



# **ANNUAL REPORT OF ACHIEVEMENTS**

**October 1, 2014-September 30, 2015**

**FISCAL YEAR 2015**

*President T. Alan Hurwitz celebrates his legacy as Gallaudet's 10th President by working with students in the university's new, state-of-the-art science labs designed according to DeafSpace design principles. The labs were constructed based on the result of information gathered at a demonstration lab to examine how deaf students and faculty really interact in a science lab. This is one example of how Gallaudet is creating living laboratories to better understand the ways architecture can be enhanced through a greater awareness of the unique ways deaf people experience and design their spaces.*

Photo by Zhee Chatmon





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OFFICE OF THE PRESIDENT

The Honorable John B. King, Jr.  
Acting Secretary  
U.S. Department of Education  
400 Maryland Avenue, S.W.  
Washington, DC 20202

Dear Acting Secretary King:

On behalf of Gallaudet University and the Laurent Clerc National Deaf Education Center (the "Clerc Center"), I am pleased to submit this Annual Report of Achievements for Fiscal Year 2014. This report is submitted in accordance with the requirements of the Education of the Deaf Act, which provides in two separate sections that we will:

"... prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate ..." (regarding the University)

"... make an annual report ... to the Secretary of the operations and traditional mission activities of the elementary and secondary education programs ... (regarding the Clerc Center)

Last year, the University announced several new initiatives in terms of its academic offerings, including the establishment of a risk management and insurance program, an entrepreneurship program, and the relocation of a noted animation firm from Los Angeles to the Gallaudet campus that will offer students internships and on-the-job training. The University also selected a developer, The JBG Companies, for its 6<sup>th</sup> Street redevelopment project. We look forward to a new phase of innovation and expansion as we seek to open the campus to the surrounding community, as well as continue the legacy of Gallaudet University and the Clerc Center as the leading educational institutions for deaf and hard of hearing students in the nation.

On behalf of our students, faculty, staff and alumni, I would like to thank the Department and Congress for the continuing support for the good work being done at Gallaudet University and the Clerc Center.

With our thanks and warm regards,

A handwritten signature in black ink that reads "T. Alan Hurwitz". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

T. Alan Hurwitz  
President







*To celebrate the 25th anniversary of the American with Disabilities Act, retired U.S. Senator Tom Harkin was honored during a special awards ceremony and luncheon hosted by Deaf-REACH on April 21, at the Gallaudet University Kellogg Conference Hotel. Harkin has a personal connection to the deaf community and for many years has served as a deaf rights advocate. From left: President Emeritus I. King Jordan, Harkin, and President T. Alan Hurwitz.*

Photo by Zhee Chatmon

## **Fiscal Year 2016 Highlights**

All of the data contained in this chapter was collected for the fall semester of Academic Year 2015-2016, which is the first quarter of Fiscal Year (FY) 2016. The data in subsequent chapters covers FY 2015. This chapter contains a variety of numeric tables highlighting the activities of Gallaudet during the current year. Included are data on enrollment, demographics of undergraduate and graduate students, home states of students, international students by country, students with cochlear implants, and data on entering students—including ACT scores, applied/accepted/enrolled students, declared majors and minors.



### Definitions of Terms Used

**Academic career** – Academic career is a student’s type of academic pursuit—graduate, undergraduate, professional studies, consortium, or English Language Institute.

**Academic year** – At Gallaudet, the academic year is considered to be the fall, spring, and summer (September 1 through August 30), unless otherwise noted. Academic Year is the calendar by which courses are offered.

**Accepted** – See “Admitted”

**Admitted** – A description of the subset of applicants offered admission to a degree-granting or certificate program.

**Alumni** – Students who received a degree, certificate, or other formal award.

**Applied** – A description of a prospective student who has completed an application for enrollment.

**Bachelor of Arts in Interpretation (BAI)** – The Bachelor of Arts in interpretation program is open to deaf, hard of hearing, and hearing undergraduates. Hearing undergraduates apply directly to the BAI program, and are not counted toward the hearing undergraduate cap, which limits the number of the entering class who may be hearing.

**Census date** – At Gallaudet the census date is the fifteenth calendar day, including weekends, from the first day of class in the fall and spring semesters, and is the day on which formal student counts are produced.

**Clerc Center** – The Laurent Clerc National Deaf Education Center is comprised of the Kendall Demonstration Elementary School (KDES), the Model Secondary School for the Deaf (MSSD), and the national mission of improving the quality of education afforded to deaf and hard of hearing students from birth to age 21 throughout the United States.

**Cohort** – A specific group of students established for tracking purposes, such as calculating retention and graduation rates. An example is the six-year graduation rate of the full-time, first-time freshmen cohort.

**Completer** – A student who receives a degree, diploma, certificate, or other formal award that is actually conferred.

**Degree-seeking** – For the purpose of this report, a student enrolled and pursuing a course of study for a formal degree or certificate program.

**Distinct headcount** – Enrollment determined by counting each student only once.

**Dual program enrollments** – Those enrolled in two or more programs.

**English Language Institute (ELI)** – The English Language Institute provides comprehensive immersion programs in English as a Second Language to international students.

**Enrolled** – Enrolled students are those registered in any course(s) offered by the university.

**Enroute enrollment** – Students completing a set of requirements for a second program while pursuing completion of their primary program.

**First-time freshman** – A completely new student at the undergraduate level, including students enrolled in the fall term who attended college for the first time in the prior summer term, and including students who entered with advanced standing (college credits earned before graduation from high school).

**Full-time** – An undergraduate student enrolled for 12 or more semester credits or 24 or more contact hours a week during the fall, spring, or summer. Graduate students are considered full-time if they are enrolled in nine or more semester credits.

**Graduate** – A student who holds a bachelor’s degree or equivalent, and is taking courses at the post-baccalaureate level.

**Graduation rate** – Calculated, as required under the Student Right-to-Know Act, as the total number of completers within 150% of normal time divided by the number in the cohort; for example, those who complete a four-year degree within six years.

**Hearing Undergraduate (HUG)** – HUGs are hearing undergraduates enrolled in a degree-seeking undergraduate program. Gallaudet adjusts the slots for potential newly enrolled hearing undergraduate students, by increasing or decreasing the number of new applicants admitted, so that overall numbers of



## Fiscal Year 2016 Highlights

undergraduate students who are hearing does not exceed a 5% limit for FY 2013, 6% for FY 2014, 7% for FY 2015, and 8% for FY 2016. The cap does not include hearing undergraduates accepted into the Bachelor of Arts in Interpretation program.

**New to career** – An individual who is a graduate student, undergraduate student, professional studies student, or English Language Institute student who is in one of those programs for the first time.

**New to program** – An individual in a course of study for the first time, regardless of whether the student is new or returning from another academic career or program.

**Persistence** – A measure of how many students return one semester from a previous term.

**Professional Studies (PST)** – An array of professional development and outreach programs and services designed to promote career development, advocacy and leadership abilities, and other life-long learning. Programs and courses may be offered for graduate, undergraduate, or non-degree professional studies credit and are held on-campus, online, or at sites across the United States through collaboration with sponsoring schools, programs, agencies, and Gallaudet regional centers.

**Program** – A course of study within an academic career that leads toward a bachelor's, master's, doctorate, or first-professional degree, or resulting in credits that can be applied to one of these degrees.

**Retention rate** – The percentage of first-time bachelor's (or equivalent) degree-seeking undergraduates from the previous fall who are enrolled in the current fall.

**Second degree** – An undergraduate student who has already received a bachelor's degree, and is pursuing another bachelor's degree.

**Traditionally Underrepresented Groups (TUG)** – A member of one of the following racial or ethnic groups: African American/Black, Asian, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, Hispanic/Latino, or Two or More.

**Undergraduate** – A student enrolled in a bachelor's degree program.

Data in this annual report cover several different "years." Primarily the report covers Fiscal Year 2015 (from October 1, 2014 to September 30, 2015). However, this one chapter ("FISCAL YEAR 2016 HIGHLIGHTS,") covers the beginning quarter of fiscal year 2016. Both of these periods are shown in the table below.

Partial Calendar Year 2013 (by month)					Calendar Year 2014 (by month)												Calendar Year 2015 (by month)																	
A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D						
Partial Fiscal Year 2013					Fiscal Year 2014										Fiscal Year 2015 (Note: This report primarily covers this time period.)															Partial Fiscal Year 2016 (Note: This chapter primarily covers this time period.)				
Academic Year 2013-2014											Academic Year 2014-2015											Partial Academic Year 2015-2016												
Fall Semester 2013					Spring Semester 2014					Sum-mer 2014	Fall Semester 2014					Spring Semester 2015					Sum-mer 2015	Fall Semester 2015												

## Fiscal Year 2016 Highlights

### Fall 2015 Census University and Clerc Center Enrollment

	Full-time	Part-time	TOTAL	% of Enrollment
Undergraduate Degree-seeking	959	30	989	
Freshmen	293	0	293	
Sophomores	179	1	180	
Juniors	217	3	220	
Seniors	258	26	284	
Second degree	12	0	12	
Undergraduate Non Degree-seeking		22	22	
<b>TOTAL UNDERGRADUATE</b>	<b>959</b>	<b>52</b>	<b>1,011</b>	<b>55%</b>
Graduate Degree-seeking	295	149	444	
Graduate Non Degree-seeking		22	22	
<b>TOTAL GRADUATE</b>	<b>295</b>	<b>171</b>	<b>466</b>	<b>26%</b>
English Language Institute	73		73	4%
Consortium		5	5	
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI &amp; CONSORTIUM</b>	<b>1,327</b>	<b>228</b>	<b>1,555</b>	
Kendall Demonstration Elementary School	106		106	
Model Secondary School for the Deaf	166		166	
<b>TOTAL CLERC CENTER</b>	<b>272</b>		<b>272</b>	<b>15%</b>
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI, &amp; CLERC CENTER</b>			<b>1,827</b>	<b>100%</b>
Professional Studies <sup>1</sup>		115	115	

<sup>1</sup>Professional Studies students can enroll continuously throughout the semester. Therefore, the one-time snapshot of Professional Studies enrollment shown on this line does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results Act (GPRA) Report.

## Fiscal Year 2016 Highlights

### Fall 2015 Degree-seeking Diversity by Career Level

	Undergraduate	Graduate	TOTAL
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	79	26	105
American Indian/Alaska Native	6	2	8
Asian	30	14	44
Black/African American	126	32	158
Hispanic of any race	120	35	155
Native Hawaiian/Other Pacific Islander	1	0	1
Two or more	113	44	157
White	481	235	716
Race and ethnicity unknown	33	56	89
<b>GENDER</b>			
Male	474	111	585
Female	515	333	848
<b>HEARING STATUS</b>			
Deaf/Hard of hearing	892	201	1,093
Hearing	97	237	334
Unknown	0	6	6
<b>ACADEMIC LOAD</b>			
Full-time	959	295	1,254
Part-time	30	149	179
<b>TOTAL FOR EACH CATEGORY</b>	<b>989</b>	<b>444</b>	<b>1,433</b>



## Fiscal Year 2016 Highlights

### Fall 2015 Undergraduate Degree-seeking Diversity by Class Year

	Freshmen	Sophomores	Juniors	Seniors	Second Degree	TOTAL
<b>RACE/ETHNICITY</b>						
International/Nonresident Alien	20	18	18	22	1	79
American Indian/Alaska Native	4	1	0	1	0	6
Asian	7	6	6	9	2	30
Black/African American	48	24	25	26	3	126
Hispanic of any race	26	24	28	42	0	120
Native Hawaiian/Other Pacific Islander	0	0	0	0	1	1
Two or more	29	19	33	31	1	113
White	138	87	105	148	3	481
Race and ethnicity unknown	21	1	5	4	2	33
<b>GENDER</b>						
Male	152	81	104	134	3	474
Female	141	99	116	150	9	515
<b>HEARING STATUS</b>						
Deaf/Hard of hearing	269	169	199	244	11	892
Hearing	24	11	21	40	1	97
Hearing Undergraduate (HUG)	18	10	13	25	0	66
Non-HUG	6	1	8	15	1	31
<b>ACADEMIC LOAD</b>						
Full-time	293	179	217	258	12	959
Part-time	0	1	3	26	0	30
<b>TOTAL FOR EACH CATEGORY</b>	<b>293</b>	<b>180</b>	<b>220</b>	<b>284</b>	<b>12</b>	<b>989</b>

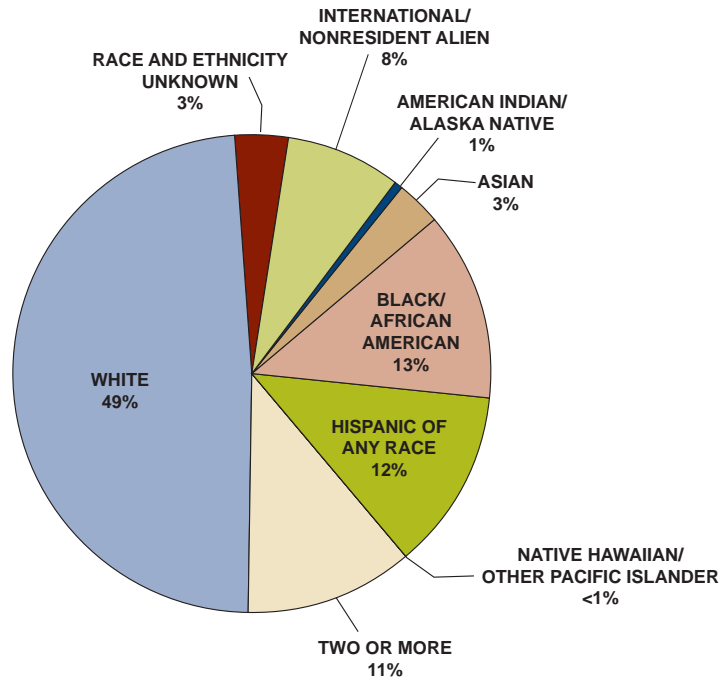
## Fiscal Year 2016 Highlights

### Fall 2015 Graduate Degree-seeking Diversity by Degree Level

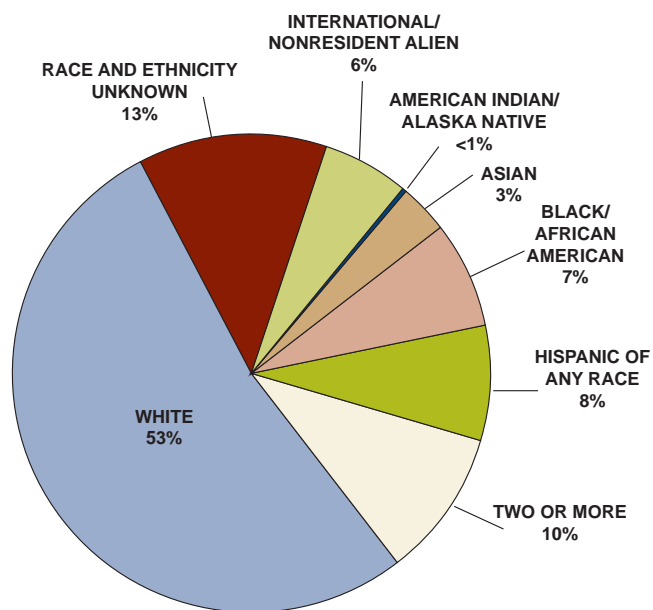
	Certificates	Masters	Specialists	Doctorates	TOTAL
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	0	21	1	4	26
American Indian/Alaska Native	0	1	0	1	2
Asian	0	9	0	5	14
Black/African American	1	19	3	9	32
Hispanic of any race	0	19	3	13	35
Native Hawaiian/Other Pacific Islander	0	0	0	0	0
Two or more	0	28	4	12	44
White	3	137	6	89	235
Race and ethnicity unknown	1	32	1	22	56
<b>GENDER</b>					
Male	1	71	2	37	111
Female	4	195	16	118	333
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	3	153	9	36	201
Hearing	2	111	8	116	237
Unknown	0	2	1	3	6
<b>ACADEMIC LOAD</b>					
Full-time	2	205	12	76	295
Part-time	3	61	6	79	149
<b>TOTAL FOR EACH CATEGORY</b>	<b>5</b>	<b>266</b>	<b>18</b>	<b>155</b>	<b>444</b>

## Fiscal Year 2016 Highlights

**Undergraduate Degree-seeking Fall 2015**



**Graduate Degree-seeking Fall 2015**



## Fiscal Year 2016 Highlights

### Fall 2015 U.S. Degree-seeking Students by State/Territory

	Undergraduate	Graduate	TOTAL
Alabama	13	1	14
Alaska	2	0	2
Arizona	4	3	7
Arkansas	23	0	23
California	90	34	124
Colorado	10	7	17
Connecticut	9	11	20
Delaware	3	0	3
District of Columbia	36	59	95
Florida	51	22	73
Georgia	20	9	29
Guam	0	0	0
Hawaii	4	0	4
Idaho	2	0	2
Illinois	30	8	38
Indiana	24	5	29
Iowa	1	1	2
Kansas	12	1	13
Kentucky	9	2	11
Louisiana	11	2	13
Maine	1	1	2
Maryland	121	67	188
Massachusetts	22	8	30
Michigan	18	8	26
Minnesota	28	9	37
Mississippi	4	0	4
Missouri	10	5	15
Montana	2	0	2

	Undergraduate	Graduate	TOTAL
Nebraska	6	1	7
Nevada	2	2	4
New Hampshire	4	1	5
New Jersey	23	11	34
New Mexico	10	5	15
New York	63	24	87
North Carolina	22	9	31
North Dakota	1	0	1
Ohio	17	7	24
Oklahoma	5	4	9
Oregon	2	5	7
Pennsylvania	21	17	38
Puerto Rico	1	0	1
Rhode Island	4	0	4
South Carolina	6	3	9
South Dakota	2	0	2
Tennessee	11	3	14
Texas	45	15	60
Utah	10	3	13
Vermont	1	3	4
Virginia	60	32	92
Virgin Islands	0	0	0
Washington	15	5	20
West Virginia	1	0	1
Wisconsin	12	5	17
Wyoming	1	0	1
Unknown	0	1	1
<b>TOTAL</b>	<b>905</b>	<b>419</b>	<b>1,324</b>

## Fiscal Year 2016 Highlights

### Fall 2015 International Undergraduate Degree-seeking Enrollment by Country

	Undergraduate	Graduate	TOTAL
Argentina		1	1
Australia		1	1
Belgium		1	1
Botswana	5		5
Canada	32	3	35
China	10	2	12
France	1		1
Germany	1		1
Ghana	1		1
Guam	1		1
Hong Kong	1	2	3
India	1	1	2
Iran	1		1
Japan	1	3	4
Korea, Republic of		2	2
Malaysia		1	1
Mexico	2		2
Mongolia	1		1
Netherlands		1	1
Nigeria	5	1	6
Panama		1	1
Paraguay	1		1
Puerto Rico	1	2	3
Qatar	1		1
Russian Federation	1		1
Saudi Arabia	9	1	10
Spain		1	1
Sri Lanka	1		1
Sweden	3		3
Taiwan	2		2
United Kingdom	1		1
Vietnam	1	1	2
<b>TOTAL</b>	<b>84</b>	<b>25</b>	<b>109</b>



## Fiscal Year 2016 Highlights

### Fall 2015 Degree-seeking Hearing Undergraduates

	2015
Hearing undergraduate (HUG)	66
Percentage of new undergraduate enrollment	6%
Bachelors of Interpretation (BAI)	27
Adult Degree Completion Program (ADCP)	4
<b>TOTAL HEARING STUDENTS</b>	<b>97</b>
<b>Percentage of new undergraduate enrollment</b>	<b>10%</b>

### Fall 2015 Hearing Undergraduate (HUG) Enrollment by Declared Majors

	2015
Communication Studies	1
Deaf Studies	6
Education	2
Government	1
International Studies	4
Interpretation	7
Mathematics	1
Psychology	3
Undeclared	41
<b>TOTAL MAJORS DECLARED<sup>1</sup></b>	<b>66</b>
<b>TOTAL HEADCOUNT<sup>2</sup></b>	<b>66</b>

<sup>1</sup>Dual program enrollments are included.

<sup>2</sup>HUG headcount includes students who haven't yet declared a major.

## Fiscal Year 2016 Highlights

### Fall 2015 Undergraduate Degree-seeking Enrollment Trend by Declared Majors and Minors

	Majors	Minors
Art		3
Art and Media Design	17	
Athletic Coaching		20
Biology		4
Biology, B.A.	6	
Biology, B.S.	9	
Business Administration	33	7
Chemistry		2
Chemistry, B.A.	2	
Chemistry, B.S.	3	
Communication Studies	55	4
Dance		5
Deaf Studies	27	6
Digital Media		
Economics & Finance		
Education	26	
English	13	8
Family & Child Studies		9
French		
Government	25	2
Graphic Design		
History	13	

	Majors	Minors
Information Technology	18	6
International Studies	22	
Interpretation	36	
Linguistics		11
Mathematics		3
Mathematics, B.A.	8	
Mathematics, B.S.	5	
Philosophy	3	1
Photography		
Physical Education	2	
Physical Education & Recreation	46	
Psychology	42	7
Recreation and Sports Program		3
Self-directed Major		
Social Work	36	
Sociology	7	8
Spanish	6	5
Studio Art		
Theatre Arts	5	5
Undeclared	523	
<b>TOTAL PLAN ENROLLMENT<sup>1</sup></b>	<b>988</b>	<b>120</b>
<b>HEADCOUNT</b>	<b>989</b>	<b>112</b>

<sup>1</sup>Dual degree enrollments are included, but students who haven't declared a major are not; this is not a headcount.

## Fiscal Year 2016 Highlights

### Fall 2015 Graduate Degree-seeking Enrollment by Degree Program and Discipline

	2014
<b>CERTIFICATES</b>	
ASL/Deaf Studies	2
ASL/English Bilingual Early Childhood Education	0
Deaf and Hard of Hearing Infants, Toddlers, and Families	13
Deaf Students with Disabilities	0
<b>CERTIFICATES TOTAL</b>	<b>15</b>
<b>MASTERS</b>	
Counseling: Mental Health	9
Counseling: School	12
Deaf Studies	15
Deaf Education: Advanced Studies	6
Deaf Education: Special Programs	4
Developmental Psychology	2
Education	22
International Development	13
Interpretation	22
Interpreting Research	4
Linguistics	13
Public Administration	44
Sign Language Education	35
Sign Language Teaching	1
Social Work	42
Speech-Language Pathology	32
<b>MASTERS TOTAL</b>	<b>276</b>

	2014
<b>SPECIALISTS</b>	
Deaf Education	2
School Psychology	16
<b>SPECIALISTS TOTAL</b>	<b>18</b>
<b>DOCTORATES</b>	
Audiology, Au.D.	44
Audiology, Ph.D.	1
Clinical Psychology	40
Critical Studies in the Education of Deaf Learners	14
Deaf Education	3
Educational Neuroscience	5
Hearing, Speech, and Language Sciences	7
Interpretation	35
Linguistics	9
<b>DOCTORATES TOTAL</b>	<b>158</b>
<b>TOTAL PROGRAM ENROLLMENT<sup>1</sup></b>	<b>467</b>
<b>HEADCOUNT</b>	<b>444</b>

<sup>1</sup>Dual program enrollments are included. Enroute enrollment counted while student is pursuing another program.

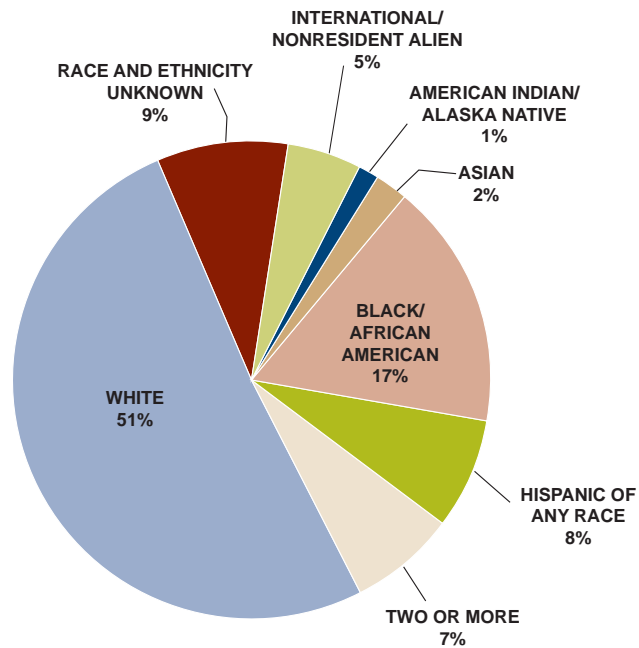
## Fiscal Year 2016 Highlights

### Fall 2015 New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	44	27	14
American Indian/Alaska Native	9	5	4
Asian	23	13	6
Black/African American	134	63	46
Hispanic of any race	38	28	21
Native Hawaiian/Other Pacific Islander	3	1	0
Two or more	19	12	20
White	302	198	141
Race and ethnicity unknown	66	40	24
<b>GENDER</b>			
Male	290	180	140
Female	348	207	136
Unknown			
<b>HEARING STATUS</b>			
Deaf/Hard of Hearing	507	335	232
Hearing	131	52	44
<b>APPLICATION TYPE</b>			
First-time Freshmen	407	251	178
Transfers	221	129	96
Second Degree	10	7	2
<b>TOTAL FOR EACH CATEGORY</b>	<b>638</b>	<b>387</b>	<b>276</b>

## Fiscal Year 2016 Highlights

**Fall 2015 New Degree-seeking Enrolled Undergraduates**



**Fall 2015 New Undergraduate Degree-seeking Average ACT**

	All New	First-time Freshmen
ENGLISH	16.9	17.2
MATH	18.1	18.4
READING	20.3	20.7

**Fall 2015 New Degree-seeking Hearing Undergraduates**

	2015
Hearing undergraduate (HUG)	29
Percentage of new undergraduate enrollment	11%
Bachelors of Interpretation (BAI)	12
Adult Degree Completion	0
<b>TOTAL HEARING STUDENTS</b>	<b>41</b>
<b>Percentage of new undergraduate enrollment</b>	<b>15%</b>



## Fiscal Year 2016 Highlights

### Fall 2015 New-to-Graduate Career Degree-seeking Diversity by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	49	19	10
American Indian/Alaska Native	2	1	1
Asian	31	13	9
Black/African American	50	17	12
Hispanic of any race	55	25	15
Native Hawaiian/Other Pacific Islander	0	0	0
Two or more	28	18	12
White	264	143	79
Race and ethnicity unknown	119	44	20
<b>GENDER</b>			
Male	117	67	43
Female	443	190	115
Unknown	38	23	0
<b>HEARING STATUS</b>			
Deaf/Hard of hearing	212	141	84
Hearing	378	136	72
Unknown	8	3	2
<b>TOTAL FOR EACH CATEGORY</b>	<b>598</b>	<b>280</b>	<b>158</b>



*On May 28, District of Columbia Mayor Muriel Bowser welcomed animation development company Pigmental Studios during a press conference at the Gallaudet University Museum in Chapel Hall. Pigmental, which has moved its headquarters to Gallaudet, plans to create and deliver an academic program in animation design and programming for students as well as offer internship and training opportunities.*

Photo by Zhee Chatmon

## Fiscal Year 2016 Highlights

### Fall 2015 New-to-Program Degree-seeking Graduate Students by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>CERTIFICATES</b>			
ASL/English Bilingual Early Childhood Education	0	0	0
ASL/Deaf Studies	1	1	1
Deaf and Hard of Hearing Infants, Toddlers, and Families	7	7	4
Deaf Students with Disabilities	1	1	0
<b>MASTERS</b>			
Counseling: Mental Health	14	5	4
Counseling: School	8	4	3
Deaf Education: Advanced Studies	9	5	5
Deaf Education: Special Programs	12	5	3
Deaf Studies	15	7	7
Education	22	12	10
International Development	20	11	6
Interpretation	39	20	15
Linguistics	15	9	7
Public Administration	41	35	22
Social Work	37	30	15
Sign Language Teaching	62	36	29
Speech-Language Pathology	156	31	15
<b>SPECIALISTS</b>			
Deaf Education	2	0	0
School Psychology	12	9	5
<b>DOCTORATES</b>			
Audiology	75	29	10
Clinical Psychology	29	7	5
Critical Studies in the Education of Deaf Learners	1	0	0
Educational Neuroscience	4	3	1
Hearing, Speech, and Language Sciences	1	1	1
Interpretation	9	6	5
Linguistics	6	6	2
<b>TOTAL PROGRAM ENROLLMENT<sup>1</sup></b>	<b>598</b>	<b>280</b>	<b>175</b>
<b>HEADCOUNT</b>	<b>559</b>	<b>269</b>	<b>172</b>

<sup>1</sup>Dual program enrollments are included.



*In early April, more than 1,200 students, faculty, and staff wearing teal “It’s On Us” T-shirts marched through campus in support of Sexual Assault Awareness Month’s National Day of Action. “It’s On Us” is a White House-led initiative that asks men and women across America to each make a personal commitment to be a part of the solution to combat campus sexual assault.*

Photo by Zhee Chatmon

## About Gallaudet University

Gallaudet University is the world leader in liberal education and career development for deaf and hard of hearing students. The University enjoys an international reputation for the outstanding undergraduate and graduate programs it provides deaf, hard of hearing, and hearing students, as well as for the quality of the research it conducts on the history, language, culture, and other topics related to people who are deaf. In addition, the University’s Laurent Clerc National Deaf Education Center serves deaf and hard of hearing children at its two demonstration schools—Kendall Demonstration Elementary School and Model Secondary School for the Deaf—and throughout the country through its national mission by developing, implementing, and disseminating innovative educational strategies.

Gallaudet University was founded more than 150 years ago in 1864 by an Act of Congress (its Charter) which was signed into law by President Abraham Lincoln.

This introductory section includes: the Mission, Vision, and Credo statements, a brief history of the University, information on accreditations, a basic set of facts about the University, and a listing of the members of the Board of Trustees.





### I. Mission Statement

Gallaudet University, federally chartered in 1864, is a bilingual, diverse, multicultural institution of higher education that ensures the intellectual and professional advancement of deaf and hard of hearing individuals through American Sign Language and English. Gallaudet maintains a proud tradition of research and scholarly activity and prepares its graduates for career opportunities in a highly competitive, technological, and rapidly changing world.

*Approved by the Board of Trustees, November 2007*



### II. Vision Statement

Gallaudet University will build upon its rich history as the world's premier higher education institution serving deaf and hard of hearing people to become the university of first choice for the most qualified, diverse group of deaf and hard of hearing students in the world, as well as hearing students pursuing careers related to deaf and hard of hearing people. Gallaudet will empower its graduates with the knowledge and practical skills vital to achieving personal and professional success in the changing local and global communities in which they live and work. Gallaudet will also strive to become the leading international resource for research, innovation and outreach related to deaf and hard of hearing people.

Gallaudet will achieve these outcomes through:

- A bilingual learning environment, featuring American Sign Language and English, that provides full access for all students to learning and communication
- A commitment to excellence in learning and student service
- A world-class campus in the nation's capital
- Creation of a virtual campus that expands Gallaudet's reach to a broader audience of visual learners
- An environment in which research can grow, develop, and improve the lives and knowledge of all deaf and hard of hearing people worldwide.

*Approved by the Board of Trustees, May 2009*

*The Charter Day 2015 celebration, held April 10-11, included the unveiling of President T. Alan Hurwitz's official portrait, painted by Cedric Egeli, son of the artist who painted the portrait of former Gallaudet President Leonard M. Elstad. LCCF Chair Janet Weinstock and GUAA President Alyce Slater Reynolds officially unveiled the painting.*

Photo by Zhee Chatmon

### III. The Gallaudet Credo

Gallaudet's Vision Statement expresses what the University aspires to become and achieve as the world's premier academic institution for deaf and hard of hearing people. Implicit in our vision are core values that serve as guiding principles for the way members of the campus community teach, study, work and live. The Gallaudet Credo identifies and realizes those core values.

The Gallaudet University campus community includes students, faculty, teachers and staff, all of whom share certain common goals and values that we all believe enrich our academic environment. The community's primary goal is to prepare students to be informed, literate, productive and responsible citizens. In pursuit of this goal, community members pledge to uphold the following values:

We believe that education is a dominant influence on our lives and recognize that learning is a lifelong quest. Therefore we will practice academic and personal integrity and work to create a positive and welcoming environment that is open to the free exchange of ideas among members of our community.

We believe that every person should be treated with civility and that our community is strengthened by the broad diversity of its members. Therefore, we will promote and applaud behaviors that support the dignity of individuals and groups and are respectful of others' opinions. We will especially discourage behaviors and attitudes that disrespect the diversity of individuals and groups for any reason including religion, race, ethnicity, gender, age, sexual orientation, disability, hearing status, or language and communication preference.

We believe that as members of the Gallaudet community we are the recipients of a proud and rich heritage, as well as contributors to and benefactors of our institution's bright future. Therefore, we will strive to bring credit to our community and ensure that the institution flourishes and succeeds in its mission.

*Students at Gallaudet are just a short walk, or shuttle bus ride, away from the DC Metro's Gallaudet-NoMa station, giving them the opportunity to explore and enjoy all that D.C., a world-class destination, has to offer.*

Photo by Matthew Vita





### IV. History of Gallaudet

#### The first 100 years

In 1856, Amos Kendall, a postmaster general during two presidential administrations, donated two acres of his estate in northeast Washington, D.C. to establish a school and housing for 12 deaf and six blind students. The following year, Kendall persuaded Congress to incorporate the new school, which was called the Columbia Institution for the Instruction of the Deaf and Dumb and Blind. Edward Miner Gallaudet, the son of Thomas Hopkins Gallaudet, founder of the first school for deaf students in the United States, became the superintendent of the new school.

Congress authorized the institution to confer college degrees in 1864, and President Abraham Lincoln signed the bill into law. Edward Miner Gallaudet was made president of the institution, including the college, which that year had eight students enrolled. He presided over the first commencement in June 1869 when three young men received diplomas. Their diplomas were signed by President Ulysses S. Grant, and to this day the diplomas of all Gallaudet graduates are signed by the presiding U.S. president.

Through an act of Congress in 1954, the name of the institution was changed to Gallaudet College in honor of Thomas Hopkins Gallaudet.

#### A time of expansion

In 1969, President Lyndon Johnson signed an act to create the Model Secondary School for the Deaf (MSSD). That same year, the secretary of the U.S. Department of Health, Education and Welfare and Gallaudet President Leonard Elstad signed an agreement authorizing the establishment and operation of MSSD on the Gallaudet campus. A year later, President Richard Nixon signed the bill that authorized the establishment of Kendall Demonstration Elementary School. Today, the two schools are part of Gallaudet's Laurent Clerc National Deaf Education Center, which is devoted to the creation and dissemination of educational opportunities for deaf students nationwide.

By an act of the U.S. Congress, Gallaudet was granted university status in October 1986. Two years later, in March 1988, the Deaf President Now (DPN) movement led to the ap-

pointment of the University's first deaf president, Dr. I. King Jordan, '70 and the Board of Trustees first deaf chair, Philip Bravin, '66. Since then, DPN has become synonymous with self-determination and empowerment for deaf and hard of hearing people everywhere.

In the 1990s, a generous contribution from the W.K. Kellogg Foundation enabled the University to construct the Kellogg Conference Hotel at Gallaudet University, which has become a popular venue for meetings, seminars, receptions, and other events for both on- and off-campus groups. Since then, additional buildings have been constructed, including the technology-rich Student Academic Center and, thanks to the generosity of James Lee Sorenson, chair of Sorenson Development, Inc., the James Lee Sorenson Language and Communication Center, a unique facility that provides an inclusive learning environment totally compatible with the visu-centric "deaf way of being."

The University's undergraduate students can choose from more than 40 majors leading to bachelor of arts or bachelor of science degrees. A small number of hearing undergraduate students—5% limit for FY 2013, 6% for FY 2014, 7% for FY 2015, and 8% for FY 2016—are also admitted to the University each year. Graduate programs at Gallaudet are open to deaf, hard of hearing, and hearing students and offer certificates and master of arts, master of science, doctoral, and specialist degrees in a variety of fields involving professional service to deaf and hard of hearing people.

Through the University Career Center, students receive internships that provide a wealth of experiential learning opportunities. Recent internships were offered at Merrill Lynch, National Aeronautics and Space Administration, National Institutes of Health, and the World Bank. Students also benefit from an array of services provided by such campus units as the Gallaudet Leadership Institute, Language Planning Institute, Hearing and Speech Center, Cochlear Implant Education Center, and the Center for International Programs and Services.

Gallaudet is also viewed by deaf and hearing people alike as a primary resource for all things related to deaf people, including: educational and career opportunities; open communication and visual learning; deaf history and culture; American Sign Language; research; and the impact of technology on the deaf community.

### V. Pictorial History of Diplomas and Institutional Name

Since 1864, when President signed the enabling legislation to authorize the establishment of a college for deaf and hard of hearing students in Washington, D.C., all of the diplomas and degrees conferred by the institution have been signed by the President of the United States. These pages provide a pictorial retrospective of this unique honor bestowed upon this institution's graduates as well as a chronology of the names of the University since its founding.

1. The **Columbia Institution for the Instruction of the Deaf and Dumb and Blind** was incorporated in 1857, with Edward Miner Gallaudet serving as the school's president.
2. The **National College for the Deaf and Dumb** was established seven years later in 1864 with the signing of its charter by President Lincoln.
3. The **National Deaf-Mute College** became the name of the college one year later in 1865 when blind students were transferred to the Maryland Institution for the Blind. This name remained in effect until 1893.
4. The **Columbia Institution for the Deaf and Dumb** became the corporate name in 1865, including both the **National Deaf-Mute College** and the **Primary Department**.
5. The **Kendall School** became the name of the **Primary Department** in 1885, in honor of Amos Kendall, the philanthropist who initially donated the land for the establishment of the school.
6. **Gallaudet College** became the name in 1894 and remained the name until 1985. This renaming honored the Rev. Thomas Hopkins Gallaudet, the father of Edward Miner Gallaudet.
7. The **Columbia Institution for the Deaf** became the corporate name in 1911.

#### National Deaf-Mute College



Lewis Palmer diploma signed by President Chester A. Arthur.

#### Gallaudet College



May Koehn diploma signed by President Franklin D. Roosevelt.

8. **Gallaudet College** became the corporate name in 1954.
9. The **Model Secondary School for the Deaf (MSSD)**, authorized by Congress in 1966, opened on campus in 1969.
10. The **Kendall Demonstration Elementary School (KDES)** became the name of the Kendall School in 1970 with the signing of Public Law 91-587 by President Richard Nixon.
11. **Gallaudet University** became the name of **Gallaudet College** in 1986, and has remained the name to the present, when President Ronald Reagan signed the Education of the Deaf Act (Public Law 99-371).
12. Today, the **Laurent Clerc National Deaf Education Center** is comprised of **KDES**, **MSSD**, and the school's national mission to improve the quality of education provided to deaf and hard of hearing students across the United States.

#### Gallaudet University



Elizabeth Sorkin's diploma signed by President Barack Obama.

## VI. Fast Facts

### Location

800 Florida Avenue, NE, Washington, DC 20002

### Website

[www.gallaudet.edu](http://www.gallaudet.edu)

### Founded

Gallaudet University, the world's only university in which all programs and services are specifically designed to accommodate deaf and hard of hearing students, was founded in 1864 by an Act of Congress (its Charter), which was signed into law by President Abraham Lincoln.

### Programs

Deaf and hard of hearing undergraduate students can choose from more than 40 majors leading to a bachelor of arts or a bachelor of science degree. The University also admits a small number of hearing, degree-seeking undergraduate students—6% limit for FY 2014, 7% limit for FY 2015, and 8% limit for FY 2016. Undergraduate students also have the option of designing their own majors, called “self-directed majors,” in which they select classes from a variety of departments at Gallaudet or take courses offered at 12 other institutions of higher learning that are members of the Consortium of Universities of the Washington Metropolitan Area.

Graduate programs, open to deaf, hard of hearing, and hearing students, include a master of arts and a master of science degree, specialist degree, certificates, and doctoral degrees in a variety of fields involving professional service provision to deaf and hard of hearing people.

Gallaudet University offers exemplary educational programs to deaf and hard of hearing students at all learning levels. The Kendall Demonstration Elementary School (KDES) serves infants and their parents and continues service through the eighth grade. The Model Secondary School for the Deaf (MSSD) offers programs for students in grades nine through 12. Both of these schools are part of the Laurent Clerc National Deaf Education Center, which has a federal mandate

for a national mission to develop and disseminate innovative curriculum, materials, and teaching strategies to schools and programs nationwide.

### Technology

Gallaudet is a leader in uses of technology in its academic programs and services. Approximately 94 percent of courses at Gallaudet have an online component and virtually all students take at least one course using an online learning system. Such technology integration is higher than the average of universities nationwide. Many courses make extensive use of video, including video recordings of classes. Students are encouraged to bring a computer to campus, and popular software is available at a discounted price.

For students interested in technology careers, majors in graphic arts, digital media, computer science, and computer information systems are available. Students have access to two central computer labs, as well as more than 15 departmental computer labs. Most classrooms are outfitted with computers, projectors, DVD/VCRs, and other technologies. All buildings on campus have wireless network access.

### Research

Gallaudet has a unique obligation to contribute knowledge and scholarship likely to benefit deaf and hard of hearing people, especially in the areas of education and human services. Accordingly, the Gallaudet Research Institute conducts studies related to demographics and assessment of deaf and hard of hearing people in the educational system, as well as language and learning processes, and engages students in research, while stimulating and supporting work directed towards priorities consistent with Gallaudet's national mission and internal strategic objectives.

Research is a key component of Gallaudet's mission as a university and has a prominent role as a major goal in the current Gallaudet Strategic Plan. Faculty pursue a full range of research interests related to their own academic disciplines. Major grant support includes research, development, and training programs in visual language and learning, access to communication for deaf and hard of hearing people, genetics, and technology assessment.

## About Gallaudet University

### Public Service

Last year, Gallaudet served tens of thousands of individuals through conferences, leadership institutes, professional studies and extension courses, sign language classes, American Sign Language (ASL)/English bilingual education, enrichment and youth programs, international programs, and its regional centers (Midwest-John A. Logan College, Illinois; Northeast-Northern Essex Community College, Massachusetts; Pacific-Kapi'olani Community College, Hawaii; Southeast-Gallaudet University, Washington, D.C.; Southwest-Austin Community College, Texas; and Western-Ohlone College, California).

In fulfilling its national mission role via training and technical assistance, information dissemination, and exhibits and performances, the Clerc Center served tens of thousands of individuals and disseminated over 36,000 products and publications this year.

### Enrollment

In the fall of academic year 2015-2016 we experienced the following enrollments:

UNIVERSITY	
Undergraduate (degree/non-degree, full- and part-time)	989
Graduate (degree/non-degree, full- and part-time)	466
English Language Institute/Consortium	73
<b>UNIVERSITY SUBTOTAL</b>	<b>1,555</b>
CLERC CENTER	
Kendall Demonstration Elementary School	106
Model Secondary School for the Deaf	166
<b>CLERC CENTER SUBTOTAL</b>	<b>272</b>
<b>TOTAL FALL ACADEMIC YEAR 2015-2016 ENROLLMENT</b>	<b>1,827</b>

In addition, on the fall census date, we had 115 students enrolled in Professional Studies activities.

International students comprise seven percent of the degree-seeking student body.

### Alumni

Gallaudet University has more than 21,000 alumni around the world. The Gallaudet University Alumni Association, organized in 1889, has 53 chapters.

According to a survey conducted by the University, 97 percent of the Gallaudet undergraduate student respondents who graduated between December 2011 and August 2012 are either employed or furthering their education. Ninety-eight percent of the survey respondents who graduated with graduate degrees during the same time frame are employed or furthering their education.

During the same period, 76 percent of the Model Secondary School for the Deaf graduates are in advanced education or training programs within one year after graduation.

### Employees

The University and the Clerc Center have 888 employees, 457 of whom are deaf or hard of hearing. A total of 225 employees are faculty members or teachers.

### Annual University Tuition and Room and Board (Academic Year 2015-2016)

Tuition and room and board are charged as below. Additional charges are applied for student activities and health-related fees. For a full explanation of the details of all charges including those below refer to the Gallaudet University website.

	Undergraduate	Graduate
U.S. Student Tuition	\$15,078	\$16,596
International Student Tuition (non-developing countries)	\$30,156	\$33,192
International Student Tuition (developing countries)	\$22,617	\$24,894
Room and Board	\$12,630	\$12,630

No tuition is charged for students at Kendall Demonstration Elementary School or the Model Secondary School for the Deaf.

## About Gallaudet University

### Funding

Total revenues and other support for FY 2015 were \$180,349,605.

### Endowment

As of the end of FY 2015, the University's endowment was approximately \$173 million.

### Fundraising

Gallaudet welcomes tax-deductible contributions from individuals, businesses, foundations, and organizations in support of University initiatives and priorities, including scholarships, program enhancements and development, and renovation projects. Please visit the Development Office website ([giving.gallaudet.edu](http://giving.gallaudet.edu)) for more information about philanthropic support for Gallaudet, including opportunities to make a gift in memory or in honor of a loved one.

### Community Impact

Gallaudet is one of the area's largest businesses, with direct salaries, wages, and benefits totaling more than \$109.7 million in FY 2015. The University spent another \$61.6 million on goods and services and \$23.3 million on capital improvements.

Since 1992, Gallaudet has constructed five buildings and renovated 21 others. In 2003, the District of Columbia's Zoning Commission approved Gallaudet's Facilities Master Plan, the University's vision for campus development for 2002 to 2012.

*Gallaudet University conferred 211 undergraduate and 171 graduate degrees during its 145th Commencement, held May 15.*

Photo by Zhee Chatmon





### VII. Accreditation

Gallaudet University is accredited by:

Middle States Commission on Higher Education  
(MSCHE)  
[http://msche.org/institutions\\_view.asp?idinstitution=237](http://msche.org/institutions_view.asp?idinstitution=237)  
3624 Market Street, Second Floor West  
Philadelphia, PA 19104  
Telephone: (267) 284-5000  
E-Mail: [info@msche.org](mailto:info@msche.org)

The Middle States Commission on Higher Education is a regional institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Many of the University's programs are also accredited by professional accrediting bodies, including:

- American Psychological Association (APA)
- American Speech-Language-Hearing Association's Council on Academic Accreditation (ASHA / CAA)
- Association of Collegiate Business Schools and Programs (ACBSP)
- Council on Accreditation of Counseling and Related Programs (CACREP)
- Council on Social Work Education (CSWE)

Our Deaf Education program is approved by, and allows graduates to become CED certified through the Council on the Education of the Deaf (CED)

Programs that prepare graduates to be a licensed professional in schools are approved by the District of Columbia State Education Agency (SEA)

These same programs, along with the master's in School Social Work program, are part of Gallaudet's Professional Education Unit which is accredited by the National Council for the Accreditation of Teacher Education (NCATE)

In addition, many programs are reviewed by the following specialized professional associations (SPAs) as part of NCATE's reaccreditation process:

- Association for Childhood Education International (ACEI)
- Council on Accreditation of Counseling and Related Programs (CACREP)
- Council for Exceptional Children (CEC)
- National Association for the Education of Young Children (NAEYC)
- National Association of School Psychologists (NASP)
- National Council for Social Studies (NCSS)
- National Council of Teachers of English (NCTE)
- National Council of Teachers of Mathematics (NCTM)
- National Science Teachers Association (NSTA)

The Kendall Demonstration Elementary School and the Model Secondary School for the Deaf are the demonstration schools of the Laurent Clerc National Deaf Education Center at Gallaudet University. Both schools are fully accredited by two organizations: the Middle States Association of Colleges and Schools (MSA), and the Conference of Educational Administrators of the Schools and Programs for the Deaf (CEASD).

## VIII. Board of Trustees

### Executive Committee



Heather Harker  
Chair  
Massachusetts



Duane Halliburton, '85  
Vice Chair  
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Claire Bugen  
Secretary  
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Dr. Tom Humphries, '68 & G-'72  
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President T. Alan Hurwitz  
Ex-Officio



## About Gallaudet University

### Additional Members



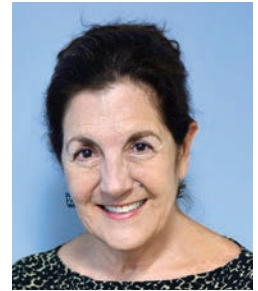
Seth Bravin, '96  
Maryland



Jameson Crane, Jr.  
Ohio



Dr. Jorge L. Díaz-Herrera  
New York



Dr. Charlene Dwyer  
Wisconsin



Dr. Harvey Goodstein, '65  
Arizona



Claudia L. Gordon, Esq.  
Washington, D.C.



Jeffrey L. Humber, Jr.  
Washington, D.C.



Nancy Kelly-Jones, '72  
& G-'75  
Illinois



Dr. Richard Ladner  
Washington



James R. Macfadden, '62  
Maryland



Wilma Newhoudt-Druchen,  
'92, G-'05 & H-'09  
South Africa



James F.X. Payne  
Washington, D.C.



Tiffany Williams, '89  
Washington

### Public Members



The Honorable G.K. Butterfield  
North Carolina



The Honorable Sherrod Brown  
Ohio



The Honorable Kevin Yoder  
Kansas

### IX. The Office of Diversity and Inclusion

The Office for Diversity and Inclusion (ODI) is charged with providing leadership to foster and advance a strategic and integrated approach to diversity in all aspects of University life. As such, ODI works to ensure the community is knowledgeable about issues of diversity and inclusion and understands how diversity and academic excellence are intricately woven into patterns of student success.

ODI supports a diverse student, faculty, and staff population and is committed to creating a climate that is inclusive and accessible so all members of the community can succeed.

To that end, ODI sponsors and co-sponsors multiple and varied programs for the community including lecture series, pedagogical workshops, cultural competency training, diversity dialogues, and cultural events. In particular, the University's Diversity Dialogue series has brought together diverse members of the community to discuss challenging topics.

ODI's many activities during FY 2015 included special presentations; educational and professional development offerings; internal studies and institutional activities; and campus events.

*GradFest is an annual event hosted by the Office of the President for all seniors, graduate students, and Ph.D. students who intend to graduate in May to give them a convenient, one-stop access to all the information they need related to the graduation process as well as pick up their Class of 2015 regalia.*

Photo by Zhee Chatmon







*Honors Capstone poster presentations were held at the Sorenson Language and Communication Center Atrium on May 7. Motivated and talented students from all disciplines embark on a one and a half year journey during which they select their faculty committee, pick a topic, propose their original work, and then create their Capstone. Presenters were Kayla Head, English/Communication Studies; Naomi Leung, Biology; Gus Shitama, Journalism/Creative Fiction; and Timothy Yu, IT/Mathematics.*

Photo by Zhee Chatmon

## Performance Requirements

The Education of the Deaf Act (EDA) states that Gallaudet University will provide “... an annual report” to the Secretary of the U.S. Department of Education and to committees of the Congress; this entire document satisfies that requirement. In addition the EDA also details requirements of that reporting. In this section of the annual report, we quote the relevant reporting requirements of the EDA and cross-reference the relevant submittal of material in this document or in separate documents.

In addition, Gallaudet University does other major required reporting of annual performance indicators established for the University by the U.S. Department of Education under the Government Performance and Results Act of 1993. That report, previously submitted to the Department, is also included in this section of the annual report.





## I. Education of the Deaf Act Reporting Requirements

The material below is quoted directly from section 4354 of the Education of the Deaf Act entitled “Reports.” For each item, a cross-reference is indicated describing where the required material can be found. Wording from this section of the EDA that does not apply to Gallaudet has been removed and an ellipsis (...) has been substituted.

Note that a separate chapter of this report on the Laurent Clerc National Deaf Education Center (Clerc Center) contains the details of the reporting required by the EDA for the Clerc Center.

### From the EDA

“The Board of Trustees of Gallaudet University ... shall prepare and submit an annual report to the Secretary, and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate, not later than 100 days after the end of each fiscal year, which shall include the following:

- (1) “The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, or who left without completing a program of study, reported under each of the programs of the University (elementary, secondary, undergraduate, and graduate) ...”

Refer to the next section of this chapter, *Government Performance and Results Act Report*. (Additional information is available in the chapters entitled *Strategic Plan Goal A: Enrollment* and *Strategic Plan Goal B: Persistence and Graduation*.)

- (2) “For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:

- A. “The number of students enrolled full- and part-time.”

Refer to the next section of this chapter, *Government Performance and Results Act Report*. (Additional information is available in the chapter entitled *Strategic Plan Goal A: Enrollment*.)

- B. “The number of these students who completed

or graduated from each of the educational programs.”

Refer to the next section of this report, *Government Performance and Results Act Report*. (Additional information is available in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation*.)

- C. “The disposition of these students on the date that is one year after the date of graduation or completion of programs ... at the University and its elementary and secondary schools in comparison to students from non-minority backgrounds.”

Refer to the next section of this report, *Government Performance and Results Act Report*. (Additional information is available in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation*.)

- D. “The number of students needing and receiving support services (such as tutoring and counseling) at all educational levels.”

Detailed information is available on these support services, for Gallaudet University and the Clerc Center and is provided in the chapter entitled *Strategic Plan Goal B: Persistence and Graduation* and *Laurent Clerc National Deaf Education Center (Clerc Center)* respectively.

- E. “The number of recruitment activities by type and location for all educational levels.”

Refer to the chapter entitled *Strategic Plan Goal A: Enrollment*.

- F. “Employment openings/vacancies and grade level/type of job and number of these individuals that applied and that were hired.”

Refer to the chapter entitled *Strategic Plan Goal C: Resource Efficiency* for available data.

- G. “Strategies (such as parent groups and training classes in the development of individualized education programs) used by the elementary and secondary programs and the extension centers to reach and actively involve minority parents in the educational programs of their children who

## Performance Requirements

are deaf or hard of hearing and the number of parents who have been served as a result of these activities.”

Detailed information is available on these strategies for the Clerc Center and is provided in the chapter *Laurent Clerc National Deaf Education Center (Clerc Center)*.

- (3) “(A) summary of the annual audited financial statements and auditor’s report of the University, as required under section 4353 of this title ...”

Refer to our audited financial statements, submitted separately.

- (4) “For the preceding fiscal year, a statement showing the receipts of the University ... and from what Federal sources, and a statement showing the expenditures ... by function, activity, and administrative and academic unit.”

Refer to our audited financial statements, submitted separately.

- (5) “A statement showing the use of funds (both corpus and income) provided by the Federal Endowment Program under section 4357 of this title.”

Refer to our audited financial statements, submitted separately.

- (6) “A statement showing how such Endowment Program funds are invested, what the gains or losses (both realized and unrealized) on such investments were for the most recent fiscal year, and what changes were made in investments during that year.”

Refer to our audited financial statements, submitted separately.

- (7) “Such additional information as the Secretary may consider necessary.”

### From the EDA on Research

- (a) “Research priorities

“Gallaudet University ... shall ... establish and disseminate priorities for [its] national mission with respect to deafness related research, development, and demonstration activities, that reflect public input, through a process that includes consumers, constituent groups, and the heads of other federally funded programs. The priorities for the University shall include activities conducted as part of the University’s elementary and secondary education programs under section 4304 of this title.

Refer to the chapter *Strategic Plan Goal E: Research and Outreach*

- (b) “Research reports

“The University ... shall each prepare and submit an annual research report, to the Secretary, the Committee on Education and Labor of the House of Representatives, and the Committee on Health, Education, Labor, and Pensions of the Senate, not later than January 10 of each year, that shall include—

- (1) “a summary of the public input received as part of the establishment and dissemination of priorities required by subsection (a) of this section, and the University’s ... response to the input; and”

Refer to the chapters *Strategic Plan Goal E: Research and Outreach* and *Laurent Clerc National Deaf Education Center (Clerc Center)*.

- (2) “a summary description of the research undertaken by the University ..., the start and projected end dates for each research project, the projected cost and source or sources of funding for each project, and any products resulting from research completed in the prior fiscal year.”

Refer to the chapter *Strategic Plan Goal E: Research and Outreach*; this summary has been incorporated into the annual report.



## Performance Requirements

### II. Government Performance Results Act Report

This section contains the performance indicators for both the University and for the Clerc Center for FY 2014, as submitted to the U.S. Department of Education. This material was submitted as specified in the Government Performance Results Act (GPRA) of 1993. The purposes of the act, paraphrased here, are to: hold Federal agencies accountable for achieving results; set goals, measure performance, and reporting publicly

on progress; improve effectiveness and public accountability; help Federal managers improve services; improve Congressional decision making on Federal programs; and improve internal management of the Federal Government. (For additional information, refer to the Office of Management and Budget's website at: [www.whitehouse.gov/omb/mgmt-gpra/gplaw2m](http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m)).

#### Program Goal

To challenge students who are deaf, graduate students who are deaf, and graduate students who are hearing to achieve their academic goals and obtain productive employment, and provide leadership in setting the national standard for best practices in education of the deaf and hard of hearing.

#### Objective 1 of 4:

The University Programs and the Model Secondary School for the Deaf and the Kendall Demonstration Elementary School will optimize the number of students completing programs of study.

**Measure 1.1 of 13:** The number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University.  
(Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	1,099	Historical Actual
2004	Not available.	1,120	Historical Actual
2005	Not available.	1,098	Historical Actual
2006	Not available.	1,174	Historical Actual
2007	Not available.	1,101	Historical Actual
2008	1,180.0	973	Target Not Met
2009	1,020.0	927	Target Not Met
2010	1,020.0	1,002	Target Not Met but Improved
2011	1,020.0	1,012	Target Not Met but Improved
2012	1,020.0	1,029	Target Exceeded
2013	1,020.0	1,045	Target Exceeded
2014	1,020.0	1,006	Target Not Met
2015	1,020.0	951	Target Not Met
2016	1,020.0	959	Target Not Met
2017	1,020.0	(October, 2016)	Pending
2018	1,020.0	(October, 2017)	Pending

## Performance Requirements

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** Gallaudet University reported a total of 959 full-time, degree-seeking undergraduate students enrolled in the fall of 2015 (FY 2016), an increase of 8 students from the previous year. The number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University includes students who are deaf and hard of hearing, as well as hearing undergraduate students (HUGS) and hearing undergraduates in the bachelor's of interpreting program. This measure does not include part-time students or non-degree seeking undergraduate students.

In FY 2008 this measure was revised to be consistent with Integrated Postsecondary Education Data System (IPEDS) methodology to report only full-time, degree-seeking undergraduates. Census data is collected and reported in the fall of each year. Consequently, this data does not include new students who enroll in the spring of the same academic year.

**Target Context.** In the FY 2009 Performance Plan, the target for the number of full-time, degree-seeking undergraduate students enrolled at Gallaudet University was reduced from 1,180 students to 1,020 students for the academic year 2008-2009 (shown in FY 2009 of this table) and for subsequent years. The decision to reduce the enrollment target was based on the anticipated impact from policy changes in the University's admissions requirements and the more rigorous academic standards implemented that year.

**Explanation.** In contrast to the past two years, the number of full-time undergraduate students increased this year. Although this increase was small, it occurs after a period during which there was a loss of personnel in key admissions and recruit-

ment positions during a critical period in the enrollment cycle. Several key positions became vacant in the late spring and were not filled until February. Furthermore, an audit in mid-summer revealed significant areas of weakness in enrollment planning. These areas are now being addressed and Gallaudet was able to maximize conversion of applications into enrollment with a resulting yield rate of 71%.

We have now hired people in almost all of vacant positions and are seeing evidence of improved operations. Recruitment activities for fall 2016 have already begun. Improved mining and analysis of recruitment and admissions data, and greater collaboration among units that have been operating in silos suggests that next year's enrollment processes will be more efficient and productive.

Gallaudet University's 2010-2015 Strategic Plan contains a goal to improve its enrollment of full-time and part-time undergraduate, graduate, and continuing education students to 3,000 by 2015. To achieve this goal, Gallaudet University is focusing its efforts to recruit and enroll: (1) college-bound students who are deaf and hard of hearing from mainstream programs; (2) non-traditional students, including transfer students, returning adult students, students with limited financial resources, and students who prefer on-line education opportunities; (3) hearing undergraduate students who are interested in careers working with deaf and hard of hearing individuals; (4) international students; and (5) traditionally-underrepresented groups.

The below table reports the total enrollment each fall for Gallaudet University (e.g. FY 2006 is the fall of the 2005-2006 academic year), which includes the number of full-time, degree-seeking undergraduate students, students enrolled part-time in degree programs or in non-degree granting programs, and graduate students.

## Performance Requirements

Fiscal Year	Full-time, degree-seeking undergraduate students	Part-time, degree-seeking or non-degree-seeking undergraduate students	Full-time and part-time graduate students	TOTAL ENROLLMENT
2006	1,174	320	466	1.960
2007	1,101	318	430	1.849
2008	973	277	383	1.633
2009	927	277	377	1.581
2010	1,002	460	408	1.870
2011	1,012	368	413	1.793
2012	1,029	274	410	1.713
2013	1,045	330	446	1.821
2014	1,006	278	469	1.753
2015	951	297	443	1,691
2016	959	267	444	1,670

The table below reports disaggregated data on the number of full-time, degree-seeking undergraduate students enrolled in a campus-based program or in an online program.

Year	Actual (or date expected)		
	Traditional	Online*	Total
2006	1,174	n/a	1,174
2007	1,101	n/a	1,101
2008	973	n/a	973
2009	927	n/a	927
2010	1,002	n/a	1,002
2011	1,004	8	1,012
2012	1,025	4	1,029
2013	1,033	12	1,045
2014	997	9	1,006
2015	946	5	951
2016	951	8	959
2017	(October 2016)		

\*Online: students who are enrolled in an online program and no other program at Gallaudet University

## Performance Requirements

**Measure 1.2 of 13:** The number of students enrolled part-time in degree programs or in non-degree-granting programs at Gallaudet University. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2004	Not available.	287	Historical Actual
2005	Not available.	311	Historical Actual
2006	Not available.	320	Historical Actual
2007	Not available.	318	Historical Actual
2008	295.0	277	Target Not Met
2009	295.0	277	Target Not Met
2010	295.0	460	Target Exceeded
2011	295.0	368	Target Exceeded
2012	295.0	274	Target Not Met
2013	295.0	330	Target Exceeded
2014	295.0	278	Target Not Met
2015	295.0	297	Target Exceeded
2016	295.0	267	Target Not Met
2017	295.0	(October, 2016)	Pending
2018	295.0	(October, 2017)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** This measure includes all students not counted in IPEDS, including students enrolled in the English Language Institute, students enrolled in a professional studies program that grants continuing education credit, and non-degree seeking undergraduate and graduate students taking other courses that can not be applied to a degree, or who have not been admitted into a degree-seeking program (i.e. special students). This indicator also includes part-time, degree-seeking undergraduates that were not counted in Measure 1.1 on full-time degree-seeking undergraduate students.

Census data is collected and reported in the fall of each year. Consequently, this data does not include new students who enroll in the spring of the same academic year.

**Target Context.** The target represents the total enrollment of a varied group of students; thus, a decrease or increase in enrollment in any one subgroup would impact the overall enrollment reported for this measure.

**Explanation.** The target of 295 was not met in fall 2015 (FY 2016). This is a decrease of 30 students compared to the previous year. A notable decrease of 20 students was in the total number of undergraduate degree-seeking students who are taking part-time course load. Ten of the 20 students not included in the count for this measure did enroll the following fall, but are counted in different measures. 8 are counted in measure 1.1, 2 are counted in measure 1.3.

The table below reports disaggregated data on the number of students not counted in IPEDS (students enrolled in the English Language Institute); part-time, degree-seeking undergraduate students; and non-degree undergraduate and graduate students enrolled in a campus-based program or in an online program.

## Performance Requirements

Year	Actual (or date expected)		
	Traditional	Online*	Total
2006	320	n/a	320
2007	318	n/a	318
2008	277	n/a	277
2009	277	n/a	277
2010	460	n/a	460
2011	366	2**	368
2012	263	11**	274
2013	320	10	330
2014	268	10	278
2015	289	8	297
2016	257	10	267
2017	(October 2016)		

\*Online: students who are enrolled in an online program and no other program at Gallaudet University

\*\* Counts do not include Summer and Online School Counseling program, since data was not available



*As a third year Gallaudet student, Mary Harmon interned at the Federal Communications Commission during the fall of 2014. Gallaudet alumni Greg Hlibok, Chief of the FCC's Disability Rights Office (DRO) under the Consumer and Governmental Affairs Bureau, was Mary's immediate supervisor.*

Photo by Zhee Chatmon

## Performance Requirements

**Measure 1.3 of 13:** The number of students enrolled in graduate programs at Gallaudet University. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	617	Historical Actual
2004	Not available.	506	Historical Actual
2005	Not available.	451	Historical Actual
2006	Not available.	466	Historical Actual
2007	Not available.	430	Historical Actual
2008	425.0	383	Target Not Met
2009	425.0	377	Target Not Met
2010	425.0	408	Target Not Met but Improved
2011	425.0	413	Target Not Met but Improved
2012	425.0	410	Target Not Met
2013	425.0	446	Target Exceeded
2014	425.0	469	Target Exceeded
2015	425.0	443	Target Exceeded
2016	440.0	444	Target Exceeded
2017	440.0	(October, 2016)	Pending
2018	440.0	(October, 2017)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** The number of students enrolled in graduate programs at Gallaudet University includes all full- and part-time students enrolled in degree-granting programs at the certificate, master's, specialist, and doctoral levels. The Integrated Postsecondary Education Data System (IPEDS) defines a certificate as a formal award along with other degree awards conferred by an institution. The IPEDS definition of a degree is an award conferred as official recognition for the successful completion of a program of studies. Gallaudet University noted that IPEDS surveys often ask for enrollment figures that are "degree/certificate seeking."

Census data is collected and reported in the fall of each year. Consequently, this data does not include new students who enroll in the spring of the same academic year.

**Target Context.** In FY 2008, the definition of graduate enrollment was changed to include only degree-seeking enrollment. Non-degree graduate enrollment is counted in Measure 1.2.

Gallaudet University exceeded the target for this measure in fall 2012 (FY 2013), fall 2013 (FY 2014), and again in fall 2014 (FY 2015). The target was increased to 440 graduate students for fall 2015 (FY 2016) and subsequent years.

**Explanation.** Gallaudet University exceeded the target for this measure in fall 2015 (FY 2016). Gallaudet University reported that most graduate programs have been successful in retaining a high percentage of their students, thus maintaining their overall enrollment from the previous year. Several graduate programs continue to attract, retain, and graduate a high number of students, including: (1) MA in Sign Language Education (a hybrid program); (2) AuD Audiology; (3) PhD in Interpretation; (4) PhD in Clinical Psychology; (5) MPA Public Administration and (6) MSW Social Work.

The table below reports disaggregated data on the number of full- and part-time degree-seeking graduate students enrolled in a campus-based program or an online program at the certificate, master's, specialist, or doctoral levels are reported in the table following.

## Performance Requirements

Year	Actual (or date expected)		
	Traditional	Online*	Total
2006	446	n/a	446
2007	430	n/a	430
2008	383	n/a	383
2009	377	n/a	377
2010	408	n/a	408
2011	413	n/a	413
2012	382	28	410
2013	410	36	446
2014	437	32	469
2015	390	53	443
2016	390	54	444
2017	(October 2016)		

\*Online: students who are enrolled in an online program and no other program at Gallaudet University

*On April 30, Gallaudet students visited with Leah Katz-Hernandez (front: fifth from the left), a Gallaudet alumna currently working in the White House. This information session, sponsored by the Career Center, provided students an opportunity to learn about Katz-Hernandez's current role as the Receptionist of the United States (ROTUS), and her internship in the very competitive White House Internship Program.*

Photo by Zhee Chatmon





## Performance Requirements

**Measure 1.4 of 13:** The enrollment in the Model Secondary School for the Deaf established by Gallaudet University.  
(Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	225.0	190	Target Not Met
2004	225.0	186	Target Not Met
2005	225.0	182	Target Not Met
2006	225.0	226	Target Exceeded
2007	225.0	218	Target Not Met
2008	225.0	164	Target Not Met
2009	225.0	149	Target Not Met
2010	225.0	151	Target Not Met but Improved
2011	225.0	140	Target Not Met
2012	165.0	165	Target Met
2013	165.0	150	Target Not Met
2014	165.0	149	Target Not Met
2015	165.0	165	Target Met
2016	165.0	166	Target Met
2017	165.0	(October, 2016)	Pending
2018	165.0	(October, 2017)	Pending

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database; Annual Report.

**Frequency of Data Collection:** Annual

**Data Quality.** On September 15 of each school year, census data is collected on the number of students enrolled at the Model Secondary School for the Deaf (MSSD). Gallaudet University states that this number is reviewed by both the Clerc Center's research and evaluation team, as well as by school administrators to ensure accuracy. This data does not include new students who enroll in the spring of the same academic year.

**Target Context.** The target was reduced to 165 students in September 2011 (FY 2012) to more closely reflect actual enrollment trends. MSSD stated that, with an average enrollment of 40 students per grade, it can effectively provide and evaluate programs, as well as report statistically relevant data.

**Explanation.** MSSD serves the local tri-state area (Maryland, Virginia, and the District of Columbia) and all 50 states, as well as U.S. territories. Gallaudet University states that a trend

analysis over the past five years indicates that MSSD continues to receive a steady stream of inquiries and requests for applications, with the goal of ensuring a higher percentage of inquiries and applications to become enrollments.

In FY 2013, the Clerc Center hired an enrollment coordinator to lead enrollment goals of: (1) working closely with District of Columbia Public Schools to increase awareness with school officials about services available at MSSD for students who are deaf and hard of hearing; (2) increasing awareness of and disseminating user friendly information about the programs; (3) improving admissions processes to improve efficiency and to ensure the process is easily navigated by prospective families; (4) improving data collection and analysis processes to review exit interview data and analyze retention; and (5) improving academic programs through rigorous standards-based curriculum, early intervention, after school programs, and collaborations with other programs and service providers. Gallaudet University stated that work in these areas, along with strong academic and student life programs, has resulted in on-target student enrollment at MSSD for academic years 2014-2015 and 2015-2016.



## Performance Requirements

**Measure 1.5 of 13:** The enrollment in the Kendall Demonstration Elementary School established by Gallaudet University.  
(Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	140.0	152	Target Exceeded
2004	140.0	145	Target Exceeded
2005	140.0	142	Target Exceeded
2006	140.0	141	Target Exceeded
2007	140.0	128	Target Not Met
2008	140.0	127	Target Not Met
2009	140.0	120	Target Not Met
2010	140.0	105	Target Not Met
2011	140.0	99	Target Not Met
2012	115.0	97	Target Not Met
2013	115.0	94	Target Not Met
2014	115.0	92	Target Not Met
2015	115.0	87	Target Not Met
2016	115.0	106	Target Not Met
2017	115.0	(October, 2016)	Pending
2018	115.0	(October, 2017)	Pending

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database; Annual Report.

**Frequency of Data Collection:** Annual

**Data Quality.** On September 15 of each school year, census data is collected on the number of students enrolled at the Kendall Demonstration Elementary School (KDES). Gallaudet University states that this number is reviewed by both the Clerc Center's research and evaluation team, as well as by school administrators to ensure accuracy. This data does not include new students who enroll in the spring of the same academic year.

**Target Context.** The target was reduced to 115 students in September 2011 (FY 2012) to more closely reflect actual enrollment trends.

**Explanation.** KDES serves the local tri-state area (Maryland, Virginia, and the District of Columbia). Students at KDES from Maryland and Virginia are exclusively parentally placed, as local education authorities (LEA) do not refer students to out-of-state programs. Students at KDES residing in the Dis-

trict may be either parentally placed or placed by the District of Columbia LEA. At this time, almost all of KDES students are parentally placed.

Gallaudet University stated that a trend analysis over the past five years indicates that KDES continues to receive a steady stream of inquiries and requests for applications. The Clerc Center is more closely monitoring inquiry rates and improved its data collection process. This enables the Clerc Center to review reasons given by prospective families on why they chose not to enroll after beginning the application process. The goal is to ensure a higher percentage of inquiries and applications becoming enrollments.

In FY 2013, the Clerc Center hired an enrollment coordinator to lead enrollment goals of: (1) working closely with District of Columbia Public Schools to increase awareness with school officials about services available at KDES for students who are deaf and hard of hearing; (2) increasing awareness of and disseminating user friendly information about the programs; (3) improving admissions processes to improve efficiency and to ensure the process is easily navigated by prospective families;

## Performance Requirements

(4) improving data collection and analysis processes to review exit interview data and analyze retention; and (5) improving academic programs through rigorous standards-based curriculum, early intervention, after school programs, and collaborations with other programs and service providers.

Gallaudet University noted that these efforts have resulted in an increase in inquiries and applications, and in September 2015 (FY 2016), KDES enrollment has increased 22 percent from the previous year.

**Measure 1.6 of 13:** The percentage of first-time, full-time degree seeking undergraduate students who were in their first year of post-secondary enrollment in the previous year and who are enrolled in the current year. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	60	Historical Actual
2004	Not available.	70	Historical Actual
2005	Not available.	75	Historical Actual
2006	Not available.	64	Historical Actual
2007	Not available.	54	Historical Actual
2008	75.0	60	Target Not Met but Improved
2009	70.0	75	Target Exceeded
2010	70.0	73	Target Exceeded
2011	70.0	70	Target Met
2012	72.0	77	Target Exceeded
2013	73.0	69	Target Not Met
2014	74.0	67	Target Not Met
2015	75.0	67	Target Not Met
2016	75.0	(October, 2016)	Pending
2017	75.0	(October, 2017)	Pending
2018	75.0	(October, 2018)	Pending

**Source.** Gallaudet University Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** In FY 2007, the calculation for this measure was changed to measure the first-year persistence of first-time, full-time freshmen students from one fall semester to the next fall semester to be consistent with the IPEDS methodology. Data for this measure was provided by Gallaudet University to the Department for the first time in October 2008 on the percentage of the undergraduate students who were in their first year of enrollment (2007-2008 academic year) in the previous year and who returned for their second year in the fall of 2008 (2008-2009 academic year). The institution also provided historical data for FY 2003, 2004, 2005, 2006, and 2007.

**Target Context.** Gallaudet University's 2010-2015 Strategic Plan identified a goal for retaining 75% of its first-time, full-time degree seeking freshmen cohort by FY 2015; that is, 75% of this cohort would return from their first fall semester to their second fall semester. In order to meet this goal, the targets for FY 2012 through FY 2015 were incrementally raised to 72%, 73%, 74%, and 75%, respectively.

Gallaudet University noted that, in comparison, the National Center for Educational Statistics data indicates that 4-year public colleges and universities have an average persistence rate of 79%, and 4-year private colleges and universities have an average persistence rate of 80% (Institutional Retention and Graduation Rates for Undergraduate Students: 2012 data). Gallaudet University also reported that data from the ACT

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Educational Services for 2012 indicated for students with ACT scores in the range of 17-22 at 4-year public colleges and universities have a persistence rate of 58.9%, and 4-year private colleges and universities in the same ACT range have a persistence rate of 51.9%. Thus, these targets represent an ambitious, yet achievable, goal for Gallaudet University.

**Explanation.** This measure was designated as a long-term measure.

The university's first-year persistence remained flat compared to the previous year at 67%. Gallaudet University stated that its drop in the persistence rate in FY 2013 to 69%, from 77% in FY 2012, was attributable to a collection of factors, including: students' background characteristics; their fit with the institution; and their interactions with institutional structures once they were here. Since then, extensive analyses of data

to better understand the factors that predict retention and attrition have been done in order to focus resources on factors most likely to improve persistence.

During FY 2015, there was a reexamination of our early alert system for students whose behaviors indicate a risk for attrition. This reexamination led to revisions and an expansion of early alert interventions to better connect students to key student success resources. Campus wide training and coaching with these early alerts were also implemented to support early alert users in best practices of early alert intervention. An Academic Intervention Team (AIT) was implemented during FY 2015 to monitor the Early Alert processes and interventions and intervene with students who are not responding to initial outreach and intervention efforts.

**Measure 1.7 of 13:** The Gallaudet University graduate student persistence rate. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2006	Not available.	77	Historical Actual
2007	Not available.	77	Historical Actual
2008	Not available.	80	Historical Actual
2009	Not available.	76	Historical Actual
2010	Not available.	77	Historical Actual
2011	Not available.	73	Historical Actual
2012	77.0	81	Target Exceeded
2013	77.0	83	Target Exceeded
2014	77.0	79	Target Exceeded
2015	80.0	84	Target Exceeded
2016	80.0	(October, 2016)	Pending
2017	80.0	(October, 2017)	Pending
2018	80.0	(October, 2018)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** Historically, Gallaudet University has calculated the graduate student persistence rate as the ratio of the number of returning graduate students in a particular fall to the number of graduate students "available to return." This

methodology was changed in September 2011 to calculate the persistence based on a cohort formula to include all students enrolled at the master's level at the University each fall, as the master's enrollment has a more consistent enrollment period than students at other graduate degree levels.

The persistence rate is calculated as the number of enrolled master's degree students who return the next fall, divided

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by the number who were enrolled in the previous fall, after subtracting the number of students who graduated from the denominator. This new method of calculating the graduate persistence rate is comparable to the method used to calculate undergraduate persistence rates.

**Target Context.** Based on five years of historical data (2006, 2007, 2008, 2009, and 2010) on the graduate student per-

sistence rate that was provided by Gallaudet University, the Department set the target at 77% for FY 2012, FY 2013, and FY 2014. This target is being increased to 80% in FY 2015 and FY 2016.

**Explanation.** This measure was designated as a long-term measure. Gallaudet graduate student persistence rates continue to exceed the established target.

**Measure 1.8 of 13:** The dropout rate for students in Model Secondary School for the Deaf. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2004	Not available.	11	Historical Actual
2005	Not available.	6	Historical Actual
2006	Not available.	5	Historical Actual
2007	Not available.	2	Historical Actual
2008	Set Baseline	13	Baseline
2009	13.0	3	Target Exceeded
2010	6.0	3	Target Exceeded
2011	6.0	3	Target Exceeded
2012	6.0	1	Target Exceeded
2013	6.0	1	Target Exceeded
2014	6.0	4	Target Exceeded
2015	6.0	6	Target Met
2016	6.0	(October, 2016)	Pending
2017	4.0	(October, 2017)	Pending
2018	4.0	(October, 2018)	Pending

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Admissions, Office of Planning, Development, and Dissemination.

**Frequency of Data Collection:** Annual

**Data Quality.** The MSSD dropout rate was calculated from data obtained from the PowerSchool databases, withdrawal forms from the Clerc Center Admissions Office, transcript requests from the MSSD Principal's Office, and Admissions Office follow-up with parents.

**Target Context.** The Clerc Center reported that the dropout rate for MSSD students has ranged from 2% to 13% from FY 2004 to 2008, with an average of 7% dropout rate over the

five years. The year-to-year variability in the dropout rate is due to the small population of students at MSSD. The Clerc Center also noted that NCES reported that the national event dropout rate for students in public schools in grades 9-12 in 2003-2004 was 3.9%. Based on the analysis of the national data and MSSD historical data, the target of 6% dropout rate was determined to be an ambitious, yet achievable goal. Given that MSSD achieved the dropout rate of 1% for 2012 and 2013 and 4% for 2014, this target is being reduced to 4%, beginning in 2017.

**Explanation.** The U.S. Department of Education's Common Core of Data (CCD) defines a dropout as "a student who was

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enrolled at any time during the previous school year who is not enrolled at the beginning of the current school year and who has not successfully completed school. Students who have transferred to another school, died, moved to another country, or who are out of school due to illness are not considered dropouts.” This method of calculating the dropout rate allows the Clerc Center to track annual changes in the dropout behavior of students.

In determining MSSD’s dropout rate, the Clerc Center calculates the percentage of MSSD students included in the official September 15 enrollment report, who indicated that they were dropping out of school, who withdrew from the program, who did not return from the previous year, who did not transfer to another high school program, or whose disposition after leaving MSSD could not be determined. The following equation is used by the Clerc Center to calculate the event dropout rate at MSSD:

$$\text{Dropout rate} = \frac{\begin{array}{c} \# \text{ of withdrawals} - (\# \text{ of transfers} + \\ \# \text{ of other exclusions}) \end{array}}{\begin{array}{c} \text{September 15 enrollment} - \\ (\# \text{ of transfers} + \# \text{ of other exclusions}) \end{array}}$$

The denominator of the equation is the official enrollment list for September 15 of the previous year, minus those leavers who are not classified as dropouts. The numerator of the equation is the number of dropouts for that year; that is, the number of leavers minus transfers and those who meet other exclusion criteria.

Exclusions to the dropout rate include those leavers who met any of the following conditions:

1. Transferred - The student transferred to and is attending another educational institution leading toward a high school diploma or its equivalent.

2. Completed program - The student received a high school diploma from MSSD or another high school program or its equivalent.
3. Early college enrollment - The student enrolled in and is attending a college offering a degree program, without first receiving a high school diploma.
4. Moved to another country - The student voluntarily or involuntarily moved out of the United States.
5. Temporary absence - The student has a temporary school-recognized absence due to suspension, illness, or unresolved immigration issues.
6. Late enrollment - The student is planning to enroll shortly after September 15.
7. Death - The student is deceased.

Dropouts also include leavers who met any of the following criteria:

1. Incomplete graduation requirements - the student completed all course requirements for graduation, but did not meet other graduation requirements.
2. Declared dropout - The student declares himself/herself to be dropping out of school.
3. Re-enrollment - The student dropped out during the previous school year, but re-enrolled by September 15th of the current school year.
4. Multiple events - The student dropped out multiple times during a school year is reported as a dropout only once for a single school year.

The Clerc Center has met the target for this measure each year from FY 2009 to FY 2015.

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**Measure 1.9 of 13:** The average daily attendance rate for students in Kendall Demonstration Elementary School for the Deaf.  
(Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2009	Not available.	94	Historical Actual
2010	Set Baseline	94	Baseline
2011	94.0	95	Target Exceeded
2012	95.0	95	Target Met
2013	95.0	95	Target Met
2014	95.0	96	Target Exceeded
2015	95.0	95	Target Met
2016	95.0	(October, 2016)	Pending
2017	95.0	(October, 2017)	Pending
2018	95.0	(October, 2018)	Pending

**Source.** Gallaudet University, Laurent Clerc National Deaf Education Center (Clerc Center) Power School student database on daily attendance data and the Office of Planning, Development, and Dissemination.

**Frequency of Data Collection:** Annual

**Data Quality.** Teachers at KDES record daily attendance in Power Teacher database program, a web-based student information system. Daily attendance is then calculated, based on enrollment dates for each students, in Power School database program. The Clerc Center merges data from these two database to generate a baseline average attendance rate for the year for KDES.

**Target Context.** The average daily K-8 grade attendance rates at KDES for the 2008-2009, 2009-2010, and 2010-2011 school years (FY 2009, 2010, and 2011) were 94%, 94%, and 95% respectively. Based on this data, the target was established in September 2011 at 95%.

**Explanation.** In 2008, the Clerc Center proposed a new measure for persistence of KDES students, using the average daily

attendance rate. This is frequently used by elementary schools as a non-academic indicator of adequate yearly progress when reporting data as required under the Elementary and Secondary Education Act accountability mandates. With this measure, daily attendance includes students who are enrolled on any particular day and who would be expected to be in school. This includes students who are in attendance, have excused absences, and have unexcused absences. The Clerc Center calculates the average daily attendance rate aggregating student attendance for the year and dividing that by the aggregated daily membership for the year, as follows:

$$\text{Average daily attendance rate} = \frac{\text{Aggregate attendance of K - 8 enrolled students}}{\text{Aggregate membership of K - 8 students}}$$

The Clerc Center has met the target for this measure each year from FY 2011 to FY 2015.

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**Measure 1.10 of 13:** The percentage of first-time, full-time, degree-seeking undergraduate students who graduate within six years of enrollment. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	29	Historical Actual
2004	Not available.	26	Historical Actual
2005	Not available.	28	Historical Actual
2006	Not available.	32	Historical Actual
2007	31.0	25	Target Not Met
2008	32.0	28	Target Not Met but Improved
2009	32.0	39	Target Exceeded
2010	32.0	35	Target Exceeded
2011	32.0	41	Target Exceeded
2012	32.0	33	Target Exceeded
2013	35.0	47	Target Exceeded
2014	39.0	46	Target Exceeded
2015	40.0	46	Target Exceeded
2016	42.0	(October, 2016)	Pending
2017	45.0	(October, 2017)	Pending
2018	45.0	(October, 2018)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Data Warehouse.

**Frequency of Data Collection:** Annual

**Data Quality.** This measure is consistent with the standard IPEDS methodology that uses a six-year cohort graduation rate, based on the same entering cohort as the IPEDS first-year persistence indicator; that is, the percentage of all incoming first-time, full-time freshmen students in one semester who have graduated by the end of six years after entry. Using the IPEDS methodology of calculating this graduation rate allows for comparisons with other colleges and universities. Gallaudet University reported the FY 2014 data on the percentage of first-time, full-time degree-seeking undergraduate students who graduate within six years of enrollment (that is, those who initially enrolled in the 2008-2009 academic year).

**Target Context.** The targets for FY 2013, FY 2014, FY 2015, and FY 2016 were raised from 32% to 35%, 39%, 40%, and 42%, respectively. In FY 2011, the six-year graduation rate was 41%, the highest rate for Gallaudet University up to that

time in years. The rate dropped in FY 2012, possibly due to the negative publicity surrounding the protest against the selection of a new president in 2006 (which would have affected the 2006-2007 cohort's persistence rate in FY 2007 and graduation rate in FY 2012). A much higher graduation rate occurred in FY 2013, at 47%, for the 2007-2008 cohort and continued to be high at 46% for FY 2014, for the 2008-2009 cohort. Based on the higher graduation rates, the target is being increased to 45% for FY 2017 and 2018.

Recent comparisons with the National Center for Education Statistics data for 4-year public and private colleges and universities indicate that 4-year public colleges have a six-year graduation rate of 57% and private colleges at 66% respectively. Gallaudet University reports that data from ACT Educational Services for 2012 indicates that students with ACT scores in the range of 17-22 at 4-year public colleges and universities have an average six-year graduation rate of 38.6%, and 4-year private colleges and universities in the same ACT range have an average six-year graduation rate of 55.3%. Further analysis show that public and private institutions with



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open enrollment and large populations from low-income families have lower graduation rates; that is, these four-year public colleges have an average graduation rate of 28.5% and four-year private colleges have an average graduation rate of 32.6%. Gallaudet University's graduation rates have been more similar to public colleges with open enrollment and student populations from low-income families.

**Explanation.** This is a long-term measure.

The university's six-year graduation rate of first-time, full-time, degree-seeking undergraduate students continues to exceed the target. While the university exceeded the target, there has been and still is a focus on implementing action plans following Strategic Goal B: increase Gallaudet's six-year undergraduate graduation rate to 50%. Some of these action plans are tied to the action plans for retention, such as expanding the early alert system and increasing the number of students declaring their major by their third year.

<b>Measure 1.11 of 13:</b> The graduation rate of Gallaudet University graduate students. (Desired direction: increase)			
<b>Year</b>	<b>Target</b>	<b>Actual (or date expected)</b>	<b>Status</b>
2006	Not available.	74	Historical Actual
2007	Not available.	78	Historical Actual
2008	Not available.	63	Historical Actual
2009	Not available.	74	Historical Actual
2010	Not available.	74	Historical Actual
2011	Not available.	72	Target Not In Place
2012	74.0	72	Target Not Met
2013	74.0	75	Target Exceeded
2014	74.0	81	Target Exceeded
2015	74.0	83	Target Exceeded
2016	74.0	(October, 2016)	Pending
2017	74.0	(October, 2017)	Pending
2018	74.0	(October, 2018)	Pending

**Source.** Gallaudet University, Office of Graduate Admissions database.

**Frequency of Data Collection:** Annual

**Data Quality.** Gallaudet University is able to identify its cohort of new master's degree students each fall through the University's Data Warehouse. The cohort includes all new master's degree students at the institution, regardless of whether they are not new to the institution or new to the graduate career at the University.

Historically, Gallaudet University has calculated the graduate student graduation rate by dividing the number of graduates in a given year, including masters and doctoral degree program students, by the number of entering students six years prior. This methodology was changed in September 2011 to calculate

the graduate rate based on a cohort formula to include all new students enrolled at the master's level at the University each fall who complete their program within a three year period. The calculation includes master's students who were already enrolled in a graduate program at the University and transferred to a different graduate program as a new student. This methodology parallels established formulas used to calculate undergraduate graduation rates.

**Target Context.** Gallaudet University proposed that the target for the revised measure be established at 70%. Based on five years of historical data (2006, 2007, 2008, 2009, and 2010) that was provided by Gallaudet University, the Department set the target at 74% for FY 2012 and subsequent years. The target was exceeded in FY 2014, at 81% graduation rate, by the University's graduate students.

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**Explanation.** This measure was designated as a long-term measure.

The university's six-year graduation rate of graduate students continues to exceed the target.

**Measure 1.13 of 13:** The annual graduation rate of the Model Secondary School for the Deaf students. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2014	Set Baseline	72	Baseline
2015	65.0	73	Target Exceeded
2016	65.0	(October, 2016)	Pending
2017	65.0	(October, 2017)	Pending
2018	65.0	(October, 2018)	Pending

**Source.** Gallaudet University, Clerc Center Office of Planning, Development, and Dissemination.

**Frequency of Data Collection:** Annual

**Data Quality.** In determining the four-year adjusted cohort graduation rate (ACGR), the Clerc Center is using the Department's definition as the percentage of students who graduate from secondary school with a regular diploma in the standard number of years, which is set at four, and is referred to as the "on-time graduation rate." The cohort is "adjusted" by adding any student transferring into the cohort and by subtracting any student who transfer out, emigrate to another country, or die during the years covered by the rate. This methodology allows for the movement of transfer of students into or out of the Clerc Center.

The following formula shows how the 4-year ACGR would be calculated for the cohort entering the 9th grade for the first time in school year 2010-2011 and graduating by the end of school year 2013-2014.

Number of cohort members who earned a regular high school diploma by the end of school year 2013-2014  
(divided by)

Number of first-time 9th-graders in fall 2010 (starting cohort), plus students who transferred in, minus students who transferred out, emigrated, or died during school years 2010-2011, 2011-2012, 2012-2013 and 2013-2014

MSSD previously reported its graduation rates using a two year senior cohort (formula = # of students graduating in year

A + # of students graduating in year B / total # of students in cohort - the # of cohort students who transferred).

This calculation did not require tracking of transfer students in and out of the program for students who were not in the two-year cohort (underclassmen). MSSD calculated graduation rates based on first time seniors. This was limited to first time seniors at MSSD, as systems were not yet in place to track if a student had been classified as a senior at another school/program. Documentation of diploma type was also not included, as is required to successfully calculate the ACGR.

When attempting to do retrospective calculations some of the variables needed to calculate the ACGR data points were not available on a large percentage of the graduating students from 2012 and 2013. Therefore, retroactively calculating the graduation rates of MSSD from 2012 and 2013 with validity using the ACGR is not an accurate reflection of program performance (due to missing data, rather than low graduation rates).

**Target Context.** The new measure is a four-year adjusted cohort graduation rate (ACGR), based on first-time 9th grade cohorts, and uses the data definitions approved by the U.S. Department of Education and is consistent with how states are now uniformly reporting graduation rates as required by the No Child Left Behind Act. It replaces the two-year cumulative senior graduation rate (a cohort of seniors who completed their fourth year of high school and graduate and seniors from the same group who return for a fifth year of school before graduating.)

In 2014, the National Center for Education Statistics (NCES) reported that national graduation rates for students with disabilities in 2010-2011 and in 2011-2012 were 59% and 61%, respectively. (The 2012-2013 national graduation rate will not be available until April 2015.) Since the most recent data

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available is from 2011-2012, the Clerc Center proposed to use the 61% as a reference point in setting an appropriate target for its students.

The target for 2015 and subsequent years is set at 65% and will be adjusted accordingly as new data on the national graduation rate of students with disabilities from NCES become available.

**Explanation.** This measure will allow for direct comparison with the national graduation rates of students with disabilities, as reported by the Institute of Education Sciences' National Center for Education Statistics.

### Objective 2 of 4:

Gallaudet works in partnership with others to develop and disseminate educational programs and materials for deaf and hard-of-hearing students.

**Measure 2.1 of 1:** The number of other programs and/or institutions adopting MSSD/Kendall innovative strategies/curricula or modifying their strategies as a result of MSSD and Kendall's leadership. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	41.0	54	Target Exceeded
2004	50.0	91	Target Exceeded
2005	55.0	56	Target Exceeded
2006	55.0	84	Target Exceeded
2007	55.0	89	Target Exceeded
2008	55.0	54	Target Not Met
2009	55.0	43	Target Not Met
2010	55.0	34	Target Not Met
2011	55.0	31	Target Not Met
2012	55.0	181	Target Exceeded
2013	55.0	113	Target Exceeded
2014	120.0	187	Target Exceeded
2015	120.0	77	Target Not Met
2016	120.0	(October, 2016)	Pending
2017	140.0	(October, 2017)	Pending
2018	140.0	(October, 2018)	Pending

**Source.** Gallaudet University, Clerc Center, Office of Planning, Development, and Dissemination.

**Frequency of Data Collection:** Annual

**Data Quality.** The Clerc Center noted that this measure, starting in FY 2012, is a reflection of the sum of the number

of programs that invested considerable resources in Clerc Center products, reported to the Clerc Center that they were using Clerc Center resources, and had multiple viewers for a Clerc Center webinar. Any program that may have been in more than one category or appeared multiple times within a category was counted only once.

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**Target Context.** The Department is working with the Clerc Center to develop more meaningful measures related to its national mission activities as alternatives to this measure. The alternative measure(s) would assess the impact of evidence-based research projects, other scholarly activities, and demonstration and program development activities on improving national educational outcomes for students who are deaf and hard of hearing. The time frame for developing new measures is uncertain.

**Explanation.** The Clerc Center's strategic plan is designed to engage programs in different ways and to disseminate information using mechanisms that can reach a broader audience. The Clerc Center is engaged in a process to revise this indicator with the Department that would better measure the outcomes of this work. This indicator was expanded

by the Clerc Center in FY 2012 to include 112 schools and organizations that arranged, for multiple individuals, viewings of four online webinars offered by the Clerc Center. In FY 2013, the Clerc Center reported that it offered one online webinar, which included 64 schools and organizations. Many of the same schools and organizations who participated in the webinars also hosted follow-up activities. In FY 2014, the Clerc Center offered two online webinars, which included 150 schools and organizations, and accounted for 80 percent of the total number of programs/institutions adopting Clerc Center strategies or curricula that year. However, in FY 2015, due to other training priorities, the Clerc Center made the decision not to host any webinars, which is evidenced by the overall decrease in the number of schools and institutions adopting Clerc Center strategies or curricula.

*Each year in December, KDES celebrates the famous Deaf education pioneer, Laurent Clerc, with interactive activities related to Deaf culture and history, American Sign Language, and performance skits. This year's guest storyteller and Gallaudet education professor Marlon Kuntze invited students to board an imaginary time machine located at the basement of Gallaudet's Chapel Hall to meet Laurent Clerc and find out about his life and then bring him to see the Kendall students of today. The students showed a video they created about Clerc in which they perform ASL handshake and ASL chain stories in honor of Clerc's support of sign language in deaf education.*

Photo by Susan Flanigan



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### Objective 3 of 4:

Curriculum and extracurricular activities prepare students to meet the skill requirements of the workplace or to continue their studies.

<b>Measure 3.1 of 7:</b> The percentage of Gallaudet University Bachelor graduates who are employed during their first year after graduation. (Desired direction: increase)			
<b>Year</b>	<b>Target</b>	<b>Actual (or date expected)</b>	<b>Status</b>
2003	Not available.	73	Historical Actual
2004	80.0	69	Target Not Met
2005	81.0	84	Target Exceeded
2006	82.0	73	Target Not Met
2007	82.0	70	Target Not Met
2008	82.0	80	Target Not Met but Improved
2009	82.0	83	Target Exceeded
2010	82.0	72	Target Not Met
2011	75.0	50	Target Not Met
2012	50.0	63	Target Exceeded
2013	50.0	59	Target Exceeded
2014	50.0	77	Target Exceeded
2015	53.0	(October, 2016)	Pending
2016	53.0	(October, 2017)	Pending
2017	53.0	(October, 2018)	Pending
2018	53.0	(October, 2019)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

**Frequency of Data Collection:** Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The employment rate reported in this indicator is defined as those working full-time and those working part-time divided by the total respondents to this survey.

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University began in the 2011-2012 academic year to collect new addresses immediately after graduation and to send out a Web-based survey with electronic reminders, as well as the mailed survey. At the same time, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. The additional information likely impacted the distribution of alumni between this category and 3.2.

**Target Context.** In FY 2011, the target for this measure was revised to 75% to reflect changes made in Measure 3.2 and



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the fact that each alumnus would be counted only once. This would allow the total percentage across all three categories (Measures 3.1, 3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or were who identified in the Student Tracker service. The target was revised again in FY 2012 (data for this fiscal year was submitted in October 2013) to reflect the impact of collecting data from various sources, including Student Tracker's information on enrolled students at other colleges and universities. The target is being increased to 53% for FY 2015 and FY 2016.

**Explanation.** In FY 2010, Gallaudet University began reporting each alumnus in only one category - either employed, pursuing additional education, or neither employed nor pursuing additional education, resulting in a lower number of those pursuing additional education when those employed were removed from this category.

Each alumnus is counted only once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2013 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	99
Education	24
Neither	5
<b>TOTAL RESPONDENTS</b>	<b>128</b>
Unknown/not responded	78
<b>Total Graduates</b>	<b>206</b>

(Some bachelors-level graduates who were employed during their first year after graduation were also pursuing additional education that matched the qualifications for Measure 3.2, but they are counted only in this category on employment.)

For FY 2014, the percentage of Gallaudet University Bachelor graduates who are employed during their first year after graduation increased 18% compared to the previous year. This increase may be attributed to the decrease in the national unemployment rate.

*Dr. Maribel Gárate, associate professor and chair of Department of Education (graduate and undergraduate programs), has conducted trainings and given presentations on topics related to bilingual deaf education, English as a Second Language instruction for Deaf children, literacy instruction, integrated curriculum, and ASL Linguistics to teachers, staff, and school administrators, both nationally and internationally.*

Photo by Zhee Chatmon





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**Measure 3.2 of 7:** The percentage of Gallaudet University Bachelor graduates who are in advanced education or training during their first year after graduation. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2003	Not available.	38	Historical Actual
2004	40.0	36	Target Not Met
2005	41.0	36	Target Not Met
2006	41.0	13	Target Not Met
2007	37.0	14	Target Not Met but Improved
2008	37.0	12	Target Not Met
2009	38.0	7	Target Not Met
2010	38.0	18	Target Not Met but Improved
2011	15.0	45	Target Exceeded
2012	45.0	35	Target Not Met
2013	45.0	38	Target Not Met but Improved
2014	45.0	19	Target Not Met
2015	45.0	(October, 2016)	Pending
2016	45.0	(October, 2017)	Pending
2017	45.0	(October, 2018)	Pending
2018	45.0	(October, 2019)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

**Frequency of Data Collection:** Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The advanced education or training rate reported in this indicator is defined as those in full-time education, in part-time education, and in internships, practicum, and other unpaid educational experiences, divided by the total number of respondents to the survey. Advanced education or training includes students enrolled in a master's or Ph.D. program, a vocational or technical program or another type of program (e.g., law school or medical school).

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University began in the 2011-2012 academic year to collect new addresses immediately after graduation and to send out a Web-based survey with electronic reminders, as well as the mailed survey. At the same time, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. The additional information likely impacted the distribution of alumni between this category and 3.1.

**Target Context.** In 2011, the target for this measure be revised to 15% to reflect changes made in Measure 3.1 and the fact that each alumnus would be counted only once. This allows the total percentage across all three categories (Measures 3.1,

## Performance Requirements

3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or were who identified in the Student Tracker service. The target was revised again in FY 2012 (data for this fiscal year was submitted in October 2013) to reflect the impact of collecting data from various sources, including Student Tracker's information on enrolled students at other colleges and universities.

**Explanation.** In FY 2010, Gallaudet University began reporting each alumnus in only one category - either employed, pursuing additional education, or neither employed nor pursuing additional education, resulting in a lower number of those pursuing additional education when those employed were removed from this category.

Each alumnus is counted only once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2013 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	99
Education	24
Neither	5
<b>TOTAL RESPONDENTS</b>	<b>128</b>
Unknown/not responded	78
<b>TOTAL GRADUATES</b>	<b>206</b>

(Some bachelors-level graduates who were employed during their first year after graduation were also pursuing additional education that matched the qualifications for Measure 3.2, but they are counted only in this category on employment.)

For FY 2014, the percentage of Gallaudet University Bachelor graduates who are in advanced education or training during their first year after graduation decreased 19% compared to the previous year. This decrease is attributed to the increase in Gallaudet University Bachelor graduates who are employed during their first year after graduation.



*Andrea Sonnier, a doctoral student in the Critical Studies in the Education of Deaf Learners, gives an in-class presentation. The Doctor of Philosophy in Critical Studies in the Education of the Deaf Learner emphasizes critical pedagogy as the foundation for advocacy in the education of deaf individuals. Graduates are prepared to be agents of change in their roles as practitioners, administrators, teacher educators, and researchers through a critical examination of educational, social, and political issues.*

Photo by Zhee Chatmon

## Performance Requirements

**Measure 3.3 of 7:** The percentage of Gallaudet University Bachelor graduates who are not employed nor in advanced education or training during their first year after graduation. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2003	Not available.	11	Historical Actual
2004	Not available.	15	Historical Actual
2005	Not available.	11	Historical Actual
2006	Set Baseline	15	Baseline
2007	10.0	16	Target Not Met
2008	10.0	8	Target Exceeded
2009	10.0	10	Target Met
2010	10.0	10	Target Met
2011	10.0	5	Target Exceeded
2012	5.0	2	Target Exceeded
2013	5.0	3	Target Exceeded
2014	5.0	4	Target Exceeded
2015	2.0	(October, 2016)	Pending
2016	2.0	(October, 2017)	Pending
2017	2.0	(October, 2018)	Pending
2018	2.0	(October, 2019)	Pending

**Source.** Gallaudet University, Office of Institutional Research, Annual Alumni Survey (of recent graduates).

**Frequency of Data Collection:** Annual

**Data Quality.** The source of this data is from an annual standardized survey to graduates one year after graduation. This survey asks questions about advanced education or training status, types of employment, salary, satisfaction with the employment, and qualifications for the job. The rate reported in this indicator is defined as those who are not employed (both those seeking work and those not seeking work) nor in advanced education or training, divided by the total respondents to this survey.

In previous years, about 30 to 35% of the graduates (approximately 50 students) responded to the survey. To improve the response rate, the University now collects new addresses

immediately after graduation and sends out a Web-based survey with electronic reminders, in addition to the mailed survey. In the 2011-2012 and 2012-2013 academic years, the University also sought information about its recent alumni through the National Clearinghouse's Student Tracker service on alumni attendance at other universities. This information likely impacted the distribution of alumni between 3.1 and 3.2. Measure 3.3 is the remaining percentage of alumni looking for work, are not employed, are not pursuing employment or additional education, or unknown.

**Target Context.** In 2012, the target for this measure is being revised to 5% to reflect changes made in the two previous indicators on the percentage of students employed and/or in advanced education or training during their first year after graduation and each alumnus being counted only once. This allows the total percentage across all three categories (Mea-

## Performance Requirements

tures 3.1, 3.2 and 3.3) to equal 100% of the alumni who submitted responses to the survey or were who identified in the Student Tracker service. The target is being revised to 2% for FY 2015 and FY 2016.

**Explanation.** In FY 2010, Gallaudet University began reporting each alumnus in only one category - either employed, pursuing additional education, or neither employed (including those seeking employment or not seeking employment) nor pursuing additional education.

Each alumnus is counted only once in their primary category as: (1) working fulltime; (2) seeking work; (3) working part-time; (4) not seeking work; (5) pursuing education full-time; (6) pursuing further education part-time; and (7) taking internships, practicums, and other unpaid educational experiences. Using these categories, Gallaudet prioritized and ranked respondents of the 2013 graduates when their answers indicated they fit the qualifications of more than one category.

Survey Respondents	
Employed	99
Education	24
Neither	5
<b>TOTAL RESPONDENTS</b>	<b>128</b>
Unknown/not responded	78
<b>TOTAL GRADUATES</b>	<b>206</b>

For FY 2014, the percentage of Gallaudet University Bachelor graduates who are neither employed or in advanced education or training during their first year after graduation exceeded the target.

**Measure 3.6 of 7:** The percentage of Model Secondary School for the Deaf graduates who are not in jobs nor postsecondary (advanced education or training) programs within one year after graduation. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2007	Not available.	0	Historical Actual
2008	Set Baseline	7	Baseline
2009	7.0	0	Target Exceeded
2010	7.0	7	Target Met
2011	0.0	7	Target Not Met
2012	0.0	7	Target Not Met
2013	0.0	24	Target Not Met
2014	25.0	7	Target Exceeded
2015	25.0	(October, 2016)	Pending
2016	25.0	(October, 2017)	Pending
2017	25.0	(October, 2018)	Pending
2018	25.0	(September, 2019)	Pending

**Source.** Gallaudet University, Clerc Center Office of Program Monitoring and Evaluation, survey of graduates' status.

**Frequency of Data Collection:** Annual

**Data Quality.** Since FY 2008, the Clerc Center has been conducting one-year follow-up survey during the following summer of each MSSD graduating class, on the percentages of graduates in postsecondary education, employed, and doing

neither. In FY 2014, the Clerc Center implemented a new method of collecting data from its graduates to address the historically low response rates to the surveys. Through a combination of successfully contacting each graduate or graduate's family directly or getting results from a query in the National Student Clearinghouse's Student Tracker service, the Clerc Center was able to get one-year follow-up data on 67% of the 2014 graduating class. With the new data collection methods

## Performance Requirements

and tracking systems, the Clerc Center believes that follow-up data will be more meaningful and allow for more consistent reporting of data in the future.

**Target Context.** In FY 2014, the Department merged Measures 3.4 and 3.5 to form a new measure, Measure 3.7, combining the percentage of students, from the 2013 graduating class, reporting they are employed or are enrolled in college or other post-secondary education or training within one year after graduation. However, the Clerc Center stated that it is unable to use historical data as a baseline for a new target, as in previous years the Center had much lower response rates to surveys from its graduates.

The Clerc Center achieved a significantly higher response rate to the survey and acquired data from the National Student Clearinghouse's Student Tracker service in 2014 and 2015. This data provided a more complete and accurate picture of the Clerc Center's post-school outcomes, and, for the first time, captures those graduates who are not employed or in higher education.

This data is comparable to data provided by the Office of Special Education in its Part B State Performance Plan/

Annual Performance Reports: 2013 Indicator Analysis for 2009, 2010, 2011. Using the OSEP measure as a reference point, the target for this measure is set at 25% for 2014 (to be collected in October 2015) and subsequent years. As new data becomes available from OSEP and the Clerc Center, this target can be adjusted accordingly.

**Explanation.** The percentages for the two current measures on post-school outcomes (Measures 3.6 and 3.7) will total 100%.

Survey Respondents	
Employed or in higher education one year after graduation	28
Doing neither one year after graduation	2
<b>Total Respondents</b>	<b>30</b>
Unknown/not responded	15
<b>TOTAL CLERC CENTER 2014 GRADUATES</b>	<b>45</b>

**Measure 3.7 of 7:** The percentage of Model Secondary School for the Deaf graduates who are enrolled in college or other post-secondary education or training, and/or who are competitively employed within one year after graduation. (Desired direction: increase)

Year	Target	Actual (or date expected)	Status
2013	100.0	76	Target Not Met
2014	75.0	93	Target Exceeded
2015	75.0	(October, 2016)	Pending
2016	75.0	(October, 2017)	Pending
2017	75.0	(October, 2018)	Pending
2018	75.0	(October, 2019)	Pending

**Source.** Gallaudet University's Clerc Center Office of Planning, Development, and Dissemination survey on graduates' status.

**Data Quality.** This is a new measure, combining the percentage of MSSD graduates who are in jobs (Measure 3.4) and/or who are in advanced education or training (Measure 3.5) within one year after graduation. To address the previous low response rates, the Clerc Center revised its data collection methods in FY 2014 and achieved a higher response rate than that of previous years. For this new measure, the data on the outcomes of Model Secondary school graduates will be

collected each year through both a one-year graduate follow-up contact with the graduate or the graduate's family and results from a query with the National Student Clearinghouse's Student Tracker service. These results will include graduates enrolled at colleges and universities and/or competitively employed.

In FY 2015, the Clerc Center was able to get one-year follow-up data on 67% of the 2014 graduating class. With the new data collection methods and tracking systems, the Clerc Center believes that follow-up data will be more meaningful and allow for more consistent reporting of data in the future.

## Performance Requirements

**Target Context.** In FY 2014, the Department merged Measures 3.4 and 3.5 to form a new measure, Measure 3.7, combining the percentage of students, from the 2013 graduating class, reporting they are employed or are enrolled in college or other post-secondary education or training within one year after graduation. However, the Clerc Center stated that it is unable to use historical data as a baseline for a new target, as in previous years the Center had much lower response rates to surveys from its graduates.

The Clerc Center achieved a significantly response rate to the survey and acquired data from the National Student Clearinghouse's Student Tracker service in 2014 and 2015. This data provided a more complete and accurate picture of the Clerc Center's post-school outcomes, and is comparable to data provided by the Office of Special Education for 2009, 2010, 2011 at 72.5%, 72.5%, and 73.5%, respectively. Using the OSEP measure as a reference point, the target for this measure is set at 75% for 2014 (to be collected in October 2015) and subsequent years. As new data becomes available from OSEP and the Clerc Center, this target can be adjusted accordingly.

**Explanation.** This is a new measure to combine and replace the two previous measures - "the percentage of Model Secondary School graduates who are in jobs within one year after

graduation" and "the percentage of Model Secondary School graduates who are in advanced education or training programs within one year after graduation" - in the FY 2014 Performance Report. An aggregated indicator is a better measure of outcomes, as students who graduate from high school are often engaged in competitive employment and enrolled in a post-secondary program at the same time. This is also more consistent with the indicator used by the Department's Office of Special Education Programs on the outcomes of students with disabilities one year after graduating from high school.

Survey Respondents	
Employed or in higher education one year after graduation	28
Doing neither one year after graduation	2
<b>Total Respondents</b>	<b>30</b>
Unknown/not responded	15
<b>TOTAL CLERC CENTER 2014 GRADUATES</b>	<b>45</b>

*The Clerc Center Odyssey magazine was honored at the 2015 CEASD Annual Conference held on April 17-20 in Tacoma, Washington with the Edward Allen Fay Award. The award recognizes individuals or organizations who have made a significant publication related to deafness. Odyssey began publication in 2000. Each issue has a thematic focus on issues important to deaf and hard of hearing children. The 2014 edition of Odyssey had "High Expectations for All" as its theme, and featured 20 articles from 34 contributors. Additionally, it came out at 96 pages--the longest produced in the history of the publication.*

Photo by Susan Flanigan





## Performance Requirements

### Objective 4 of 4:

Improve the efficiency of operations at Gallaudet as defined by the cost per successful student outcome, where the successful outcome is graduation.

**Measure 4.1 of 2:** Federal cost per Gallaudet graduate. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2003	Not available.	227,487	Historical Actual
2004	Not available.	227,453	Historical Actual
2005	Not available.	219,897	Historical Actual
2006	Not available.	230,214	Historical Actual
2007	Set Baseline	245,356	Baseline
2008	245,356.0	227,940	Target Exceeded
2009	245,356.0	264,523	Target Not Met
2010	237,969.0	257,875	Target Not Met but Improved
2011	243,204.0	252,501	Target Not Met but Improved
2012	248,554.0	241,894	Target Exceeded
2013	253,277.0	232,117	Target Exceeded
2014	258,343.0	222,140	Target Exceeded
2015	263,768.0	(January, 2016)	Pending
2016	269,307.0	(January, 2017)	Pending
2017	269,307.0	(January, 2018)	Pending
2018	269,307.0	(January, 2019)	Pending

**Source.** Gallaudet University, Budget Office.

**Frequency of Data Collection:** Annual

**Data Quality.** The FY 2014 data on the Federal cost per graduate, as reported by Gallaudet University, is an average of the cost per graduate from FY 2009 to FY 2014. The Federal cost per graduate includes graduates who receive bachelor, master's, and doctoral degrees, and graduate and specialist certificates from Gallaudet University.

**Target Context.** In determining the appropriate target each year for the Federal cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from Gallaudet University. When the Department originally set the targets for the two efficiency measures (Federal cost per graduate and total cost

per graduate) for FY 2010, 2011, and 2012, the Consumer Price Index (CPI) projections of inflation - as calculated by the Congressional Budget Office (CBO) - at a rate of 2.2% per year was used to guide target setting, with the overall goal for Gallaudet University to record increases in the efficiency measures that are at or less than the CPI rate each year.

In 2012, the Department chose to use the CPI-U estimates, as calculated by the Office of Management of Budget (instead of the CBO), to set the targets for FY 2013, 2014, 2015, which would be annually adjusted for the next fiscal year, based on the most recent projected and agreed-on assumed inflation rate. The targets that were set for 2013 to 2015 are as follows:

2013: 1.9%  
2014: 2.0%  
2015: 2.0%

## Performance Requirements

In August 2014, the targets were updated to align with current CPI-U estimates, August 2014 as follows:

2015: 2.1%

2016: 2.1%

Based on the declining Federal cost per graduate from \$264,523 in 2009 to \$222,140 in 2014, the 2017 and 2018 targets are set to be consistent with the 2016 target at \$269,307.

**Explanation.** This measure is calculated by adding the Federal appropriations for the current year and the five preceding years, which is then averaged. The average (from six years of Federal appropriations) is divided by the number of graduates in the current year, both undergraduate and graduate students. Federal students' financial aid, vocational rehabilitation payments, other Federal support for students, Federal grants and

contracts, the Federal Endowment Grant Program, tuition payments, and other private funds received by the University are not included in this calculation.

Gallaudet University reported that, over the past five years, the average 6-year educational expenses and the average 6-year Federal appropriations have increased by 5% and 9%, respectively; while the number of students graduating increased by 26%. With the rate of students graduating growing faster than the rate of increases in educational expenses and the Federal appropriations, the Federal and total educational costs per graduate decreased over the same period. Gallaudet University also stated that, with the predicted decrease in the number of students graduating in 2015 and future years, along with inflationary increases in educational costs and higher Federal appropriations, the Federal and total educational costs per graduate in 2015 and subsequent years will increase.

**Measure 4.2 of 2:** Total educational cost per graduate. (Desired direction: decrease)

Year	Target	Actual (or date expected)	Status
2003	Not available.	271,735	Historical Actual
2004	Not available.	272,294	Historical Actual
2005	Not available.	263,088	Historical Actual
2006	Not available.	273,068	Historical Actual
2007	Set Baseline	292,279	Baseline
2008	292,279.0	272,094	Target Exceeded
2009	292,279.0	313,142	Target Not Met
2010	284,066.0	301,652	Target Not Met but Improved
2011	290,315.0	291,548	Target Not Met but Improved
2012	296,702.0	276,785	Target Exceeded
2013	302,339.0	263,927	Target Exceeded
2014	308,386.0	250,882	Target Exceeded
2015	314,862.0	(January, 2016)	Pending
2016	321,474.0	(January, 2017)	Pending
2017	321,474.0	(January, 2018)	Pending
2018	321,474.0	(January, 2019)	Pending

**Source.** Gallaudet University, Budget Office.

**Frequency of Data Collection:** Annual

**Data Quality.** The FY 2014 data on the total educational cost per graduate, as reported by Gallaudet University, is an average of the cost per graduate from FY 2009 to FY 2014. The total

## Performance Requirements

educational cost per graduate includes graduates who receive bachelor, master's, and doctoral degrees, and graduate and specialist certificates from Gallaudet University.

**Target Context.** In determining the appropriate target each year for the Federal cost per graduate, future inflation must be taken into account, as well as the variation in the number of students who graduate each year from Gallaudet University. When the Department originally set the targets for the two efficiency measures (Federal cost per graduate and total cost per graduate) for FY 2010, 2011, and 2012, the Consumer Price Index (CPI) projections of inflation - as calculated by the Congressional Budget Office (CBO) - at a rate of 2.2% per year was used to guide target setting, with the overall goal for Gallaudet University to record increases in the efficiency measures that are at or less than the CPI rate each year.

In 2012, the Department chose to use the CPI-U estimates, as calculated by the Office of Management of Budget (instead of the CBO), to set the targets for FY 2013, 2014, 2015, which would be annually adjusted for the next fiscal year, based on the most recent projected and agreed-on assumed inflation rate. The targets that were set for 2013 to 2015 are as follows:

2013: 1.9%  
2014: 2.0%  
2015: 2.0

In August 2014, the targets were updated to align with current CPI-U estimates, August 2014 as follows:

2015: 2.1%  
2016: 2.1%

Based on the declining total cost per graduate from \$313,142 in 2009 to \$250,882 in 2014, the 2017 and 2018 targets are set to be consistent with the 2016 target at \$321,474.

**Explanation.** This measure is calculated by adding the Federal appropriations for the current year and the five preceding years, which is then averaged. The average (from six years of Federal appropriations) is divided by the number of graduates in the current year, both undergraduate and graduate students. Costs associated with public services, auxiliary enterprises, and construction, are excluded from this calculation.

Gallaudet University reported that, over the past five years, the average 6-year educational expenses and the average 6-year Federal appropriations have increased by 5% and 9%, respectively; while the number of students graduating increased by 26%. With the rate of students graduating growing faster than the rate of increases in educational expenses and the Federal appropriations, the Federal and total educational costs per graduate decreased over the same period. Gallaudet University also stated that, with the predicted decrease in the number of students graduating in 2015 and future years, along with inflationary increases in educational costs and higher Federal appropriations, the Federal and total educational costs per graduate in 2015 and subsequent years will increase.



*For the first time in 55 years, Gallaudet's Theatre Arts presented William Shakespeare's Hamlet, April 12-21. The performance was adapted and directed by Ethan Sinnott, associate professor and chair of the Theatre Arts Department, and voiced under the direction of Dr. Lindsey Snyder.*

Photo by Tara Lanning



*The Sorenson Language and Communication Center Atrium is one of the popular areas for students to meet and study.*

Photo by Matthew Lester

## Gallaudet Strategic Plan

The Gallaudet Strategic Plan (GSP) provides the university community with a roadmap for the years 2010-2015. Approved by the Board of Trustees in May 2009 the GSP re-affirms the core values of our Mission, Vision, and Credo statements, and sets forth bold, new, clearly articulated goals, objectives, and strategies – all included in this section. In broad terms, the five goals focus on: enrollment; persistence and graduation; resource efficiency; academic programs; and research and outreach. All were established to ensure a university of excellence for future generations of students.





## I. Brief History

In June 2007, Gallaudet University began a revitalization process by establishing a working group to develop a refocused mission statement; in doing so, we were guided by a sense of rededication to Gallaudet's heritage as a bilingual, signing community of students, teachers, and scholars. The new mission statement was subsequently approved by the Board of Trustees in November 2007, and is included earlier in this report.

Thereafter, five strategic goals were developed that sharpened the emphasis of the previous strategic plan, and focused on issues that flowed from the revised mission statement. Those five areas, each with a strong goal vital to the ongoing renewal of Gallaudet, can be broadly stated as involving: enrollment; persistence and graduation; resource efficiency; academic programs; and research and outreach.

Beginning with those goals, the Board of Trustees asked the campus community to engage a process of envisioning the next strategic steps for the University. The community responded by developing a strategic plan that established objectives and strategies for accomplishing the five goals. Working together, the constituencies of Gallaudet University prepared a complete plan—the Gallaudet Strategic Plan (GSP).

In May 2009, the Board of Trustees unanimously approved this new Gallaudet Strategic Plan intended to carry the University from 2010 to 2015. The GSP was the product of more than eighteen months of hard work by faculty, staff, students, alumni, and other key stakeholders. The GSP, like the revised mission statement and new vision statement (approved by the Board of Trustees in May 2009, and also included earlier in this report), is similarly guided by a sense of rededication to Gallaudet's heritage. The GSP positions Gallaudet as the University of choice for the most qualified and diverse group of deaf and hard of hearing students in the world, as well as for hearing students pursuing careers related to people who are deaf and hard of hearing.

The Gallaudet Strategic Plan for 2010-2015 provides the university community with a roadmap for upcoming years. In 2013, the GSP underwent a mid-cycle update to assess progress and clarify strategies as needed. During the next few years the five vital goals will ensure a University of excellence for future generations of students. The following section of this chapter includes the goals, objectives, and strategies of the GSP. Subsequent chapters of this report include a variety of data tied to each of the GSP goals.

*The Department of American Sign Language and Deaf Studies offers a M.A. degree in Sign Language Education (MASLED). This program is designed to prepare future sign language teachers to provide exemplary leadership in the American Sign Language teaching field.*

Photo by Zhee Chatmon





## Gallaudet Strategic Plan

### Goal A: Grow Gallaudet's enrollment of full-time undergrads, full- and part-time graduate students, and continuing education students to 3,000 by 2015

#### Objective 1

Expand all undergraduate recruiting to become "top of mind" for all deaf and hard of hearing, and hearing students seeking deaf/HH-related careers

**Strategy A.1.1** Increase enrollment of students from all programs serving deaf and hard of hearing students particularly from mainstream schools

**Strategy A.1.2** Develop an innovative media campaign to promote Gallaudet and frame Deaf People and their signed languages as positive aspects of human diversity, while iteratively assessing the impact of the campaign on enrollment (attracting/retaining diverse learners)

**Strategy A.1.3** Expand the pipeline of recreational and academic youth programs for middle- and high school deaf, hard of hearing, and hearing students by increasing the number of prospects in the Admissions database

**Strategy A.1.4** Increase the visibility of the Honors program to prospective students

**Strategy A.1.5** Increase enrollment of non-traditional students through targeted programs (i.e. online, ADP, transfer, readmits)

**Strategy A.1.6** Increase enrollment of international students to achieve the current university cap of 15%

**Strategy A.1.7** Increase enrollment of traditionally-underrepresented groups (TUGs)

**Strategy A.1.8** Increase enrollment of BAI/HUG students

#### Objective 2

Expand all graduate recruitment to become top of mind for all deaf, hard of hearing, and hearing students seeking deaf or hard of hearing-related careers

**Strategy A.2.1** Expand the graduate school pipeline by increasing the number of contacts

**Strategy A.2.2** Increase the enrollment of Traditionally Underrepresented Groups (See report from the Office of Distance Education for increasing Online Graduate Students)

**Strategy A.2.3** Increase department accountability to meeting new student enrollment targets

**Strategy A.2.4** Increase graduate program offerings based on student demand, market needs and enrollment trends

#### Objective 3

Expand the ELI program by reaching out to all constitutes that support ESL learning

**Strategy A.3.1** Develop new programs to encourage students to enroll in a degree seeking program at Gallaudet University after the completion of their ESL studies

**Strategy A.3.2** Identify funding partners with strategic goals related to education of ESL students

**Strategy A.3.3** Collaborate with the Office of International Relations and Gallaudet University Regional Center-Pacific strengthen international outreach efforts

**Strategy A.3.4** Expand summer offerings with an emphasis in ACT, GWE, DRP, and/or TOEFL preparation for current ELI students who intend to pursue undergraduate/graduate studies

## Gallaudet Strategic Plan

### Objective 4

The Center for Continuing Studies (CCS) will increase enrollment of students in professional studies courses and programs

**Strategy A.4.1** Expand the number of in-demand professional studies courses and programs that support professional development and career advancement

**Strategy A.4.2** Expand niche market programs and courses in the areas of ASL, Deaf Studies, and Interpreting

**Strategy A.4.3** Provide courses and programs in delivery formats, schedules, and locations that addresses the learning needs of adult learners

**Strategy A.4.4** Create appropriate students service infra-structure to more appropriately service adult learners

**Strategy A.4.5** Create appropriate students service infra-structure to more appropriately service adult learners



*Participants from the 145th Commencement gathered in front of Chapel Hall. Held on May 15, this Commencement exercise was the last for President T. Alan Hurwitz. Dr. Vincent Cerf, widely regarded as one of the creators of the Internet, served as the Commencement speaker.*

Photo by Zhee Chatmon

## Gallaudet Strategic Plan

### Goal B: By 2015, increase Gallaudet's six-year undergraduate graduation rate to 50%

#### Objective 1

Create environment and support system to encourage retention and successful completion

**Strategy B.1.1** Upgrade physical infrastructure (primarily dormitories to meet 21<sup>st</sup> century student expectations for quality of campus life.

**Strategy B.1.2** Strengthen the continuity of teaching and learning outcomes between developmental and "supported" courses and for credit courses

**Strategy B.1.3** Enhance collaboration connecting enrollment and retention support (e.g. ARC, placement testing, data analysis) to improve admissions decision making and ensure student support for student persistence and graduation

**Strategy B.1.4** Extend the Peer Mentor program for underprepared students from freshman to sophomore year, on into the major

**Strategy B.1.5** Develop an effective early warning and intervention system (Starfish) to guide students to graduation

**Strategy B.1.6** Provide learning assistance programs (Supplemental Instruction/Tutoring) and a centralized student academic support center with emphasis on Math, ASL, and English

#### Objective 2

Institutionalize clear Path to Graduation for all undergraduates

**Strategy B.2.1** Strengthen advising including collaboration between Academic Advising and Faculty Advising

**Strategy B.2.2** Update the GSR curriculum to manage limited resources, allow for timely progress to graduation, and provide for a bridge into the majors during GSR

**Strategy B.2.3** Strengthen culturally appropriate mentoring and support programs for all TUGs

#### Objective 3

Increase acceptance of undergraduate students into majors

**Strategy B.3.1** Develop and use student planning tools and resources for students in selecting and transitioning into a major and in documenting and monitoring milestones towards graduation

**Strategy B.3.2** Reduce barriers so that students can declare major no later than 50 credits

**Strategy B.3.3** Improve the course passage rates of key Gateway Courses

#### Objective 4

Increase and broaden accountability for student retention and graduation

**Strategy B.4.1** Utilize department/program retention and graduation targets and performance data to improve university retention and graduation

**Strategy B.4.2** Amend performance management system to reflect retention and graduation as strategic priorities for all faculty and staff

**Strategy B.4.3** Establish targets for retention and graduation of TUGs university wide, and in targeted majors

**Strategy B.4.4** Improve the quality of interactions between students and faculty and student support services

**Strategy B.4.5** Improve acceptance and respect in all programs for students, faculty and staff along all facets of diversity

## Gallaudet Strategic Plan

### Goal C: By 2015, secure a sustainable resource base through expanded and diversified funding partnerships and increased efficiency of operations

#### Objective 1

Increase breadth and depth of local and federal government relations

**Strategy C.1.1** Designate specific staff and retain external experts for government relations to strengthen partnerships with the federal and District of Columbia governments

**Strategy C.1.2** Increase accountability for performance on GPRA goals, with special attention to efficiency and cost/graduate indicators

**Strategy C.1.3** Develop facilities strategic plan for university and Clerc Center, and seek ongoing federal support for capital improvement projects

#### Objective 2

Grow revenue from grants, auxiliary enterprises, and private fundraising

**Strategy C.2.1** Develop incentives and infrastructure to support faculty/staff in seeking, obtaining, and administering grants

**Strategy C.2.2** Leverage the Innovation Lab concept (in initial planning stages) to secure grants and private funding

**Strategy C.2.3** Reallocate capital expenditures towards 6th Street projects to generate consistent revenue streams and improve Gallaudet's physical environment

**Strategy C.2.4** Explore options for additional revenue from interpreting, VRS, and other deafness-related enterprises

**Strategy C.2.5** Establish seed money for promising academic and nonacademic ventures and innovative revenue-producing programs

**Strategy C.2.6** Establish specific targets and strategies to grow planned giving, bequests, and private fundraising from foundations and individuals

#### Objective 3

Increase student-related income through enrollment growth

**Strategy C.3.1** Limit growth in charges for tuition and fees to inflation or less, to achieve lower costs per student and costs per graduate

**Strategy C.3.2** Identify student-specific auxiliary enterprises whose revenues could increase with enrollment, such as student housing (on- and off-campus)

**Strategy C.3.3** Optimize enrollment numbers resulting from Gallaudet administered financial aid, by targeting funds to undergraduates

**Strategy C.3.4** Develop program to increase student access to and usage of sources of financial aid in addition to Vocational Rehab, through communication with students and their parents

#### Objective 4

Improve efficiency and effectiveness of all programs and services

**Strategy C.4.1** Create mechanisms that reallocate resources to high-priority areas, including funding the strategic plan

**Strategy C.4.2** Conduct Workforce Planning Analysis, mapping human capital against current needs, to achieve improved faculty:student and staff:student ratios

**Strategy C.4.3** Identify optimal unit costs and develop plans to meet cost objectives

**Strategy C.4.4** Institute ongoing cost/benefit reviews of new and existing programs, including 'sunset policies'

**Strategy C.4.5** Develop shared services to increase efficiency and generate cost savings between departments

## Gallaudet Strategic Plan

**Goal D: By 2015, refine a core set of undergraduate and graduate programs that are aligned with the institutional mission and vision, leverage Gallaudet's many strengths, and best position students for career success**

### Objective 1

Optimize undergraduate majors and graduate programs to justify costs and outcomes

**Strategy D.1.1** Review outcomes of program prioritization to assess results of recommendations in terms of curricular and economic impact

**Strategy D.1.2** Assess the extent to which the program viability process has an impact on program changes

**Strategy D.1.3** Develop a process for assessing the quality and impact of new programs (since 2010) and for sunseting (closing) those that have not had desired impact

**Strategy D.1.4** Develop a regular Program Review process for all academic programs

### Objective 2

Develop five new comprehensive academic partnerships

**Strategy D.2.1** Develop and assess the strengths and challenges of a pilot partnership with one DC Consortium universities to develop or sustain curriculum for specific majors

**Strategy D.2.2** Conduct a best practices study on interuniversity partnerships and implement findings to maximize benefit of Gallaudet's membership in DC Consortium

### Objective 3

Strengthen students' preparation for employment and career success

**Strategy D.3.1** Maintain and strengthen the infrastructure to require real-world experiences (internships) as a graduation requirement for all students, by increasing collaborations between Career Center and academic programs

**Strategy D.3.2** Increase student participation and use of Career Center services to improve job search and interview skills

**Strategy D.3.3** Increase number of advisory groups consisting of employers, alumni, and professionals in the field (includes Career Center employer advisory board as well as departmental) to advise on developing, implementing and assessing programs

**Strategy D.3.4** Continue to develop relationships with new employers as well as strengthen existing relationships to increase variety and number of internship sites for students

**Strategy D.3.5** Create career skill application modules to be integrated throughout each major program (i.e. creation of SLOs for real-life application of skills)

### Objective 4

Increase faculty accountability for student learning and development

**Strategy D.4.1** Modify faculty performance management systems to increase accountability for results in total student development, including learning and engagement

**Strategy D.4.2** Through Scholarship of Teaching and Learning, identify ways to optimize classroom and online content and delivery methods

**Strategy D.4.3** Provide development opportunities, particularly via ASL/English bilingual education, to address the identified ways to optimize content and delivery methods

**Strategy D.4.4** Align teaching loads and course assignments to increase lower-level undergrads' access to faculty who are distinguished in teaching



## Gallaudet Strategic Plan

### Goal E: Establish Gallaudet as the epicenter of research, development and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all of humanity

#### Objective 1

Establish Gallaudet's research agenda and set and achieve targets for externally-funded research proposal submission, funding, and completion by 2015 and beyond

**Strategy E.1.1** Formulate no more than five integrated research priorities by assessing compelling needs as well as current and potential strengths in fields such as visual language and learning; hearing enhancement; linguistic and communication access; genetics; and ASL/English bilingualism

**Strategy E.1.2** Conduct market/feasibility study to identify potential funders, partners, and competitors to inform choice of priority areas in Gallaudet's research agenda

**Strategy E.1.3** Set and achieve targets for number of proposal submissions and successful funding awards in priority and discipline-specific research areas by 2015

#### Objective 2

Create the infrastructure needed to support a world-class research enterprise

**Strategy E.2.1** Assess and provide the necessary administrative leadership to promote research synergies within and outside the university

**Strategy E.2.2** Evaluate and provide appropriate staffing complement and resources to enhance services for pre-award support, post-award support, and research compliance including professional development and training in grant writing and management for faculty and support staff

**Strategy E.2.3a** Align faculty evaluation and incentive systems to encourage and reward grant-funded research and peer-reviewed publication

**Strategy E.2.3b** Identify and remove barriers that exist for deaf and hard of hearing faculty as they seek to advance their scholarship, research, and creative activity goals

**Strategy E.2.4** Build administrative infrastructure, and leadership succession, resource base needed to support and institutionalize externally funded research centers such as VL2, RERC-TA, and RERC-HE

**Strategy E.2.5** Set and achieve expectations for all doctoral programs to apply for external funds for research with significant support for graduate students, a plan for mentoring them in grant-writing, and support for post-doctoral fellows

**Strategy E.2.6** Determine strategic cost/benefit of revitalizing Gallaudet Research Institute (including re-creating center for assessment and demographic studies)

#### Objective 3

Enhance outreach integrating research and its evidence-based and ethical translation, particularly to benefit deaf and hard of hearing PK-12 students and visual learners across the lifespan.

**Strategy E.3.1** Through VL2, establish collaborations among Gallaudet University, the Clerc Center, and PK-12 programs nationwide to achieve two-way research and translation innovations with the goal of improving the learning outcomes of deaf and hard-of-hearing students, especially minority students

**Strategy E.3.2** Develop and implement research-based educational innovations and evaluate their impacts on student learning through research, PK-12 school and university partnerships, and cooperative relationships among community organizations, private foundations, museums, government programs, and industry

**Strategy E.3.3** Establish and maintain a state-of-the-art web-based national clearinghouse for research-based information relating to deaf/hard-of-hearing people

**Strategy E.3.4** Establish a center for research, development, and assessment on diversity, equity and TUG achievement, both on campus and in PK-12 settings







*Students venture into Chinatown, one of DC's vibrant areas known for its restaurants, museums, and entertainment. Washington, D.C. provides a rich blend of diversity and culture, and Gallaudet students certainly take advantage of all that is offered in the nation's capital.*

Photo by Zhee Chatmon

## **Strategic Plan Goal A: Enrollment**

This chapter includes data on University enrollment and on recruitment activity directed to individuals who are deaf or hard of hearing from minority backgrounds. (Separate data are contained in the Clerc Center chapter for their students.) Included are enrollment data: for the fiscal year and trend data for the last five years; by undergraduate, graduate and professional studies status; by race/ethnicity, gender, deaf/hearing status, and full-time/part-time status; for cochlear implant users; by state; for international students by country; by numbers applied, admitted, and enrolled; and by ACT scores. The contents of this chapter reflect the major accomplishments performed during FY 2015 in support of Goal A of the Gallaudet Strategic Plan.



## Goal A: Enrollment

### I. Enrollment

#### Fall 2014 Census University and Clerc Center Enrollment

	Full-time	Part-time	Total	% of Enrollment
Undergraduate Degree-seeking	951	50	1,001	
Freshmen	327	4	331	
Sophomores	165	4	169	
Juniors	236	5	241	
Seniors	213	35	248	
Second degree	10	2	12	
Undergraduate Non Degree-seeking		30	30	
<b>TOTAL UNDERGRADUATE</b>	<b>951</b>	<b>80</b>	<b>1,031</b>	<b>57%</b>
Graduate Degree-seeking	325	118	443	
Graduate Non Degree-seeking		14	14	
<b>TOTAL GRADUATE</b>	<b>325</b>	<b>132</b>	<b>457</b>	<b>25%</b>
English Language Institute	81		81	4%
Consortium		3	3	
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI &amp; CONSORTIUM</b>	<b>1,357</b>	<b>215</b>	<b>1,572</b>	
Kendall Demonstration Elementary School	87			
Model Secondary School for the Deaf	165			
<b>TOTAL CLERC CENTER</b>	<b>252</b>			<b>14%</b>
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI, &amp; CLERC CENTER</b>	<b>1,609</b>	<b>215</b>	<b>1,824</b>	<b>100%</b>
Professional Studies <sup>1</sup>		119	119	

<sup>1</sup>Professional Studies students can enroll continuously throughout the semester. Therefore, a one-time snapshot of Professional Studies enrollment does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results (GPRA) Report.

## Goal A: Enrollment

### End-of-Year University Enrollment with Dual Enrollment

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Undergraduates	1,184	1,204	1,200	1,160	1100
Graduates	488	491	535	567	513
English Language Institute	84	92	109	100	115
Consortium			11	12	5
Professional Studies	928	842	751	708	681
<b>TOTAL UNIVERSITY</b>	<b>2,684</b>	<b>2,629</b>	<b>2,606</b>	<b>2,547</b>	<b>2,414</b>
<b>DISTINCT HEADCOUNT ENROLLMENT</b>	<b>2,496</b>	<b>2,438</b>	<b>2,463</b>	<b>2,419</b>	<b>2,306</b>
<b>ENROLLED IN MORE THAN ONE CATEGORY</b>	<b>188</b>	<b>191</b>	<b>143</b>	<b>128</b>	<b>108</b>

### Fall Census University and Clerc Center Enrollment

	2010	2011	2012	2013	2014
Undergraduate Degree-seeking	1,064	1,078	1,097	1,053	1,001
Undergraduate Non Degree-seeking	36	40	20	24	30
<b>TOTAL UNDERGRADUATE</b>	<b>1,100</b>	<b>1,118</b>	<b>1,117</b>	<b>1,077</b>	<b>1,031</b>
Graduate Degree-seeking	413	410	446	469	443
Graduate Non Degree-seeking	20	18	17	15	14
<b>TOTAL GRADUATE</b>	<b>433</b>	<b>428</b>	<b>463</b>	<b>484</b>	<b>457</b>
English Language Institute	59	65	90	63	81
Consortium			4	7	3
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI &amp; CONSORTIUM</b>	<b>1,592</b>	<b>1,611</b>	<b>1,674</b>	<b>1,631</b>	<b>1,572</b>
Kendall Demonstration Elementary School	99	97	94	92	87
Model Secondary School for the Deaf	140	165	150	149	165
<b>TOTAL CLERC CENTER</b>	<b>239</b>	<b>262</b>	<b>244</b>	<b>241</b>	<b>252</b>
<b>TOTAL UNDERGRADUATE, GRADUATE, ELI, &amp; CLERC CENTER</b>	<b>1,831</b>	<b>1,873</b>	<b>1,918</b>	<b>1,872</b>	<b>1,824</b>
Professional Studies <sup>1</sup>	201	102	147	122	119

<sup>1</sup> Professional Studies students can enroll continuously throughout the semester. Therefore, a one-time snapshot of Professional Studies enrollment does not provide an accurate picture. The snapshot of Professional Studies enrollment is used, however, in reporting enrollment in the Government Performance and Results (GPRA) Report.

## Goal A: Enrollment

### Fall 2014 Degree-seeking Diversity by Career Level

	Undergraduate	Graduate	Total
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	82	28	110
American Indian/Alaska Native	2	1	3
Asian	43	14	57
Black/African American	124	41	165
Hispanic of any race	146	25	171
Native Hawaiian/Other Pacific Islander	3		3
Two or more	33	10	43
White	562	264	826
Race and ethnicity unknown	6	60	66
<b>GENDER</b>			
Male	459	102	561
Female	542	341	883
<b>HEARING STATUS</b>			
Deaf/Hard of hearing	917	201	1,118
Hearing	84	235	319
Unknown		7	7
<b>ACADEMIC LOAD</b>			
Full-time	951	325	1,276
Part-time	50	118	168
<b>TOTAL FOR EACH CATEGORY</b>	<b>1,001</b>	<b>443</b>	<b>1,444</b>



## Goal A: Enrollment

### Fall Degree-seeking Diversity Trend

	2010	2011	2012	2013	2014
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	84	79	98	106	110
American Indian/Alaska Native	9	4	5	5	3
Asian	53	57	53	52	57
Black/African American	162	149	161	156	165
Hispanic of any race	137	114	179	182	171
Native Hawaiian/Other Pacific Islander	2	2	3	3	3
Two or more	27	78	35	37	43
White	981	963	960	916	826
Race and ethnicity unknown	22	42	49	65	66
<b>GENDER</b>					
Male	581	590	592	607	561
Female	896	898	951	915	883
Unknown					
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	1,169	1,180	1,198	1,176	1,118
Hearing	300	299	335	338	319
Unknown	8	9	10	8	7
<b>ACADEMIC LOAD</b>					
Full-time	1,303	1,329	1,366	1,367	1,276
Part-time	174	159	177	155	168
<b>TOTAL FOR EACH CATEGORY</b>	<b>1,477</b>	<b>1,488</b>	<b>1,543</b>	<b>1,522</b>	<b>1,444</b>

## Goal A: Enrollment

### Fall 2014 Undergraduate Degree-seeking Diversity by Class Year

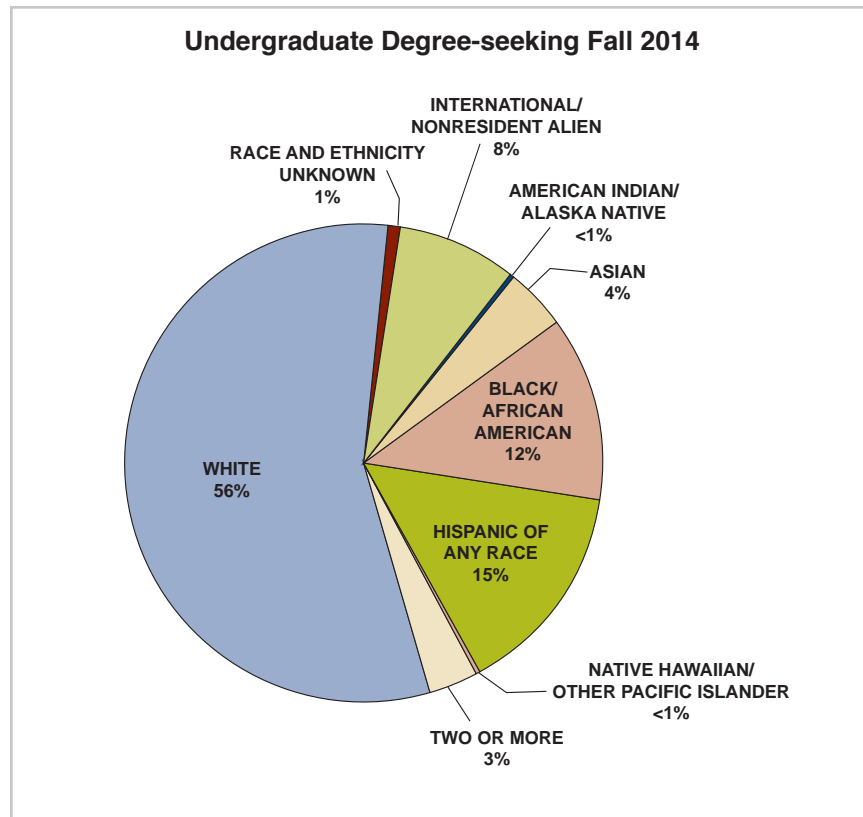
	Freshmen	Sophomores	Juniors	Seniors	Second Degree	TOTAL
<b>RACE/ETHNICITY</b>						
International/Nonresident Alien	28	15	20	17	2	82
American Indian/Alaska Native	1	1				2
Asian	12	7	8	14	2	43
Black/African American	55	16	30	20	3	124
Hispanic of any race	56	19	35	36		146
Native Hawaiian/Other Pacific Islander	1	1		1		3
Two or more	17	6	4	6		33
White	157	103	144	153	5	562
Race and ethnicity unknown	4	1		1		6
<b>GENDER</b>						
Male	148	86	107	115	3	459
Female	183	83	134	133	9	542
<b>HEARING STATUS</b>						
Deaf/Hard of hearing	304	163	223	216	11	917
Hearing	27	6	18	32	1	84
Hearing Undergraduate (HUG)	19	5	13	11	1	49
Non-HUG	8	1	5	21		35
<b>ACADEMIC LOAD</b>						
Full-time	327	165	236	213	10	951
Part-time	4	4	5	35	2	50
<b>TOTAL FOR EACH CATEGORY</b>	<b>331</b>	<b>169</b>	<b>241</b>	<b>248</b>	<b>12</b>	<b>1,001</b>

## Goal A: Enrollment

### Fall Undergraduate Degree-seeking Diversity Trend

	2010	2011	2012	2013	2014
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	57	55	72	75	82
American Indian/Alaska Native	6	3	3	4	2
Asian	39	46	43	40	43
Black/African American	122	122	125	117	124
Hispanic of any race	106	89	144	146	146
Native Hawaiian/Other Pacific Islander	1	1	2	2	3
Two or more	23	63	29	28	33
White	704	689	676	636	562
Race and ethnicity unknown	6	10	3	5	6
<b>GENDER</b>					
Male	489	508	509	490	459
Female	575	570	588	563	542
Unknown					
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	987	997	1,011	962	917
Hearing	77	81	86	91	84
<b>ACADEMIC LOAD</b>					
Full-time	1,012	1,029	1,045	1,006	951
Part-time	52	49	52	47	50
<b>TOTAL FOR EACH CATEGORY</b>	<b>1,064</b>	<b>1,078</b>	<b>1,097</b>	<b>1,053</b>	<b>1,001</b>

## Goal A: Enrollment



*Enrollment Marketing, a group within the Office of Communications and Public Relations, develops print, web, video, and other content aimed at showcasing the outstanding academic and campus life at Gallaudet to recruit prospective undergraduate and graduate students.*

Photo by Zhee Chatmon



## Goal A: Enrollment

### Fall 2014 Graduate Degree-seeking Diversity by Degree Level

	Certificates	Masters	Specialists	Doctorates	TOTAL
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien		22	2	4	28
American Indian/Alaska Native				1	1
Asian		12		2	14
Black/African American		26	3	12	41
Hispanic of any race		9	3	13	25
Native Hawaiian/Other Pacific Islander					
Two or more		5	1	4	10
White	5	153	10	96	264
Race and ethnicity unknown	3	34	1	22	60
<b>GENDER</b>					
Male		69		33	102
Female	8	192	20	121	341
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	4	153	10	34	201
Hearing	4	106	9	116	235
Unknown		2	1	4	7
<b>ACADEMIC LOAD</b>					
Full-time		221	14	90	325
Part-time	8	40	6	64	118
<b>TOTAL FOR EACH CATEGORY</b>	<b>8</b>	<b>261</b>	<b>20</b>	<b>154</b>	<b>443</b>

## Goal A: Enrollment

### Fall Graduate Degree-seeking Diversity Trend

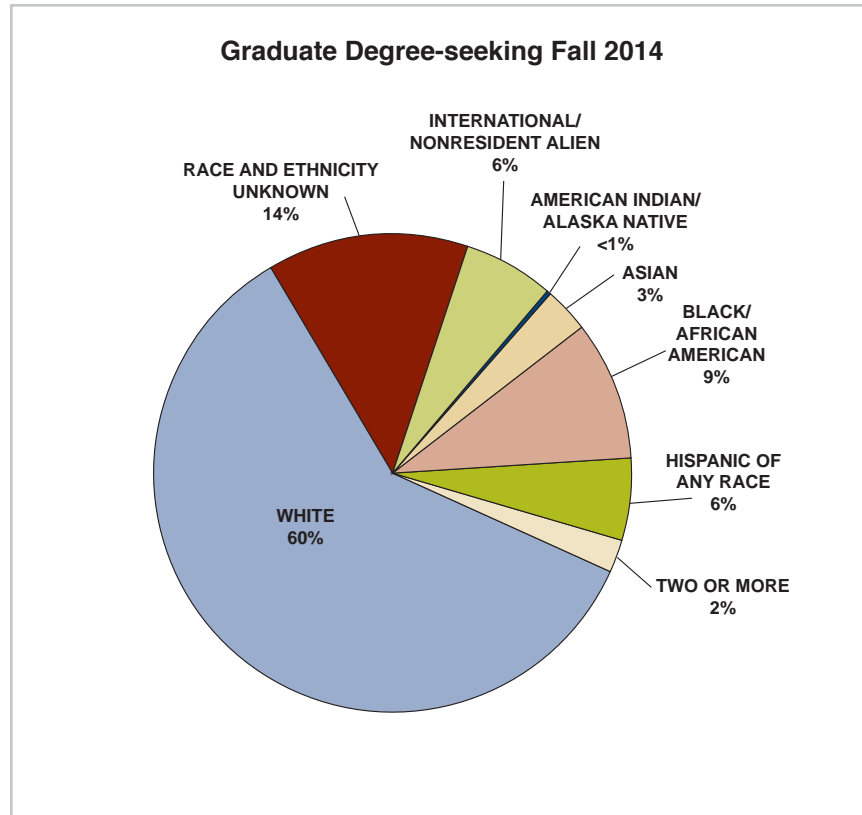
	2010	2011	2012	2013	2014
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	27	24	26	31	28
American Indian/Alaska Native	3	1	2	1	1
Asian	14	11	10	12	14
Black/African American	40	27	36	39	41
Hispanic of any race	31	27	35	36	25
Native Hawaiian/Other Pacific Islander	1	1	1	1	
Two or more	4	15	6	9	10
White	277	274	284	280	264
Race and ethnicity unknown	16	32	46	60	60
<b>GENDER</b>					
Male	92	82	83	117	102
Female	321	328	363	352	341
Unknown					
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	182	183	187	214	201
Hearing	223	218	249	247	235
Unknown	8	9	10	8	7
<b>ACADEMIC LOAD</b>					
Full-time	291	300	321	361	325
Part-time	122	110	125	108	118
<b>TOTAL FOR EACH CATEGORY</b>	<b>413</b>	<b>410</b>	<b>446</b>	<b>469</b>	<b>443</b>

### Online and Hybrid Courses Enrollment Trend

	AY 2010	AY 2011	AY 2012	AY 2013	AY 2014
Online and Hybrid enrollment	1,000	1,246	1,606	1,611	1,207



## Goal A: Enrollment



*Dr. Brian Greenwald, a history professor at Gallaudet, shares information from a degree pamphlet with a student and parent during an Undergraduate Open House Academic Fair. Open House, offered several times throughout the academic year, provides prospective students and family members a chance to meet department representatives and academic advisors, attend student panels, tour the campus, and enjoy lunch with faculty and current students. Open House dates are coordinated with ACT testing dates given on campus.*

Photo by Zhee Chatmon

## Goal A: Enrollment

### Fall 2014 Cochlear Implant Use of Degree-seeking Students

	Cochlear Implants	%
<b>UNDERGRADUATE</b>	79	8%
Freshmen	19	
Sophomores	15	
Juniors	24	
Seniors	21	
Second degree		
<b>GRADUATE</b>	7	2%
<b>TOTAL</b>	<b>86</b>	<b>6%</b>

### Fall Degree-seeking Student Cochlear Implant Use Trend

	2010	2011	2012	2013	2014
<b>UNDERGRADUATE</b>	102	102	105	94	79
Percentage of undergraduate enrollment	7%	10%	10%	9%	8%
<b>GRADUATE</b>	3	3	9	8	7
Percentage of graduate enrollment	1%	1%	2%	2%	2%
<b>TOTAL</b>	<b>105</b>	<b>105</b>	<b>114</b>	<b>102</b>	<b>86</b>
<b>PERCENTAGE OF ENROLLMENT</b>	<b>7%</b>	<b>7%</b>	<b>7%</b>	<b>7%</b>	<b>6%</b>

### Fall Degree-seeking Hearing Undergraduate Trend

	2010	2011	2012	2013	2014
Hearing undergraduate (HUG)	46	43	47	43	49
Percentage of undergraduate enrollment	4%	4%	4%	4%	5%
Bachelors of Interpretation (BAI)	31	38	39	42	32
Adult Degree Completion Program (ADCP)				6	3
<b>TOTAL HEARING STUDENTS</b>	<b>77</b>	<b>81</b>	<b>86</b>	<b>91</b>	<b>84</b>
<b>Percentage of undergraduate enrollment</b>	<b>7%</b>	<b>8%</b>	<b>8%</b>	<b>9%</b>	<b>8%</b>

## Goal A: Enrollment

### Fall 2014 U.S. Degree-seeking Students by State/Territory

	Undergraduate	Graduate	Total		Undergraduate	Graduate	Total
Alabama	12	1	13	Nebraska	8	1	9
Alaska	3		3	Nevada	3	1	4
Arizona	20	1	21	New Hampshire	1	1	2
Arkansas	3		3	New Jersey	25	16	41
California	102	29	131	New Mexico	9	3	12
Colorado	11	3	14	New York	65	27	92
Connecticut	9	6	15	North Carolina	17	9	26
Delaware	3		3	North Dakota	1	1	2
District of Columbia	32	53	85	Ohio	24	9	33
Florida	52	13	65	Oklahoma	7	1	8
Georgia	24	8	32	Oregon	4	3	7
Hawaii	6	1	7	Pennsylvania	21	18	39
Idaho	1		1	Puerto Rico	3		3
Illinois	27	12	39	Rhode Island	3		3
Indiana	21	5	26	South Carolina	6	3	9
Iowa	5	1	6	South Dakota	1		1
Kansas	12		12	Tennessee	11	3	14
Kentucky	7	4	11	Texas	46	16	62
Louisiana	9	3	12	Utah	7	5	12
Maine	4	1	5	Vermont		1	1
Maryland	112	73	185	Virginia	60	26	86
Massachusetts	22	11	33	Washington	10	3	13
Michigan	20	9	29	West Virginia	3	1	4
Minnesota	32	12	44	Wisconsin	10	6	16
Mississippi	3		3	Wyoming	1		1
Missouri	16	10	26	Unknown	4	5	9
Montana	1		1	<b>TOTAL</b>	<b>919</b>	<b>415</b>	<b>1,334</b>

## Goal A: Enrollment

### Fall U.S. Degree-seeking Students by State/Territory Trend

	2010	2011	2012	2013	2014
Alabama	7	13	20	13	13
Alaska	4	4	5	5	3
Arizona	23	21	22	17	21
Arkansas	6	7	4	6	3
California	124	146	140	121	131
Colorado	20	22	25	19	14
Connecticut	16	14	8	11	15
Delaware	6	6	4	5	3
District of Columbia	98	86	73	99	85
Florida	71	70	57	66	65
Georgia	31	29	28	37	32
Guam				1	
Hawaii	10	8	7	5	7
Idaho		1	1	1	1
Illinois	47	42	43	44	39
Indiana	36	22	22	20	26
Iowa	8	7	7	7	6
Kansas	11	15	16	19	12
Kentucky	10	13	17	11	11
Louisiana	16	14	11	14	12
Maine	7	7	10	7	5
Maryland	190	188	213	198	185
Massachusetts	38	31	33	32	33
Michigan	33	29	34	31	29
Minnesota	40	36	31	35	44
Mississippi	2	2	3	2	3
Missouri	20	21	23	24	26
Montana	1	1		3	1

	2010	2011	2012	2013	2014
Nebraska	5	8	8	9	9
Nevada	4	4	3	4	4
New Hampshire	4	6	7	4	2
New Jersey	49	56	57	53	41
New Mexico	7	8	10	10	12
New York	68	80	94	87	92
North Carolina	26	26	31	30	26
North Dakota				1	2
Ohio	29	42	41	39	33
Oklahoma	8	11	13	12	8
Oregon	11	8	10	8	7
Pennsylvania	45	39	40	40	39
Puerto Rico	1	2	2	8	3
Rhode Island	3	6	5	4	3
South Carolina	7	9	9	12	9
South Dakota	1		1	2	1
Tennessee	19	18	21	20	14
Texas	81	84	72	67	62
Utah	8	8	15	14	12
Vermont	4	5	2	3	1
Virginia	89	86	104	97	86
Virgin Islands					
Washington	15	16	22	17	13
West Virginia	4	8	5	6	4
Wisconsin	21	16	11	11	16
Wyoming					1
Unknown	8	8	5	5	9
<b>TOTAL</b>	<b>1,392</b>	<b>1,409</b>	<b>1,445</b>	<b>1,416</b>	<b>1,334</b>

## Goal A: Enrollment

### Fall U.S. Degree-seeking Undergraduates by State/Territory Trend

	2010	2011	2012	2013	2014
Alabama	7	13	19	12	12
Alaska	3	3	4	4	3
Arizona	15	16	15	14	20
Arkansas	5	6	3	4	3
California	87	109	108	96	102
Colorado	15	17	17	14	11
Connecticut	9	9	6	7	9
Delaware	4	5	4	5	3
District of Columbia	42	45	34	29	32
Florida	60	53	40	54	52
Georgia	24	23	24	30	24
Hawaii	10	8	6	4	6
Idaho		1	1	1	1
Illinois	37	29	29	33	27
Indiana	33	20	21	18	21
Iowa	3	5	6	6	5
Kansas	10	13	15	17	12
Kentucky	7	10	9	6	7
Louisiana	13	12	11	10	9
Maine	6	6	6	5	4
Maryland	127	130	137	128	112
Massachusetts	30	23	28	25	22
Michigan	28	20	22	19	20
Minnesota	30	26	24	24	32
Mississippi	2	2	3	2	3
Missouri	16	15	17	17	16
Montana	1	1		3	1

	2010	2011	2012	2013	2014
Nebraska	3	6	6	8	8
Nevada	3	3	3	4	3
New Hampshire	4	4	5	2	1
New Jersey	39	36	39	30	25
New Mexico	6	6	7	9	9
New York	51	55	59	57	65
North Carolina	19	18	22	25	17
North Dakota				1	1
Ohio	23	34	33	30	24
Oklahoma	8	10	12	12	7
Oregon	10	5	7	4	4
Pennsylvania	32	25	31	31	21
Puerto Rico	1	1	1	3	3
Rhode Island	2	3	3	3	3
South Carolina	7	7	7	9	6
South Dakota			1	1	1
Tennessee	17	17	19	18	11
Texas	66	70	61	48	46
Utah	4	8	6	9	7
Vermont	2	2	1	2	
Virginia	52	56	66	60	60
Washington	12	13	14	11	10
West Virginia	4	7	4	5	3
Wisconsin	13	13	8	6	10
Wyoming					1
Unknown	5	4	1	3	4
<b>TOTAL</b>	<b>1,007</b>	<b>1,023</b>	<b>1,025</b>	<b>978</b>	<b>919</b>

## Goal A: Enrollment

### Fall U.S. Degree-seeking Graduate Students by State/Territory Trend

	2010	2011	2012	2013	2014
Alabama			1	1	1
Alaska	1	1	1	1	
Arizona	8	5	7	3	1
Arkansas	1	1	1	2	
California	37	37	32	25	29
Colorado	5	5	8	5	3
Connecticut	7	5	2	4	6
Delaware	2	1			
District of Columbia	56	41	39	70	53
Florida	11	17	17	12	13
Georgia	7	6	4	7	8
Guam				1	
Hawaii			1	1	1
Illinois	10	13	14	11	12
Indiana	3	2	1	2	5
Iowa	5	2	1	1	1
Kansas	1	2	1	2	
Kentucky	3	3	8	5	4
Louisiana	3	2		4	3
Maine	1	1	4	2	1
Maryland	63	58	76	70	73
Massachusetts	8	8	5	7	11
Michigan	5	9	12	12	9
Minnesota	10	10	7	11	12
Missouri	4	6	6	7	10
Montana					

	2010	2011	2012	2013	2014
Nebraska	2	2	2	1	1
Nevada	1	1			1
New Hampshire		2	2	2	1
New Jersey	10	20	18	23	16
New Mexico	1	2	3	1	3
New York	17	25	35	30	27
North Carolina	7	8	9	5	9
North Dakota					1
Ohio	6	8	8	9	9
Oklahoma		1	1		1
Oregon	1	3	3	4	3
Pennsylvania	13	14	9	9	18
Puerto Rico		1	1	5	
Rhode Island	1	3	2	1	
South Carolina		2	2	3	3
South Dakota	1			1	
Tennessee	2	1	2	2	3
Texas	15	14	11	19	16
Utah	4		9	5	5
Vermont	2	3	1	1	1
Virginia	37	30	38	37	26
Washington	3	3	8	6	3
West Virginia		1	1	1	1
Wisconsin	8	3	3	5	6
Unknown	3	4	4	2	5
<b>TOTAL</b>	<b>385</b>	<b>386</b>	<b>420</b>	<b>438</b>	<b>415</b>



## Goal A: Enrollment

### Cumulative U.S. University Enrollment since 1864<sup>1</sup>

Alabama	213	Maine	111	Oregon	215
Alaska	31	Maryland	1,617	Pennsylvania	1,069
Arizona	291	Massachusetts	539	Puerto Rico	32
Arkansas	179	Michigan	454	Rhode Island	78
California	1,754	Minnesota	600	South Carolina	198
Colorado	251	Mississippi	82	South Dakota	134
Connecticut	390	Missouri	405	Tennessee	233
Delaware	81	Montana	83	Texas	857
District of Columbia	484	Nebraska	204	Utah	119
Florida	736	Nevada	38	Vermont	59
Georgia	365	New Hampshire	89	Virginia	953
Guam	7	New Jersey	605	Virgin Islands	6
Hawaii	93	New Mexico	140	Washington	419
Idaho	84	New York	1,552	West Virginia	157
Illinois	1,013	North Carolina	497	Wisconsin	460
Indiana	500	North Dakota	111	Wyoming	24
Iowa	313	Ohio	714		
Kansas	307	Oklahoma	120		
Kentucky	248				
Louisiana	253				
				<b>TOTAL</b>	<b>20,567</b>

<sup>1</sup>Includes enrollment through summer 2015.

## Goal A: Enrollment

### Fall 2014 International Undergraduate Degree-seeking Enrollment by Country

	Undergraduate	Graduate	Total
Argentina		1	1
Bahamas	1		1
Botswana	4		4
Canada	29	3	32
China	9	4	13
France	2		2
Germany	2		2
Ghana	1		1
India	3		3
Iran	1		1
Italy		1	1
Hong Kong		1	1
Japan	1	4	5
Kenya		1	1
Korea, Republic of		3	3
Kuwait		1	1
Malaysia		1	1
Mali	1		1
Mongolia	1		1
Nepal	1		1
Netherlands		1	1
Nigeria	6	4	10
Paraguay	2		2
Peru	1		1
Qatar	1		1
Russian Federation	1		1
Saudi Arabia	8		8
Singapore		1	1
Spain		2	2
Sri Lanka	2		2
Sweden	4		4
Taiwan	1		1
<b>TOTAL</b>	<b>82</b>	<b>28</b>	<b>110</b>

## Goal A: Enrollment

### Fall International Undergraduate Degree-seeking Enrollment by Country Trend

	2010	2011	2012	2013	2014
Argentina	1	1			
Bahamas		1	1	1	1
Belgium	1	1	1		
Botswana	1	1	5	5	4
Brazil	1	1			
Burkina Faso	1				
Canada	21	22	32	33	29
China	3	2	4	6	9
Denmark	1	1			
Fiji	1	1	1	1	
France	1	1	1	2	2
Germany				2	2
Ghana				1	1
India	1	4	3	4	3
Iran					1
Italy		1	1		
Japan	2	1	1	2	1
Kenya	1				
Korea, Republic of	1				
Malaysia	1				

	2010	2011	2012	2013	2014
Mali		1	1	1	1
Mongolia					1
Nepal		1	1	1	1
Netherlands	1	1	1	1	
Nigeria	2	2	5	4	6
Paraguay			1	2	2
Peru	1	1	2	1	1
Qatar					1
Russian Federation					1
Saudi Arabia	3	2	3	3	8
Slovenia	1	1			
Sri Lanka		1	1	2	2
Sweden			4	3	4
Switzerland	2				
Taiwan, Republic of China					1
Unknown	9	7	3		
<b>TOTAL</b>	<b>57</b>	<b>55</b>	<b>72</b>	<b>75</b>	<b>82</b>

*An excited student proudly wore her "I'm In!" t-shirt during the New Student Orientation check-in session. Many students wore their "I'm In" t-shirts and posted photos on Facebook, #gubound, to announce their acceptance to Gallaudet University.*

Photo by Zhee Chatmon



## Goal A: Enrollment

### Fall International Graduate Student Degree-seeking Enrollment by Country Trend

	2010	2011	2012	2013	2014
Argentina	1			1	1
Cameroon				1	
Canada	4	3	5	6	3
Chad				1	
China	1	1		2	4
Hong Kong	1				1
India				1	
Italy				1	1
Japan	2	3	3	5	4
Kenya		1	1	1	1
Korea, Republic of	1	1	1	2	3
Kuwait			1	1	1
Malaysia		1	2	2	1
Mexico	1				
Mongolia	1	1	1		
Morocco			1	1	
Netherlands					1
Nigeria	1	1	1	3	4
Philippines			1	1	
Saudi Arabia		1	1		
Singapore					1
Spain		1	1	1	2
Thailand	1	1	2	1	
Unknown	14	9	5		
<b>TOTAL</b>	<b>28</b>	<b>24</b>	<b>26</b>	<b>31</b>	<b>28</b>

## Goal A: Enrollment

### Cumulative International Enrollment since 1864<sup>1</sup>

Argentina	4	El Salvador	2	Kenya	10	Singapore	21
Australia	19	Eritrea	1	Korea, Republic of	20	Slovakia	2
Austria	2	Ethiopia	5	Kuwait	2	Slovenia	1
Bahamas	4	Fiji	1	Lebanon	3	South Africa	19
Bangladesh	1	Finland	7	Liberia	1	Spain	9
Barbados	2	France	11	Malaysia	19	Sri Lanka	7
Belgium	13	Gabon	2	Mali	1	Sweden	43
Benin	1	Germany	17	Mexico	8	Switzerland	5
Bermuda	1	Ghana	18	Mongolia	3	Taiwan, Republic of China	20
Bolivia	1	Greece	5	Nepal	1	Tanzania	1
Botswana	9	Guatemala	3	Netherlands	14	Thailand	10
Brazil	20	Guyana	2	New Zealand	4	Trinidad and Tobago	3
Bulgaria	1	Haiti	1	Nigeria	74	Turkey	1
Burkina Faso	1	Honduras	1	Norway	15	Uganda	4
Cameroon	5	Hong Kong	2	Pakistan	3	United Arab Emirates	8
Canada	857	Hungary	2	Paraguay	2	United Kingdom	22
Chile	3	Iceland	4	Peru	3	Uzbekistan	1
China	73	India	62	Philippines	20	Venezuela	3
Colombia	2	Indonesia	3	Poland	1	Vietnam	2
Costa Rica	6	Iran	3	Portugal	1	Yugoslavia	1
Cote D'Ivoire	1	Ireland	15	Qatar	1	Zambia	2
Croatia	2	Israel	16	Russian Federation	3	Zimbabwe	1
Cyprus	1	Italy	11	Rwanda	1		
Czech Republic	1	Jamaica	6	Samoa	1		
Denmark	10	Japan	58	Saudi Arabia	21		
Egypt	1	Jordan	4	Sierra Leone	2		
						<b>TOTAL</b>	<b>1,723</b>
						<b>COUNTRIES</b>	<b>100</b>

<sup>1</sup>Includes enrollment through summer 2015.

## Goal A: Enrollment

### Fall 2014 New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	59	41	21
American Indian/Alaska Native	5	3	1
Asian	28	19	7
Black/African American	143	74	47
Hispanic of any race	130	74	45
Native Hawaiian/Other Pacific Islander	2	1	1
Two or more	22	18	13
White	329	228	143
Race and ethnicity unknown	18	8	3
<b>GENDER</b>			
Male	314	195	122
Female	422	271	159
Unknown			
<b>HEARING STATUS</b>			
Deaf/Hard of hearing	610	424	247
Hearing	126	42	34
<b>APPLICATION TYPE</b>			
First-time Freshmen	496	324	182
Transfers	229	138	96
Second Degree	11	4	3
<b>TOTAL FOR EACH CATEGORY</b>	<b>736</b>	<b>466</b>	<b>281</b>

### Fall New Undergraduate Degree-seeking by Applied, Admitted, and Enrolled Trend

	2010	2011	2012	2013	2014
Applied	670	630	727	732	736
Admitted	385	411	434	468	466
Enrolled	291	302	298	286	281
<b>ENROLLMENT YIELD</b>	<b>76%</b>	<b>73%</b>	<b>69%</b>	<b>61%</b>	<b>60%</b>

## Goal A: Enrollment

### Fall New Undergraduate Degree-seeking Diversity Trend

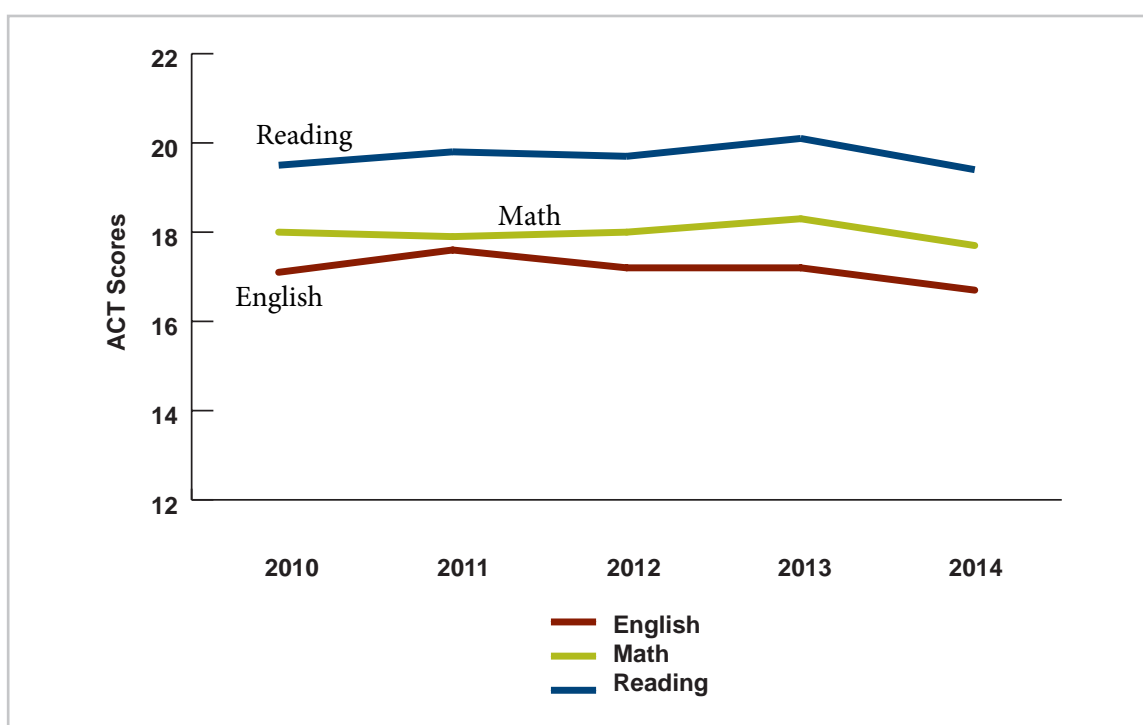
	2010	2011	2012	2013	2014
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	15	7	23	14	21
American Indian/Alaska Native			1	2	1
Asian	13	14	9	9	7
Black/African American	34	41	34	32	47
Hispanic of any race	37	34	45	45	45
Native Hawaiian/Other Pacific Islander	1		1	1	1
Two or more	7	21	12	12	13
White	183	180	172	170	143
Race and ethnicity unknown	1	5	1	1	3
<b>GENDER</b>					
Male	136	161	130	119	122
Female	155	141	168	167	159
Unknown					
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	263	273	264	254	247
Hearing	28	29	34	32	34
<b>APPLICATION TYPE</b>					
First-time Freshmen	198	201	213	201	182
Transfers	89	99	82	83	96
Second Degree	4	2	3	2	3
<b>TOTAL FOR EACH CATEGORY</b>	<b>291</b>	<b>302</b>	<b>298</b>	<b>286</b>	<b>281</b>



## Goal A: Enrollment

**Fall New Undergraduate Degree-seeking  
Average ACT Trend**

	2010	2011	2012	2013	2014
English	17.1	17.6	17.2	17.2	16.7
Math	18.0	17.9	18.0	18.3	17.7
Reading	19.5	19.8	19.7	20.1	19.4



**Fall New Degree-seeking Hearing Undergraduate Trend**

	2010	2011	2012	2013	2014
Hearing undergraduate (HUG)	15	13	17	18	25
Percentage of new undergraduate enrollment	5%	4%	6%	6%	9%
Bachelors of Interpretation (BAI)	13	16	17	13	9
Adult Degree Completion (ADCP)				1	
<b>TOTAL HEARING STUDENTS</b>	<b>28</b>	<b>29</b>	<b>34</b>	<b>32</b>	<b>34</b>
<b>Percentage of new undergraduate enrollment</b>	<b>10%</b>	<b>10%</b>	<b>11%</b>	<b>11%</b>	<b>12%</b>

## Goal A: Enrollment

### Fall 2014 New-to-Program Degree-seeking Graduate Students by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>CERTIFICATES</b>			
ASL/English Bilingual Early Childhood Education	5	3	2
ASL/Deaf Studies	4	4	1
Deaf and Hard of Hearing Infants, Toddlers, and Families	20	19	17
Deaf Students with Disabilities	8	7	4
<b>MASTERS</b>			
Counseling: Mental Health	16	8	7
Counseling: School	32	11	10
Deaf Education: Advanced Studies	6	3	2
Deaf Education: Special Programs	6	1	
Deaf Studies	16	7	5
Education	26	8	7
International Development	14	11	5
Interpretation	25	13	13
Linguistics	15	9	7
Public Administration	34	24	17

	Applied	Admitted	Enrolled
Social Work	28	23	17
Sign Language Teaching	83	39	31
Speech-Language Pathology	189	45	19
<b>SPECIALISTS</b>			
Deaf Education	6	5	3
School Psychology	11	10	7
<b>DOCTORATES</b>			
Audiology	91	30	12
Clinical Psychology	33	9	7
Critical Studies in the Education of Deaf Learners	7		
Educational Neuroscience	6	2	2
Hearing, Speech, and Language Sciences	3	3	2
Interpretation	14	9	8
Linguistics	2		
<b>TOTAL PROGRAM ENROLLMENT<sup>1</sup></b>	<b>700</b>	<b>303</b>	<b>205</b>
<b>HEADCOUNT</b>	<b>654</b>	<b>281</b>	<b>191</b>

<sup>1</sup>Dual program enrollments are included.

## Goal A: Enrollment

### Fall 2014 New-to-Graduate Career Degree-seeking Diversity by Applied, Admitted, and Enrolled

	Applied	Admitted	Enrolled
<b>RACE/ETHNICITY</b>			
International/Nonresident Alien	42	17	10
American Indian/Alaska Native	1		
Asian	20	11	7
Black/African American	45	19	12
Hispanic of any race	48	10	7
Native Hawaiian/Other Pacific Islander			
Two or more	11	5	3
White	294	152	105
Race and ethnicity unknown	156	43	27
<b>GENDER</b>			
Male	114	52	37
Female	503	205	134
Unknown			
<b>HEARING STATUS</b>			
Deaf/Hard of hearing	213	121	95
Hearing	397	134	75
Unknown	7	2	1
<b>TOTAL FOR EACH CATEGORY</b>	<b>617</b>	<b>257</b>	<b>171</b>

## Goal A: Enrollment

### Fall New Graduate Student Degree-seeking by Applied, Admitted, and Enrolled Trend

	2010	2011	2012	2013	2014
Applied	442	498	595	602	617
Admitted	230	225	287	296	257
Enrolled	145	168	190	177	171
<b>ENROLLMENT YIELD</b>	<b>63%</b>	<b>75%</b>	<b>66%</b>	<b>60%</b>	<b>67%</b>

### Fall New-to-Graduate Career Degree-seeking Diversity Trend

	2010	2011	2012	2013	2014
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	5	10	7	15	10
American Indian/Alaska Native	1		1		
Asian	4	5	3	8	7
Black/African American	7	10	17	13	12
Hispanic of any race	12	9	14	12	7
Native Hawaiian/Other Pacific Islander					
Two or more	1	6	1	4	3
White	105	110	121	95	105
Race and ethnicity unknown	10	18	26	30	27
<b>GENDER</b>					
Male	34	29	46	53	37
Female	111	139	144	124	134
Unknown					
<b>HEARING STATUS</b>					
Deaf/Hard of hearing	56	82	88	97	95
Hearing	82	83	99	77	75
Unknown	7	3	3	3	1
<b>TOTAL FOR EACH CATEGORY</b>	<b>145</b>	<b>168</b>	<b>190</b>	<b>177</b>	<b>171</b>

## Goal A: Enrollment

### II. Recruitment of a Diverse Student Body

The Office of Admissions and Outreach works to recruit, retain and graduate a diverse and academically talented group of students. To accomplish this goal, targeted recruitment visits were scheduled.

In addition, specific campus programs have been designed and implemented to attract and retain these students. Refer to the “Support Programs and Strategies” section of the “Goal B Persistence and Graduation” chapter in this report for a description of the programs intended to retain students, including specific programs to retain a diverse student body.

#### Percent New U.S. Degree-seeking Undergraduates from Traditionally Underrepresented Groups (TUG<sup>1</sup>)

	2011	2012	2013	2014	2015
% New TUG Enrollment	37%	37%	35%	44%	34%

<sup>1</sup>TUG=Traditionally Underrepresented Groups. This is comprised of the following racial or ethnic groups: American Indian/Alaska Native, Asian, Black/African American, Hispanic of any race, Native Hawaiian/Other Pacific Islander, or Two or More.

In an effort to recruit academically talented students from diverse backgrounds, the financial aid structure was redesigned several years ago to recognize talents and abilities across a

number of dimensions. Of 148 scholarships awarded, 52 (35 percent) were awarded to students from traditionally under-represented groups.

#### Fall 2015 Scholarships Awarded by Race/Ethnicity

	President's Honors Distinction	Provost's Excellence	Provost's Honors Distinction	Dean's Prestige	Academic Recognition	TOTAL
American Indian/Alaska Native	0	0	0	2	0	2
Asian	0	2	0	2	3	7
Black/African American	0	0	0	8	17	25
Hispanic of any race	0	1	0	0	6	7
Native Hawaiian/Other Pacific Islander	0	0	0	0	0	0
Two or More	0	2	0	4	5	11
<b>TOTAL TUG<sup>1</sup></b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>16</b>	<b>31</b>	<b>52</b>
White	4	17	10	31	34	96
<b>TOTAL AWARDS</b>	<b>4</b>	<b>22</b>	<b>10</b>	<b>47</b>	<b>65</b>	<b>148</b>
<b>PERCENTAGE TUG<sup>1</sup></b>	<b>0%</b>	<b>23%</b>	<b>0%</b>	<b>34%</b>	<b>48%</b>	<b>35%</b>

<sup>1</sup>TUG=Traditionally Underrepresented Groups. This is comprised of one of the following racial or ethnic groups: American Indian/Alaska Native, Asian, Black/African American, Hispanic of any race, Native Hawaiian/Other Pacific Islander, or Two or More.

## Goal A: Enrollment

Recruitment efforts for cultivating a diverse student body continue to focus on financial aid, scholarships, and special programs. In addition, recruitment activities target states with the highest concentration of students of color: Alabama, Arizona, California, Colorado, Delaware, Florida, Georgia, Louisiana, Maryland, New Mexico, North Carolina, and South Carolina.

Gallaudet continues its recruiting efforts in residential schools for the deaf, mainstream schools, and two-year programs attended by deaf and hard of hearing students. Schools are selected for a visit based on criteria that include the number of applications received, the number of current prospects and inquiries, academic bowl participating schools, location, diversity considerations, recommendations, and new leads.

### Recruitment Visits by Location Trend

	FY 2011	FY 2012	FY 2013	FY 2014 <sup>2</sup>	FY 2015 <sup>3</sup>
Schools for the Deaf	52	57	51	55	32
Mainstream/Public schools – Deaf/Hard of Hearing prospects	323	259	821	149	55
Public Schools – Hearing (BAI/HUG prospects)	N/A	N/A	N/A	31	11
Postsecondary programs – Deaf/Hard of Hearing prospects	39	52	16	18	8
Postsecondary programs – Hearing (BAI/HUG prospects)	N/A	N/A	N/A	20	5
Conventions/Conferences/Fairs	35	29	30	28	20
High School/Vocational Rehabilitation Counselor meetings	12	7	7	23	15
Parent events	5	4	6	4	3
Athletic events	5	8	2	2	1
Open Houses	5	7	8	8	9
Camps	9	2	7	5	4
Community Relations/Alumni/Youth	N/A	N/A	N/A	11	3
How to Apply Webinar	N/A	N/A	4	0	0
Home Visits	N/A	N/A	21	20	10
<b>TOTAL</b>	<b>485</b>	<b>425</b>	<b>213</b>	<b>374</b>	<b>176</b>

<sup>1</sup>The admissions office implemented recruitment webinars in place of actual school visits.

<sup>2</sup>FY 2014 data includes a breakdown of activities and visits to schools by prospect type.

<sup>3</sup>The admissions office experienced unusually high staff turnover during the 2014 fall travel season.



*Class of 2015 graduate Lake Peters triumphantly holds up her degree beside the statue of Edward Miner Gallaudet.*

Photo by Zhee Chatmon

## **Strategic Plan Goal B: Persistence and Graduation**

This chapter includes data on University persistence and graduation, with separate data contained in the Clerc Center chapter for their students. Included are data for persistence from year to year as well as for graduation: for the fiscal year and trend data for the last five years; for all students; for traditionally underrepresented groups; by undergraduate and graduate discipline/majors; and by disposition (returned, graduated, academically dismissed, or withdrawn). The chapter ends with narrative regarding activities that support persistence and graduation, as well as the number of contact hours spent engaging students for each of these support activities. The contents of this chapter reflect the major accomplishments performed during FY 2015 in support of Goal B of the Gallaudet Strategic Plan.





## Goal B: Persistence and Graduation

### I. Persistence and Graduation Data

#### Undergraduate Degree-seeking Fall 2014 to Fall 2015 Attrition/Persistence by Diversity

	Fall 2014 Enrollment	Graduated	Academically Dismissed	Withdrew	Returned Fall 2015
<b>RACE/ETHNICITY</b>					
International/Nonresident Alien	82	16		8	58
American Indian/Alaska Native	2			1	1
Asian	43	13		3	27
Black/African American	124	16	8	16	84
Hispanic of any race	146	24	6	27	89
Native Hawaiian/Other Pacific Islander	3	1			2
Two or more	33	6	2	3	22
White	562	114	6	78	364
Race and ethnicity unknown	6				6
<b>GENDER</b>					
Male	459	75	14	64	306
Female	542	115	8	72	347
<b>HEARING STATUS</b>					
Deaf/Hard of Hearing	917	167	21	126	603
Hearing	84	23	1	10	50
Hearing Undergraduate (HUG)	49	8	1	6	34
Non-HUG	35	15		4	16
<b>CLASS</b>					
Freshmen	331	1	18	76	236
Sophomores	169		2	24	143
Juniors	241	22	1	18	200
Seniors	248	161	1	17	69
Second Degree	12	6		1	5
<b>ACADEMIC LOAD</b>					
Full-time	951	168	21	124	638
Part-time	50	22	1	12	15
<b>TOTAL FOR EACH CATEGORY</b>	<b>1,001</b>	<b>190</b>	<b>22</b>	<b>136</b>	<b>653</b>

## Goal B: Persistence and Graduation

### Graduate Degree-seeking Fall 2014 to Fall 2015 Attrition/Persistence by Diversity

	Fall 2014 Enrollment	Graduated	Withdrew	Returned Fall 2015
<b>RACE/ETHNICITY</b>				
International/Nonresident Alien	28	11	2	15
American Indian/Alaska Native	1			1
Asian	14	6	2	6
Black/African American	41	19	4	18
Hispanic of any race	25	8	1	16
Native Hawaiian/Other Pacific Islander				
Two or more	10	3		7
White	264	91	20	153
Race and ethnicity unknown	60	21	4	35
<b>GENDER</b>				
Male	102	34	7	61
Female	341	125	26	190
<b>HEARING STATUS</b>				
Deaf/Hard of Hearing	201	76	20	105
Hearing	235	80	12	143
Unknown	7	3	1	3
<b>DEGREE</b>				
Certificates	8	5	3	
Masters	261	109	23	129
Specialists	20	13	1	6
Doctorates	154	32	6	116
<b>ACADEMIC LOAD</b>				
Full-time	325	118	21	186
Part-time	118	41	12	65
<b>TOTAL FOR EACH CATEGORY</b>	<b>443</b>	<b>159</b>	<b>33</b>	<b>251</b>

## Goal B: Persistence and Graduation

### Persistence of First-time Freshmen by Diversity

Group in the Cohort	Cohort 2010	Cohort 2011	Cohort 2012	Cohort 2013	Cohort 2014
<b># IN COHORT</b>	<b>198</b>	<b>200</b>	<b>212</b>	<b>200</b>	<b>181</b>
Male	91	115	91	86	83
Female	107	86	121	114	98
TUG*	66	76	70	74	77
White	120	116	122	116	93
Deaf/Hard of Hearing	193	195	205	196	174
Hearing	5	5	7	4	7
Hearing Undergraduate (HUG)	5	3	3	3	6
Non-HUG	0	2	4	1	1
<b>% RETAINED TO YEAR 2</b>	<b>70%</b>	<b>77%</b>	<b>69%</b>	<b>67%</b>	<b>67%</b>
Male	67%	72%	67%	66%	59%
Female	72%	84%	70%	67%	74%
TUG*	70%	72%	67%	62%	64%
White	67%	81%	68%	69%	70%
Deaf/Hard of Hearing	71%	77%	69%	66%	67%
Hearing	20%	80%	71%	100%	71%
Hearing Undergraduate (HUG)	20%	67%	67%	100%	67%
Non-HUG	N/A	100%	75%	100%	100%
<b>% RETAINED TO YEAR 3</b>	<b>57%</b>	<b>64%</b>	<b>57%</b>	<b>55%</b>	
Male	54%	61%	52%	52%	
Female	59%	69%	60%	58%	
TUG*	48%	59%	56%	47%	
White	58%	67%	57%	60%	
Deaf/Hard of Hearing	58%	64%	57%	55%	
Hearing	20%	60%	57%	75%	
Hearing Undergraduate (HUG)	20%	67%	33%	100%	
Non-HUG	N/A	50%	75%	0%	

\*Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

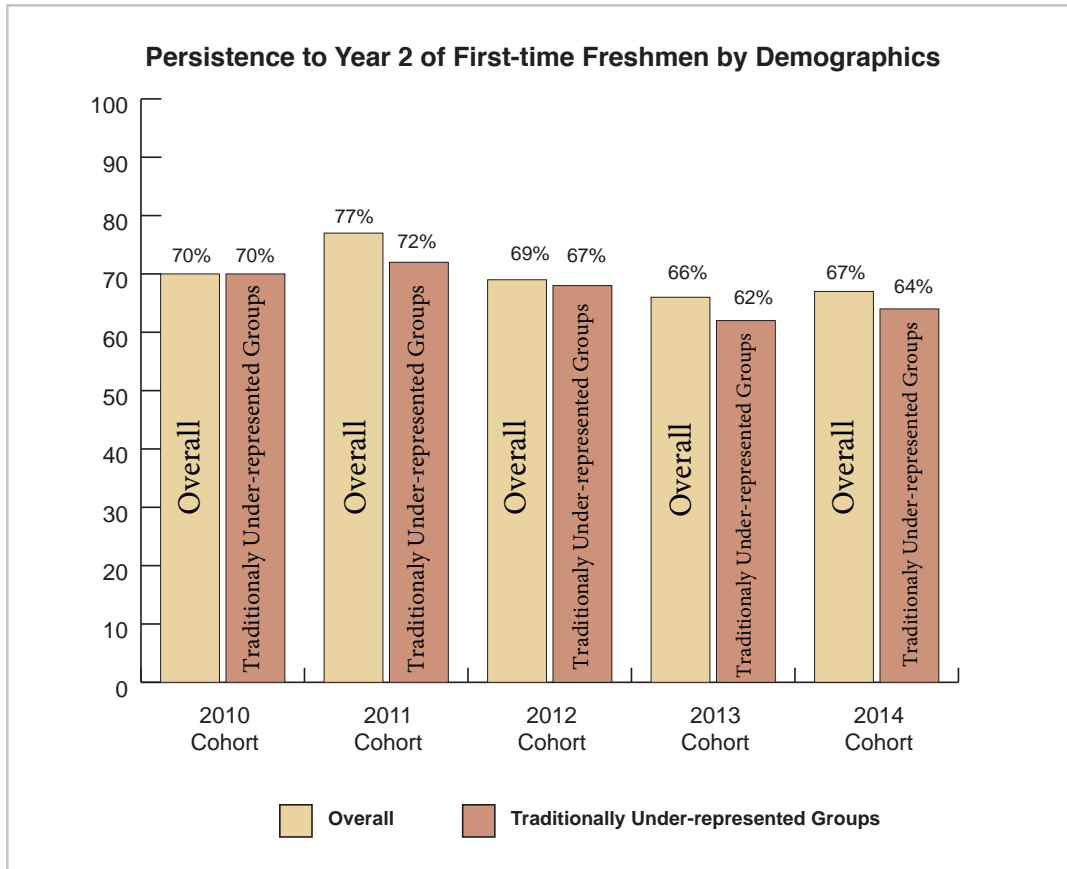
## Goal B: Persistence and Graduation

### Persistence of First-time Freshman by Diversity (continued)

Group in the Cohort	Cohort 2010	Cohort 2011	Cohort 2012	Cohort 2013	Cohort 2014
<b>% RETAINED TO YEAR 4</b>	<b>50%</b>	<b>60%</b>	<b>53%</b>		
Male	45%	54%	51%		
Female	54%	67%	55%		
TUG*	42%	58%	46%		
White	53%	61%	54%		
Deaf/Hard of Hearing	51%	60%	53%		
Hearing	0%	60%	43%		
Hearing Undergraduate (HUG)	0%	67%	33%		
Non-HUG	N/A	50%	50%		
<b>% RETAINED TO YEAR 5</b>	<b>27%</b>	<b>33%</b>			
Male	31%	39%			
Female	23%	26%			
TUG*	26%	33%			
White	25%	34%			
Deaf/Hard of Hearing	27%	33%			
Hearing	0%	20%			
Hearing Undergraduate (HUG)	0%	0%			
Non-HUG	N/A	50%			
<b>% RETAINED TO YEAR 6</b>	<b>13%</b>				
Male	12%				
Female	14%				
TUG*	12%				
White	13%				
Deaf/Hard of Hearing	13%				
Hearing	0%				
Hearing Undergraduate (HUG)	0%				

\*Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

## Goal B: Persistence and Graduation



*Stephanie Ruiz (left) and Andrea Vigil (right) receive their tassels during GradFest on February 25. GradFest is an annual event hosted by the Office of the President for all seniors, graduate students, and Ph.D. students who intend to graduate in May to give them convenient access to all the information they need related to the graduation process.*

Photo by Zhee Chatmon



## Goal B: Persistence and Graduation

### Four-year Graduation Rate of Full-time, First-time Freshmen by Diversity

Group in the Cohort	Cohort 2007		Cohort 2008		Cohort 2009		Cohort 2010		Cohort 2011	
	#	%	#	%	#	%	#	%	#	%
<b>GENDER</b>										
Male	79	11%	83	11%	99	13%	91	11%	114	13%
Female	97	19%	98	20%	112	34%	107	27%	86	38%
<b>RACE/ETHNICITY</b>										
International/Nonresident Alien	6	17%	9	22%	12	50%	12	25%	6	50%
Male	4	25%	5	0%	6	33%	3	33%	4	50%
Female	2	0%	4	50%	6	67%	9	22%	2	50%
American Indian/Alaska Native	0	N/A	2	0%	1	0%	0	N/A	0	N/A
Male	0	N/A	2	0%	0	N/A	0	N/A	0	N/A
Female	0	N/A	0	N/A	1	0%	0	N/A	0	N/A
Asian	7	29%	7	29%	9	11%	9	22%	10	50%
Male	2	0%	2	0%	5	0%	4	25%	5	60%
Female	5	40%	4	50%	4	25%	5	20%	5	40%
Black/African American	21	0%	26	8%	28	11%	24	4%	33	12%
Male	12	0%	11	9%	12	0%	13	0%	20	10%
Female	9	0%	15	7%	16	19%	11	9%	13	15%
Hispanic of any race	16	0%	14	7%	19	11%	27	11%	20	20%
Male	6	0%	4	0%	12	8%	11	0%	13	8%
Female	10	0%	10	10%	7	14%	16	19%	7	43%
White	126	19%	120	18%	140	28%	120	25%	115	26%
Male	55	15%	60	13%	63	16%	56	14%	64	9%
Female	71	23%	60	22%	77	38%	64	45%	51	47%
TUG <sup>1</sup>	44	5%	49	10%	57	11%	66	9%	76	20%
Male	20	0%	18	6%	30	3%	32	3%	44	16%
Female	24	8%	31	13%	27	19%	34	15%	32	25%
<b>HEARING STATUS</b>										
Deaf/Hard of Hearing	175	15%	177	16%	206	25%	193	20%	195	24%
Hearing	1	0%	4	0%	5	0%	5	0%	5	20%
Hearing Undergraduate (HUG)	1	0%	4	0%	2	0%	5	0%	3	33%
Non-HUG	0	N/A	0	N/A	3	0%	0	N/A	2	0%
<b>TOTAL WITHIN THE COHORT</b>	<b>176</b>	<b>15%</b>	<b>181</b>	<b>16%</b>	<b>211</b>	<b>24%</b>	<b>198</b>	<b>20%</b>	<b>200</b>	<b>24%</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.



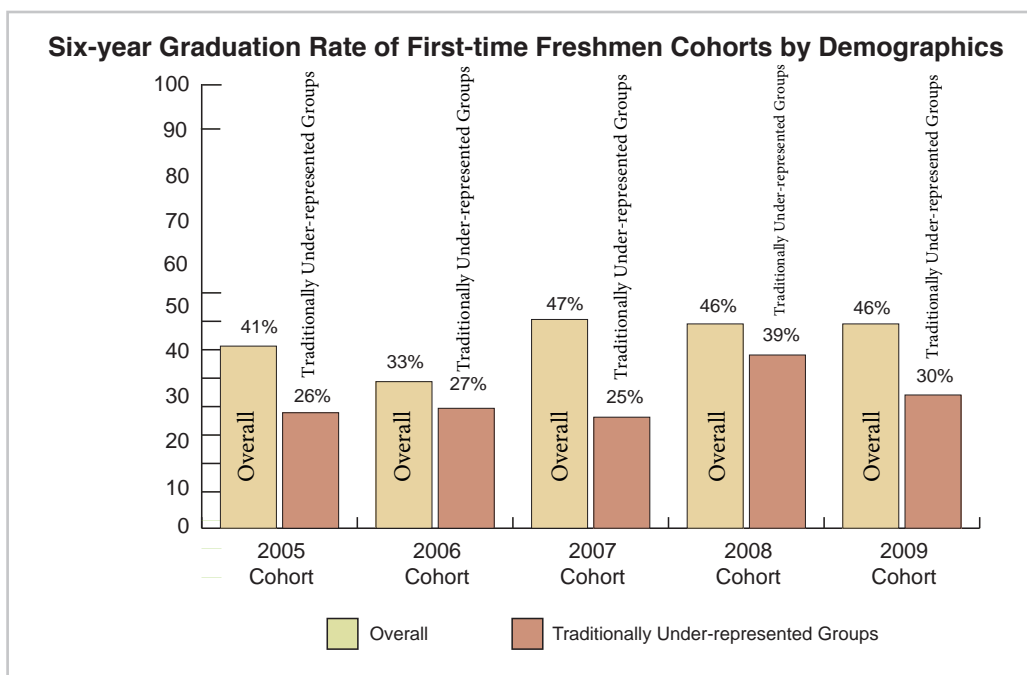
## Goal B: Persistence and Graduation

### Six-year Graduation Rate of Full-time, First-time Freshmen by Diversity

Group in the Cohort	Cohort 2005		Cohort 2006		Cohort 2007		Cohort 2008		Cohort 2009	
	#	%	#	%	#	%	#	%	#	%
<b>GENDER</b>										
Male	129	37%	113	27%	79	46%	83	48%	99	37%
Female	151	45%	96	42%	97	48%	98	44%	112	55%
<b>RACE/ETHNICITY</b>										
International/Nonresident Alien	20	30%	12	50%	6	67%	9	33%	12	67%
Male	7	57%	6	33%	4	75%	5	20%	6	50%
Female	13	15%	6	67%	2	50%	4	50%	6	83%
American Indian/Alaska Native	14	57%	2	0%	0	N/A	2	50%	1	0%
Male	6	50%	2	0%	0	N/A	0	N/A	1	0%
Female	8	63%	0	N/A	0	N/A	2	50%	0	N/A
Asian	9	22%	9	56%	7	57%	7	43%	9	33%
Male	5	40%	5	60%	2	0%	3	33%	5	20%
Female	4	0%	4	50%	5	80%	4	50%	4	50%
Black/African American	35	14%	26	19%	21	19%	26	23%	28	29%
Male	17	6%	15	13%	12	17%	11	36%	12	17%
Female	18	22%	11	27%	9	22%	15	13%	16	38%
Hispanic of any race	26	27%	12	25%	16	19%	14	64%	19	32%
Male	13	23%	4	0%	6	17%	4	100%	12	25%
Female	13	31%	8	38%	10	20%	10	50%	7	43%
White	176	50%	148	34%	126	54%	120	49%	140	52%
Male	81	43%	81	28%	55	55%	60	50%	63	44%
Female	95	56%	67	42%	71	54%	60	48%	77	58%
TUG <sup>1</sup>	84	26%	49	27%	44	25%	49	39%	57	30%
Male	41	22%	26	19%	20	15%	18	50%	30	20%
Female	43	30%	23	35%	24	33%	31	32%	27	41%
<b>HEARING STATUS</b>										
Deaf/Hard of Hearing	275	41%	205	34%	175	47%	177	38%	206	47%
Hearing	5	40%	4	25%	1	0%	4	75%	5	40%
Hearing Undergraduate (HUG)	5	40%	3	33%	1	0%	4	75%	2	50%
Non-HUG	0	N/A	1	0%	0	N/A	0	N/A	3	33%
<b>TOTAL WITHIN THE COHORT</b>	<b>280</b>	<b>41%</b>	<b>209</b>	<b>33%</b>	<b>176</b>	<b>47%</b>	<b>181</b>	<b>46%</b>	<b>211</b>	<b>46%</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

## Goal B: Persistence and Graduation



### Six-year Graduation Rate of All<sup>1</sup> New Undergraduate Students Cohort

Group in the Cohort	Cohort 2005		Cohort 2006		Cohort 2007		Cohort 2008		Cohort 2009	
	#	%	#	%	#	%	#	%	#	%
<b>GENDER</b>										
Male	161	41%	143	27%	94	47%	99	45%	56	43%
Female	190	45%	137	43%	132	54%	131	45%	83	49%
<b>ADMIT TYPE</b>										
First-time Freshmen	280	41%	212	33%	176	47%	181	46%	98	46%
Transfer/Second-Degree	71	51%	68	41%	50	66%	49	43%	41	46%
<b>HEARING STATUS</b>										
Deaf/Hard of Hearing	334	43%	265	35%	218	50%	215	44%	126	48%
Hearing	17	47%	15	40%	8	63%	15	60%	13	37%
Hearing Undergraduate (HUG)	16	50%	8	50%	7	71%	15	60%	5	33%
Non-HUG	1	0%	7	29%	1	100%	0	N/A	8	40%
<b>TOTAL WITHIN THE COHORT</b>	<b>351</b>	<b>43%</b>	<b>280</b>	<b>35%</b>	<b>226</b>	<b>51%</b>	<b>230</b>	<b>45%</b>	<b>300</b>	<b>46%</b>
<b>TOTAL GRADUATED</b>		<b>152</b>		<b>98</b>		<b>115</b>		<b>104</b>		<b>139</b>

<sup>1</sup>Includes part-time students, transfers, and second-degree seeking students.

## Goal B: Persistence and Graduation

### Undergraduate Degrees Awarded by Major Trend

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Accounting	8	3	11	6	3
American Sign Language	8	12	9	6	4
Art	1				
Art and Media Design				6	16
Art History	3		1		
Biology, B.A.	8	4	2	5	9
Biology, B.S.	2	2	1	6	5
Business Administration	10	9	9	20	16
Chemistry, B.A.	1			1	
Chemistry, B.S.	1	3	1	2	
Communication Studies	20	21	17	11	16
Computer Information Systems	1	1			
Computer Science, B.A.			1		
Computer Science, B.S.		1	1		
Deaf Studies	12	15	14	17	23
Digital Media	1	7	3	1	
Education	9	11	7	3	7
English	3	5	7	7	6
Family & Child Studies	13	12	11	3	1
French	1				
Government	9	4	6	10	5
Graphic Design	4	8	5	4	1
History	6	7	10	7	3
Information Technology		5	8	3	5
International Studies	3	3	8	5	11
Interpretation	5	16	11	17	14
Liberal Studies		1	1		
Mathematics, B.A.	4	5	4	1	4

## Goal B: Persistence and Graduation

### Undergraduate Degrees Awarded by Major Trend (continued)

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Mathematics, B.S.		3	1	3	
Philosophy	1				1
Photography	3	5	3	3	
Physical Education	11	8	8	7	4
Physical Education & Recreation				4	13
Psychology	13	19	20	29	10
Recreation & Leisure Studies	1	1	1		
Recreation & Sports	5	6	8	7	4
Self-directed Major	5	2		2	4
Social Work	7	16	17	13	17
Sociology	5	4	6	1	5
Spanish	2	1		1	1
Studio Art		2	2	1	
Theatre Arts	3	4	8	5	3
<b>TOTAL DEGREES AWARDED</b>	<b>189</b>	<b>227</b>	<b>222</b>	<b>217</b>	<b>211</b>
<b>DISTINCT HEADCOUNT OF GRADUATES</b>	<b>179</b>	<b>204</b>	<b>206</b>	<b>203</b>	<b>201</b>

Note: Includes programs awarding dual degrees to single graduates. Cut-off dates for each year as follows: 2010-11 (9/21/11), 2011-12 (9/11/12), 2012-13 (9/10/13), 2013-14 (9/9/14), and 2014-2015 (10/28/15).

*Graduates sign "I love you" to the audience during the 145th Commencement, held May 15.*

Photo by Zhee Chatmon



## Goal B: Persistence and Graduation

### Degrees Awarded to Hearing Undergraduates (HUG) by Major Trend

	2010-2011	2011-2012 <sup>1</sup>	2012-2013 <sup>2</sup>	2013-2014 <sup>3</sup>	2014-2015
American Sign Language	1	3	1		
Biology, B.S.				1	
Communication Studies		1	1		
Deaf Studies	1	2	3	3	7
Education		2	1		1
English				1	
Family and Child Studies	1	1			
History		1	1		
International Studies			1		
Interpretation	5	3	2	1	1
Philosophy					1
Photography		1			
Psychology	1	1		2	
Recreation and Sports Program			1		
Self-directed Major		1		1	
Social Work			1		1
Sociology			1	1	1
<b>TOTAL DEGREES AWARDED</b>	<b>9</b>	<b>16</b>	<b>13</b>	<b>10</b>	<b>12</b>
<b>DISTINCT HEADCOUNT OF GRADUATES</b>	<b>9</b>	<b>14</b>	<b>13</b>	<b>10</b>	<b>12</b>

Note: Includes programs awarding dual degrees to single graduates. Cut-off dates for each year as follows: 2009-10 (9/15/10), 2010-11 (9/21/11), 2011-12 (9/11/12), 2012-13 (9/10/13), 2013-14 (9/9/14) and 2014-15 (10/28).

<sup>1</sup>Twelve additional hearing undergraduates graduated in 2011-12 with degrees in Interpretation. These students are not considered HUGs and had applied directly to the Bachelor of Interpretation (BAI) program. Since this program is new, this is the first year of graduates for the direct-admit to the BAI program.

<sup>2</sup>Eight additional hearing undergraduates graduated in 2012-13 with degrees in Interpretation; one also double-majored in Studio Art. These students are not considered HUGs and had applied directly to the Bachelor of Interpretation (BAI) program.

<sup>3</sup>Nineteen additional hearing undergraduates graduated in 2013-14 who are not considered HUGs. Fifteen graduated from the Bachelors of Interpretation (BAI) with degrees in Interpretation. Four additional hearing undergraduate students graduated from the Adult Degree Completion program in 2013-14 with degrees in Deaf Studies.

## Goal B: Persistence and Graduation

### Graduate Degrees Awarded by Program Trend

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
<b>CERTIFICATES</b>					
ASL/Deaf Studies			1		1
ASL/English Bilingual ECE					1
Deaf/HOH Infants, Toddlers, and Families			6	9	6
Deaf History	1				
Educating Deaf Students with Disabilities					
Cultural Diversity and Human Services					
International Development					
Management	1	3			
<b>CERTIFICATES TOTAL</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>9</b>	<b>8</b>
<b>MASTERS</b>					
Administration	9	6	2		
Audiology	6				
Counseling: Mental Health	6	8	10	5	3
Counseling: School	3	6	4	12	4
Deaf Education: Advanced Studies		2	1	1	2
Deaf Education: Special Programs	10		1		2
Deaf Studies	11	6	4	13	5
Developmental Psychology	4	4	6	3	6
Education	11	11	19	9	10
Hearing, Speech, and Language: Non-clinical	1	8	12	8	11
International Development	5	7	4	8	4
Interpretation	5	10	8	20	7
Leisure Studies	1	5			
Linguistics	9	9	8	7	11
Psychology	7	4	4	3	4
Public Administration				11	15
Sign Language Education				21	27
Sign Language Teaching		18	26	9	1

## Goal B: Persistence and Graduation

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Social Work	7	11	14	14	14
Speech-Language Pathology	13	10	13	16	14
<b>MASTERS TOTAL</b>	<b>108</b>	<b>125</b>	<b>136</b>	<b>160</b>	<b>140</b>
<b>SPECIALISTS</b>					
Change Leadership in Education, Ed.S.	8				
Deaf Education, Ed.S.	2				
School Psychology, Psy.S.	6	2	4	2	6
<b>SPECIALISTS TOTAL</b>	<b>16</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>6</b>
<b>DOCTORATES</b>					
Administration, Special Education	2	2	6		
Audiology, Au.D.	9	8	8	11	8
Audiology, Ph.D.		1	2	3	
Critical Studies					2
Deaf Education	3		1		
Interpretation					1
Linguistics	4	3	3	2	1
Clinical Psychology	6	4	4	7	5
<b>DOCTORATES TOTAL</b>	<b>24</b>	<b>18</b>	<b>24</b>	<b>23</b>	<b>17</b>
<b>TOTAL DEGREES AWARDED</b>	<b>150</b>	<b>148</b>	<b>171</b>	<b>194</b>	<b>171</b>
<b>HEADCOUNT</b>	<b>148</b>	<b>146</b>	<b>164</b>	<b>189</b>	<b>166</b>

*Sungho An poses proudly with Dr. T. Alan Hurwitz, holding his newly issued degree, as Dr. Genie Gertz, dean of the College of Arts and Sciences, watches during the 145th Commencement, held May 15.*

Photo by Zhee Chatmon





## Goal B: Persistence and Graduation

### Cumulative Listing of U.S. Alumni by State/Territory since 1864<sup>1</sup>

Alabama	90	Nebraska	96
Alaska	17	Nevada	23
Arizona	164	New Hampshire	51
Arkansas	83	New Jersey	402
California	1,029	New Mexico	85
Colorado	138	New York	1,018
Connecticut	250	North Carolina	274
Delaware	44	North Dakota	60
District of Columbia	245	Ohio	401
Florida	432	Oklahoma	53
Georgia	193	Oregon	108
Guam	4	Pennsylvania	636
Hawaii	53	Puerto Rico	24
Idaho	49	Rhode Island	53
Illinois	557	South Carolina	85
Indiana	259	South Dakota	69
Iowa	141	Tennessee	101
Kansas	154	Texas	486
Kentucky	128	Utah	56
Louisiana	139	Vermont	31
Maine	61	Virginia	549
Maryland	965	Virgin Islands	5
Massachusetts	315	Washington	208
Michigan	259	West Virginia	79
Minnesota	327	Wisconsin	269
Mississippi	33	Wyoming	12
Missouri	208		
Montana	48		
		<b>TOTAL</b>	<b>11,619</b>

<sup>1</sup>Includes all those that graduated through summer 2015.

## Goal B: Persistence and Graduation

### Cumulative Listing of International Alumni by Country since 1864<sup>1</sup>

Argentina	4	Guyana	1	Peru	3
Australia	10	Haiti	1	Philippines	16
Austria	2	Honduras	1	Poland	1
Bahamas	2	Hong Kong	1	Portugal	1
Bangladesh	1	Hungary	1	Russian Federation	2
Barbados	1	Iceland	2	Rwanda	1
Belgium	7	India	40	Saudi Arabia	7
Benin	1	Indonesia	3	Sierra Leone	2
Botswana	3	Iran	2	Singapore	19
Brazil	7	Ireland	6	Slovakia	1
Bulgaria	1	Israel	11	Slovenia	1
Burkina Faso	1	Italy	2	South Africa	17
Cameroon	3	Jamaica	5	Spain	7
Canada	487	Japan	27	Sri Lanka	6
Chile	3	Jordan	4	Sweden	18
China	53	Kenya	8	Switzerland	3
Colombia	2	Korea, Republic of	14	Taiwan, Republic of China	11
Costa Rica	3	Kuwait	1	Tanzania	1
Cyprus	1	Lebanon	2	Thailand	5
Czech Republic	1	Liberia	1	Trinidad and Tobago	2
Denmark	1	Malaysia	16	Turkey	1
El Salvador	2	Mali	1	Uganda	3
Ethiopia	4	Mexico	7	United Arab Emirates	3
Fiji	1	Mongolia	1	United Kingdom	11
Finland	3	Nepal	1	Uzbekistan	1
France	5	Netherlands	11	Venezuela	2
Gabon	2	New Zealand	3	Vietnam	1
Germany	6	Nigeria	56	Zambia	1
Ghana	13	Norway	7		
Greece	4	Pakistan	3		
Guatemala	3	Paraguay	1		
				<b>TOTAL</b>	<b>1,024</b>
				<b>COUNTRIES</b>	<b>90</b>

<sup>1</sup>Includes all those that graduated through summer 2015.

## Goal B: Persistence and Graduation

### II. Support Programs and Strategies

In all its activities, the University promotes and encourages student learning and development as well as supports students' persistence to graduation to prepare them for careers or graduate education. Gallaudet's Student Affairs and Academic Support division provides an array of programs that contribute to outside-the-classroom learning that enhances the academic curriculum, supports at-risk students, facilitates leadership development, and ensures an inclusive and supportive social environment. Within a positive and inspiring campus climate, the University encourages students' connection to the University community and the deaf community, an important contributor to student persistence. The following section provides brief descriptions of the significant impact that these programs have on persistence and graduation rates.

#### Academic Advising

Academic/Career Advisors work with students in collaboration with academic departments and other student support offices to enhance students' academic performance for retention purposes. The office provides academic and career advising primarily for students who have not decided on their major. Advisors meet numerous times per semester with students as a group in their First Year Seminar classes to cover relevant academic and career topics. Students also meet individually with their academic/career advisor to review their four year plans and "shopping cart" to ensure that they have selected appropriate courses for enrollment. Other services include, but not limited to, assistance with course registration, individual and group advising, career interest and personality testing, computerized career guidance, and guidance in selecting an academic major and/or minor throughout their years at Gallaudet. In addition, advisors monitor Starfish, an early warning and student tracking system, for any red flags; when students are red-flagged in the system, they are contacted by their advisor to discuss concerns raised by their faculty and if necessary develop an intervention plan to ensure academic success. Academic Advisors periodically meet with students who have declared their major for any questions they may have related to academic issues.

Academic Advising highlights for the year include:

- Students' preparedness on the fall and spring Pre-Registration Shopping Cart process was assessed and 75 percent were prepared, surpassing targets;

- Students' facility with the Pre-Registration My Planner procedure was assessed with 87 percent demonstrating excellent preparedness in the fall and 70 percent in the spring, meeting or surpassing targets;
- Students' knowledge about the Degree Audit Report Quiz was assessed with 96 percent of the students showing understanding of the process in the fall and 94 percent in the spring;
- Student satisfaction with academic advising services continues to be high with 97 percent (fall 2014) and 96 percent (spring 2015) reporting satisfaction;
- Each semester, Academic Advising identified a graduate intern from the Department of Counseling to provide with additional support to students who were on Academic Warning or Academic Probation;
- Students now can make appointments online with Academic Advisors through Starfish; This makes it convenient for the students and allows the university to track students' use of Academic Advising services;
- Students made 1,339 appointments in the fall that totaled over 680 hours; in the spring semester they made 1,754 appointments that totaled over 820 hours;
- Modified Starfish so that student can use a drop down menu to identify reasons for their visits; advisors are also now able to record the actions that were taken, making it easier to assess Academic Advising services.
- Two Academic Advisors brought back valuable information from the "Enriching the Advising Experience" NACADA Region 2 Conference in Richmond, Virginia.

#### Athletics and Intramural Programs

Athletics Programs provide opportunities for student-athletes of good character and academic standing to compete in organized intercollegiate athletics while pursuing a baccalaureate degree. Students participating in intercollegiate athletics are taught the importance of an academics-first philosophy and the approach of the Athletics Programs. Each student-athlete is encouraged to be involved in other areas of student life and is given tools that will aid the student-athletes after graduation, which allow the student-athlete to develop as a total person.

## Goal B: Persistence and Graduation

Intramural Programs provide students who are not on an intercollegiate team with an opportunity to participate in sports activities that provide the benefits of team membership and foster connections to the Gallaudet community.

Athletics and Intramural Programs highlights for the year include:

- Sixty-eight student-athletes made the Dean's List during the 2014-2015 academic year;
- A record 61 student-athletes earned a spot on the 2014-15 North Eastern Athletic Conference (NEAC) Scholar-Athlete list for having a GPA of 3.4 or better;
- Twelve student-athletes graduated with honors (Summa Cum Laude, Magna Cum Laude, Cum Laude);
- One student-athlete received University Honors and 4 student-athletes made the Eastern Collegiate Football Conference (ECFC) All-Academic team;
- Two student-athletes were named CoSIDA (College Sports Information Directors of America) Academic All-America honorees for their respective sport; Katie Giles became Gallaudet's first woman to earn two Academic All-America selections and the second GU student-athlete to be named Academic All-America two years in a row;
- Twenty-seven confirmed student-athletes, coaches and managers that were on an active athletic roster during the 2014-15 season, graduated and met their degree requirements;
- Elena Ciccarelli became the first Gallaudet student-athlete to be selected by its conference to be a nominee for the NCAA Woman of the Year Award and the first Gallaudet student-athlete to play three different sports every year through her collegiate career (four years); she was recognized by Sports Illustrated for the accomplishment by being featured in "Faces in the Crowd";
- Gallaudet's athletic social media platforms were ranked No. 1 in NCAA Division III by D3SocialMedia.com for the entire 2014-15 school year. The Bison had the top-ranked Instagram account and held the highest Social Media Index rating;
- The women's volleyball team won a fifth straight NEAC championship and went to the NCAA tournament for the tenth time in program history and earned AVCA Team Academic Award for ninth straight year;
- Men's basketball set school records for wins (18), conference wins (14) and broke a 98-year-old school record for consecutive wins (10);
- Twenty-seven student-athletes earned all-conference honors for their respective sport. Coach Brendan Stern was named NEAC Men's Basketball Coach of the Year;
- Assistant Athletic Director for Communications Sam Atkinson was elected to the CoSIDA Board of Directors as one of 16 Sports Information Directors in the country representing a membership of more than 3,000;
- Gallaudet athletics department hosted a special sportsmanship seminar to help educate coaches, student-athletes, and staff about the topic;
- Gallaudet hosted the 2014 NEAC Men's and Women's Cross Country championships for the first time in school history;
- Gallaudet hosted its first home men's and women's track and field meet since 1992 thanks to major renovations to the Thomas O. Berg Track facility;
- Gallaudet athletics was ranked in the Learfield Sports Directors' Cup standings for a record fifth year in a row;
- Fifteen former Gallaudet student-athletes were recognized and selected to the Capital Athletic Conference Silver Anniversary Team.

### Career Center

The Career Center prepares students for life after Gallaudet through a variety of services and learning opportunities including: internship and job fairs, job-search workshops, resume reviews, mock interviews, and career consultation. The Career Center's goals are to educate and empower students to learn lifelong career development skills, to make effective career decisions, and to achieve professional success.

Career Center Highlights for the year include:

- Eighty-one percent of 2015 graduates reported that they had participated in internships prior to graduation.
- 201 student internships were coordinated by the Career Center in 2014-2015

## Goal B: Persistence and Graduation

- Twenty-two internship site visits were conducted by Career Consultants to monitor student internships.
- 370 students and 45 employers in attendance at the fall Internship and Job Fair.
- 366 students and 31 employers attended the spring Internship and Job Fair.
- 401 students received direct career consulting.
- 1,857 student visited the Career Library
- 265 students enrolled in the GSR 110 Career Development Course
- 604 students attended employer information sessions and/or mock interviews
- Thirteen Deaf Awareness training workshops were presented to off-campus employers.
- 109 career presentations/consultations were conducted in partnership with faculty and/or in their classrooms.
- Ninety students interviewed through Workforce Recruitment Program (WRP)
- Seventy-nine percent of students reported that CAPS services helped them stay in school;
- Sixty-seven percent reported that services helped them do better in class;
- Ninety percent rated that CAPS services were above average to outstanding;
- Over 200 staff and faculty attended the Question Persuade Refer (QPR) training that taught participants how to recognize the warning signs of a suicide crisis and how to question, persuade, and refer someone for help.
- Over 300 students, staff and faculty participated in the Out of the Darkness Campus Walk, a collaborated effort coordinated by CAPS to raise awareness of suicide prevention; participants raised over \$25,000 for the American Foundation for Suicide Prevention.

### Counseling and Psychological Services

Counseling and Psychological Services (CAPS) supports the academic and social-emotional development of Gallaudet students by providing: psychological assessments; counseling; crisis intervention; psychiatric services, and prevention programs. CAPS also provides consultation services for faculty and staff, contributes to the student paraprofessional training programs, and offers training for mental health graduate students from the departments of psychology, social work, and counseling.

CAPS highlights for the year include:

- 305 students were served (271 received counseling, 58 completed an assessment, 24 received both counseling and assessment services; 61 received psychiatric services);
- Sixty-nine percent of students receiving services identified themselves as deaf, 22 percent as hard of hearing, and 9 percent as hearing;
- Fifty-seven percent of students received services because of problems in school;
- 255 students with disabilities used OSWD services, (54) graduate and (201) undergraduate students;
- Eighteen percent of the student population was served by OSWD (12 percent of the graduate population, 21 percent of the undergraduate population);
- Fifty-four OSWD students received student advocacy training designed to enhance their understanding of advocacy strategies, including Introduction to Advocacy Training, Roles and Responsibilities, Confidentiality, and the Grievance Process;
- Thirty students with disabilities received New Student Orientation tailored to OSWD students;
- Produced 247,325 pages of large print/scanned pages, 240 Braille pages and 150 eBooks for 18 students with low vision;

### Office for Students with Disabilities

The Office for Students with Disabilities (OSWD) empowers students with disabilities to succeed in higher education and encourages and provides experiences and opportunities to build confidence beyond the classroom. OSWD provides individually tailored, comprehensive, support services and programs for students with disabilities.

OSWD highlights for the year include:

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- Seventy-five students in 204 classes received support from 96 student paraprofessionals note takers who received the Note Takers Training & Orientation workshop for OSWD Note Takers;
- Reinstated OSWD's Faculty Support Program to strengthen collaboration with faculty who are key stakeholders in the disability support service process by providing opportunities for information sharing, discussion, and professional development;
- Enhanced OSWD's student testing services to assure academic integrity and equal access;
- Presented "Assuring Accommodations for Students with Multiple Disabilities" at the 2015 National Conference of the Association of Higher Education and Disability (AHEAD).
- Seventy-three percent of the students reported that they will recommend living on-campus to new students.
- Seventy-seven percent of the students reported that they were satisfied with the community environment in their residence hall.
- Fifty-six percent of students needing assistance from the Coordinator of Residence Education (CRE) said that the CRE met their needs.

### Office of Residence Life and Housing

The Office of Residence Life and Housing provides a safe and welcoming environment for students in the pursuit of academic excellence. Realizing the transition to college living can be challenging, the office offers dormitory programs that foster skills that contribute to living successfully in a pluralistic world and cultivate character, civility, and connections to community.

The Office of Residence Life and Housing highlights for the year include:

- Room Lottery was conducted 100 percent online this year.
- Co-sponsored and Co-Chaired the revived Paraprofessional Conference for paraprofessionals from Residence Life, Campus Activities, Commuter Programs, and Student Success.
- Co-sponsored the Berry Blossom Festival for the second consecutive year with the Office of the President and Campus Activities.
- Seventy-four percent of students reported that they were satisfied with their degree of privacy in their rooms.
- Eighty percent of students reported that they felt safe in their residence hall.

### Student Center Programs and Services

#### Alcohol and Other Drugs Services

Alcohol and Other Drug Services (ADS) provides education and support for students dealing with alcohol and/or other drug related infractions. In addition, ADS also coordinates the required online AlcoholEdu and Haven course for new/transfer students.

- Fifty-one students participated in mandatory alcohol and/or other drug classes last year;
- Eighty-eight percent of students were assigned a C or above on the post-class test and 53 percent got a B or above. Through students' reflection papers, 77.5 percent discussed modifications to future decision-making; 80 percent recognized/identified impact on their community; and 75 percent demonstrated understanding of personal risk associated with behavior;
- 275 new, transfer and special students participated in AlcoholEdu and Haven, the online course promoting healthy behaviors related to alcohol use and relationships.

#### Campus Activities

Campus Activities is a one-stop information center responsible for student organizations. It manages the planning and execution of student organization events, coordinates numerous events in collaboration with academic and non-academic departments, provides leadership training and mentoring for students, and manages reservations for rooms in the Jordan Student Academic Center (JSAC). Campus Activities also handle room reservations for space in JSAC, Ely Center and the Foster Auditorium. Services such as poster approvals, printing banners, making copies are provided for the community.



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- 671 people follow the Campus Activities Facebook page;
- Thirty student organizations and clubs were registered and they hosted a total of 163 events;
- Campus Activities handled over 500 requests to use space in the Jordan Student Academic Building;
- Community Service Programs (CSP) also was subsumed into Campus Activities during FY 2015.

### Commuter Programs

Commuter Programs provides a place for commuter students to stay between classes and offers a number of amenities such as a place to rest, watch TV, and study; there is a small kitchenette, computer lab, lockers, and a playroom for kids to play in while their parents do their school work. Commuter Programs also serves as a resource for commuter students by offering programs such as landlord/tenant rights and how to be a good neighbor.

- An average of 267 students per week visited the Commuter Lounge this year;
- 807 students received a weekly newsletter from the Commuter staff during the academic year;
- 1,257 commuters are in the Commuter Programs database.
- 368 individuals are members of the Commuter Programs' Facebook; there is a page with 1,205 member called "Need a Place" in which individuals can post rental ads or seek an apartment.

### Health and Wellness Programs

Health and Wellness Programs provides for the enhanced well-being of Gallaudet University students by empowering them to make informed health and lifestyle choices. Examples of activities include the following.

- Twenty-five programs were offered by the Health and Wellness Programs on physical, social, emotional, sexual health to 1,055 participants (duplicated); Programming included workshops, booths and events (Take Back the Night, Get Moving Gallaudet, etc.); this demonstrates a 39 percent increase in the programming we offered;

- Provided six Peer Health Advocates (PHA) the opportunity to develop professional skills, learn about different aspects of health, and organize information to present to the Gallaudet community through "bathroom tips," bulletin boards, booths, workshops, and other events; The average growth demonstrated was 17 percent between their first (December) paraprofessional assessment to their second one (April); in the exit interview/questionnaire, all of the PHAs "agreed or strongly agreed" that this experience "helped me to develop skills I can use;"
- Through the Campus Grant from the Office on Violence Against Women, Department of Justice facilitated nine Green Dot bystander intervention trainings to 177 participants, along with other programs on sexual assault, domestic/dating violence, and stalking; the grant also funded additional components allowing Gallaudet University to progress with examining the issue of sexual misconduct on campus.

### New Student Orientation

New Student Orientation (NSO) assists new and transfer students with transition to Gallaudet University. Students learn about the mission of Gallaudet, examine their individual identity, develop an appreciation for diversity, and explore the DC community through a series of programs and experiences; they also learn about the various services available that they can utilize throughout their personal and academic journey.

- 270 new undergraduate and transfer students were welcomed this year and over 50 parents participated in the Family Orientation Program;
- 373 people are members of NSO's Facebook page, and 33 posts and 44 followers of the Instagram page;
- Graduate Student Orientation and New Student Orientation conducted business registration together to create a one-stop registration this year. The result was a more efficient and festive NSO;
- The students and their families joined in many fun-filled activities, met the Bison Mascot, attended vendor fairs all to welcome the students and families to campus and make them aware of all the services and support available on campus.



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- 120 students signed up for three major weekend events to conclude NSO: a trip to King's Dominion (amusement park), a trip to the Washington Nationals baseball game, and a trip to Old Town, Virginia.

### Office of Campus Ministries

Realizing that spiritual development is an important part of students' engagement for many students in the campus community and a contributor to overall student development, the university supports a group of volunteer religious workers who are appointed by their jurisdictional supervisors to serve and minister on campus.

The eight campus ministers:

- Offer regular religious services,
- Counsel on religious matters,
- Coordinate interfaith activities that foster social justice and diversity awareness,
- Offer student service projects in the community,
- Help to foster the moral and spiritual development of members of the community.

### Office of Student Conduct

The Office of Student Conduct (OSC) used discussion, counseling, mediation and other procedures to handle conduct problems and to maximize the educational experience of students involved. OSC also serves as a campus-wide resource, providing consultation on issues related to student conduct, classroom disruptions, and Title IX. OSC also provides training for new and current students, paraprofessional student workers, and student organization officers.

The Office of Student Conduct expanded the Title IX Team by adding a Title IX Investigator to assist with the Title IX process and ensure compliance with federal regulations related to sexual misconduct and gender-based misconduct.

- OSC handled 153 cases from during the 2014-15 academic year.

### Student Success

Student Success' three programs (JumpStart: American Sign Language (ASL), JumpStart: Bachelor of Interpretation, and Peer Mentorship) give targeted groups of students specialized support to facilitate their adjustment to Gallaudet and help them succeed.

#### JumpStart: ASL

JumpStart: ASL is a four-week summer program for first-year students, including transfer students, who are new or emerging users of American Sign Language. Students arrive the summer before the fall semester and receive intensive sign language training and instruction in deaf awareness, deaf culture, and Gallaudet history and traditions.

#### JumpStart: BAI

JumpStart: BAI is a four-week summer program for first year students, including transfer students, who are enrolled in the Bachelor of Interpretation program. Students arrive the summer before the fall semester, and receive help in polishing their sign language skills and instruction in deaf awareness, deaf culture, and Gallaudet history and traditions.

### Peer Mentorship Program

The Peer Mentorship Program assists students in their social, personal, and academic acclimation to Gallaudet University. Each incoming student who is taking the First Year Seminar is paired with an outstanding sophomore, junior, senior student who act as a mentor throughout the academic year.

Student Success highlights for the year include:

- Thirty-nine students participated in the JumpStart: ASL program;
- Ten students participated in the JumpStart: BAI program;
- Seventeen peer mentors were recruited;
- 194 first-year students were assigned a peer mentor ;
- Peer mentors served as teacher assistants in GSR 101 courses;

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- Seventy-six percent of mentees reported that visits with their peer mentors helped them adjust to Gallaudet, and 61 percent reported that mentors helped them keep up with their studies.

### Tutorial & Instructional Programs

In the Tutorial & Instructional Programs (TIP) students find academic assistance in a supportive learning environment. The TIP provides a variety of academic support services by qualified tutors, supplemental instruction interns (who provide academic support for historically difficult courses) and academic coaches. Students learn essential skills and strategies necessary for academic success. TIP, in collaboration with academic departments, also provides specialized learning assistance programs and a consolidated academic support center with emphasis on American Sign Language, English and Mathematics.

Tutorial & Instructional Programs highlights for the year include:

- Math Center provided a new tutoring concept with “in class tutoring” for classes that are designed for a flipped classroom approach;
- ASL department identified a coordinator for the ASL Center;
- Students received TIP services in various programs; 1,525 tutoring session that totaled 95,484 minutes in the fall and 1,423 sessions that totaled 89,754 minutes in the spring;
- Reestablished Math Walk-in Service and expanded the hours for English Walk-in Service;
- Math Center Coaches produced a dramatic advertising video to promote its services;
- English Center made smooth transition from the paper feedback service previously offered by TIP. This has encouraged more students to receive face-to-face feedback on paper revisions;
- Modified Starfish so that tutees can use a drop down menu to identify what kind of help they need; academic coaches are also now able to record the actions that were taken, making it easier to assess TIP services.

### Office of Diversity and Equity for Students

The initiatives of the Office of Diversity and Equity for Students (ODES) which houses the Dialogue Program, Keeping the Promise, Multicultural Programs, and the Lesbian, Gay, Bisexual, Transgender, Questioning, and Allies (LGBTQA) Resource Center all support: Strategic Plan Goal B (which guides the University to increase Gallaudet’s six-year undergraduate rate to 50%); Objective 1 (which guides the university to create an environment and support system to encourage retention and successful completion); and Strategy 1.3 which specifies that the university should develop programs to promote acceptance and respect for students, faculty and staff along all facets of diversity including nationality, race, gender, communication modalities, etc.

#### Dialogue Program

Spring 2015, in the wake of the events in Ferguson, New York City, Ohio, Florida and elsewhere, the Office of Diversity and Equity for Students (ODES) hosted a series of presentations and dialogues on the theme of *Black Lives Matter: Addressing Inequity and Injustice On and Off Campus*.

The program began on February 3, with Wendy Pohlhaus, Assistant U.S. Attorney for External Affairs presenting on Police-Community Relations. On February 19, we held a campus-wide dialogue and engaged in conversations about Profiling, Racism, and Privilege. The feedback indicated that people were able to listen to and learn from others different from themselves. On March 12, a panel of African American/Black students shared how privilege and racism have affected their experiences at Gallaudet University. The panel was followed by a campus-wide dialogue. On March 31, ODES hosted an illustrious guest panel of leaders in law enforcement, civil rights, community organization, and higher education. Their candid sharing of personal and professional perspectives deeply resonated with the lived experiences of African American/Black members of our campus community, as indicated in the comments on the evaluation forms. On April 14, an ODES-moderated panel of African American/Black Gallaudet faculty and staff shared their experiences and thoughts about the issues identified by our March 31 guest leaders. The panel was followed by a dialogue focused on identifying concrete steps that must be taken to address racial inequity and injustice at Gallaudet University. Approximately 700 faculty, staff and students attended this series.

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### Keeping the Promise: Equitable Outcomes for Students

Keeping the Promise (KTP) is a key initiative in support of the University goal of closing the gap in retention and graduation for deaf students who are underrepresented in terms of degree conferment. Of the KTP participants from 2013-2014, 85% were retained for 2014-2015. This is an increase of 2% compared to the retention in 2012-2013. In addition, 14 undergraduate and 8 graduate KTP participants graduated in 2015. Thus, KTP supports retention and graduation via promoting the intellectual advancement of these students by demonstrating and reinforcing the essential values of scholarship and perseverance through intentionally-designed activities that foster motivation, empowerment, academic excellence, understanding of historical and cultural heritage, and model citizenship.

#### Academic Skills-Building Workshops

In these weekly events, campus experts share strategies for succeeding in college. Topics discussed range from general strategies for success to applied and personal stories, which are designed to raise students' awareness of identity and appreciation of different cultures. Included are: Facilitating the difficult dialogue: Role playing, Social Justice: Intersectionality and Community Accountability, How to Succeed in Your Major, Study Tips/Exam Taking Tips, and Study Tables. In 2014-2015, thirty-five academic skills building and cultural education workshops were offered with a total of 705 attendances.

#### Cultural Education Workshops and Events

These workshops and events address the learning of one's heritage, culture and communication, and included visits to Latino/Hispanic and African-American museums, History of the Day of the Dead (día de Muertos) by the Latino Student Union, The Indian Removal Act and The Trail of Tears, Community Accountability, Physical and Sexual Assaults and an Asian panel. Three cultural education trips were offered. A total of 260 participants attended these cultural education workshops and trips.

#### Focus Groups

Focus groups provide opportunities for KTP members to discuss issues affecting them as students belonging to underrepresented groups on campus and to exchange ideas and suggestions for navigating a predominantly white University. Four group discussions were held during the course of the academic year.

Keeping the Promise established an Asian and Pacific Islander Community Forum to discuss their experiences being Asian/Pacific Islander students at Gallaudet. Based on the survey and community forum, KTP identified two important issues and needs which KTP is positioned to address: A Multicultural Mentoring Program and Brown Bag Lunch gatherings to provide avenues for developing a support system for students who identify as Asian/Pacific Islander.

#### Leadership Training Retreat

A two-day leadership and team-building retreat is offered every fall enabling students to learn leadership skills, to develop the peer bonds and support systems that are critical to persistence, and to develop understanding of the characteristics and traits of effective leaders. Twenty-eight students participated in this activity this year.

#### Personal Counseling (One-on-one)

This year 639 walk-in students were served with a variety of issues ranging from class-oriented questions to personal matters.

#### Multicultural Student Programs

The Office of Multicultural Student Programs (MSP) seeks to create an environment at Gallaudet University that embraces individual difference, sustains inclusion, provides support, advocacy, and cultivates a campus atmosphere that is free from bias. MSP will achieve its mission by offering the community a variety of multicultural programs and experiences, which foster an inclusive, bias-free campus climate. MSP provides and supports the strategic goal B.1.3.

#### Turn-A-Page-Together (TAPT)

This program was offered during the fall and spring semesters; eight weeks in the fall and nine weeks in the spring. TAPT is one of the cornerstone programs of MSP. Thirty-nine faculty, staff and students participated during the fall semester and thirty-two participated during the spring semester. Participants essentially join a book club and had the opportunity to share their diverse views and perspectives with regard to different cultures through discussions.

#### Hispanic Heritage Month

##### Workshop "Immigration is Beautiful: Butterfly"

Mindy Enriquez, a paraprofessional at Gallaudet University, gave a presentation about the history of immigration issues in America during this workshop. Participants later took part in a hands-on activity involving making wearable butterfly wings

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which represents a symbol for migrant rights. There were 26 participants in this workshop.

### **“Piñata” Workshop**

Zoila Barazarte gave a presentation about the history of the piñata and also conducted a hands on activity which involved making colorful piñatas which are popular in Latino culture. A total of 18 participants took part in this workshop

### **Presentation: “Decolonizing Minds: Embracing Multiple Intersectional Identities” by Dr. Carla Garcia-Fernandez**

The speaker Dr. Carla Garcia Fernandez shared a new theoretical proposition in her PhD dissertation where she explored how Deaf-Latin@ high school students define their multiple identities and experiences while living at a residential school for the Deaf in the Southwest. Dr. Carla Garcia-Fernandez shared her findings and suggested the need to look beyond Deaf identity by embracing the multiple intersectional identities of Deaf-Latin@ students, particularly in school. She also talked about how we all can promote safe spaces for Deaf-Latin@ students in the fields of education and other disciplines. A total of 102 participants attended this presentation.

### **Native American Heritage Month**

#### **Presentation: “Tayac’s Turtle Island Dancers”**

At the time of Columbus, as many as 10 million Native Americans lived in North America. Many thousands lived in “Lenapehocking,” the vast homeland of the Lenni-Lenape, who were the first inhabitants of eastern Pennsylvania and parts of New York, New Jersey, Maryland and Delaware. Today, the Turtle Island Dancers carry on this long standing tradition of tribal dance, drum and song. The 108 participants learned about Native American Indian history, culture and traditions. The Lenni-Lenape’s Turtle Island Dancers also taught hands on, different dances and their significance.

### **Diversity Dance Showcase**

MSP brought students, staff, faculty and friends together to showcase different styles of dance and music while promoting pride and cultural awareness. Through this event, we share our traditions without stigmas or stereotypes and highlight that the beauty of unique heritages and cultural distinctions can be most easily transmitted and appreciated through the performing arts. Twelve (12) individuals and groups provided performances and 167 participants attended this event.

### **The Signing Gospel Winter Concert**

This event included performance groups from throughout the metropolitan Washington, D.C. area. The groups shared

music about God and spirituality through sign language. Twenty two (22) individuals and groups performed gospel music in sign language. About 128 participants watched the performance.

### **Black History Month**

#### **“Afrofuturism: How Black Deaf History Can Influence the Future” by Kari Cooke**

Kari Cooke shared the role of community engagement within higher education policy and the concept of Afrofuturism and how Black Deaf History can be central to determining a future that includes the Black Deaf perspective at the core. This two-hour presentation was attended by 42 people.

### **Women History Month**

#### **Presentation: “Diverse Deaf Women Who Changed Her-story” by Vicki T. Hurwitz**

One hundred and twenty-six people attended this presentation by the First Lady of Gallaudet University, Vicki T. Hurwitz, on the lives and accomplishments of several diverse deaf women who made a difference to women’s “history”.

### **Asian-Pacific History Month**

#### **Presentation: “The Forgotten Minority – Asian Deaf Journey” by Nan Zhou**

Nan Zhou’s presentation was attended by 97 persons. The central thesis was that Asian Deaf Americans still struggle to survive and achieve their potential in the face of educational, socioeconomic and political challenges. Due to model minority stereotypes of Asian Americans, they are stigmatized as high achievers who fit into the dominant culture. Nan Zhou shared that Deaf people from these groups are at even greater disadvantage because of added cultural, linguistic and accessibility issues. Nan Zhou believed that the Asian Deaf role models are essential to our generation for a richer appreciation of our heritage, cultural values, unique sign languages and Asian Deaf history.

### **UnityFest**

The 2015 iteration of UnityFest was the 9th successive annual festival, a full day of celebration of the rich cultural heritage of the Gallaudet Community. The day’s events provided students, faculty, staff, and friends an opportunity to explore and experience the wide variety of cultures that make up our campus community. There were 300 participants at this event.

## Goal B: Persistence and Graduation

### Individual Support and Consulting (One-on-one)

MSP provides support and consultation to students, staff and faculty during meetings in-person related to MSP resources, interviews for different projects, and collaboration with different units for various issues related to multi-culturalism. During the academic year 2014-2015, 328 students, staff and faculty were supported or provided with consultation.

Approximately 1412 hours during the academic year 2014-2015 related to MSP programs, resources and diversity issues were spent on e-mails.

### LGBTQA Resource Center

The Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, and Allies (LGBTQA) Resource Center supports the University's goal of promoting student retention and graduation rates through intentionally designed programs that facilitate understanding and respect for different sexual orientations, gender identities and expressions.

The LGBTQA Resource Center serves as a hub for LGBTQA-related programs, services, trainings, activities, and student groups on campus. The Center is a visible space to promote a LGBTQA presence year-round, with particular activities during Pride Month, Coming Out Week, Transgender Awareness Week, and Lavender Graduation. The Center offers a meeting space, volunteers, and assistance with coordination and planning of events designed to address and combat heterosexism and homophobia, including student discussion and support groups, informational and structured diversity trainings in and out of the classroom, consultation to departments and campus groups, individual counseling and support for students, and written resources and outreach materials among other activities. These activities support the Gallaudet Strategic Plan goal B.1.3.

### LGBTQA 101 and Allies Network Awareness-Raising Workshops

These one to three hour interactive workshops are developed by request, and the content is tailored to target audiences. During the trainings, students, staff, and faculty are familiarized with LGBTQA-related terms and introduced to topics related to LGBTQA identities, such as coming out processes, spectrums of sexual orientation and gender identity as well as gender expression, impacts of bullying and micro-aggressions, legal and civil rights, and other important topics. Time is devoted to answering questions from the participants, with the goal of clearing up misconceptions, reducing stigma, and leav-

ing participants with a broader understanding of LGBTQA identities. During AY 2014-2015, eleven LGBTQA 101 workshops were offered with a total of 302 students, faculty, and staff attending.

### Lavender Graduation

This end-of-the-year ceremony acknowledges the unique challenges of being an LGBTQA student at Gallaudet University, witnessing and celebrating students' achievements through a communal dinner, student and staff/faculty speakers, and special recognition of advocates and supporters. AY 2014-2015 Lavender Graduation was attended by nearly 200 people, with a record high of 41 lesbian, gay, bisexual, transgender, queer/questioning, and/or allied students graduating in the Lavender Graduation class of 2015

### Individual and Group Support and Consultation

The LGBTQA Resource Center Coordinator is available to provide support to students, staff, and faculty during drop-in hours, with services ranging from referrals to consultation to collaboration on a variety of projects. During AY 2014-2015, we met with 21 faculty members, 52 staff members, and 64 students for a total of 137 hours spent providing individual and group consultation.

### Campus Email List

The LGBTQA Resource Center distributes occasional emails with information related to on-campus and local LGBTQA programming and events, such as announcements about upcoming initiatives, volunteers wanted, or other LGBTQA-related information. Students, staff, and faculty members may opt-in to receiving LGBTQA Resource Center emails: during the AY 2014-2015 year, the LGBTQA Email List was distributed to a readership of 400 individuals. A total of 350 contact hours were achieved by email, between response emails sent by the LGBTQA Resource Center Coordinator and emails distributed by the LGBTQA Resource Center Campus Email List.

### Facebook Page

The LGBTQA Resource Center Facebook Page features posts, stories, links, and pictures related to LGBTQA events on-campus, locally, and around the world. The Facebook page exists to promote a Resource Center presence on social media and to facilitate a feeling of collaboration and interaction between Gallaudet students and the LGBTQA Resource Center. As of the end of AY 2014-2015, the LGBTQA Resource Center Facebook page had achieved a page total of 487 individual "LIKES."



## Goal B: Persistence and Graduation

### Community Outreach

The LGBTQA Resource Center strives to keep abreast of current community, national and worldwide information that may pertain to LGBTQA students, staff, faculty, and alumni of Gallaudet University. To that end, 15 hours of community consultation were devoted to meeting with LGBTQA Resource Center Coordinators/Directors of Diversity and Inclusion at universities (American University and George Washington University); community LGBTQA healthcare and transgender activists; and Gallaudet University LGBTQA-identified alumnus.

### LGBTQA Academic Year 2014-2015 Highlights

#### Fall 2014

- “Allies Network” training presentation is revised and presented to numerous groups, including Counseling and Psychological Services (CAPS), Office of Residence Life and Housing, Peer Advisors, and others.
- “LGBTQA 101” (fundamental LGBTQA awareness training) presentation is developed and presented to students in Departments of Psychology and Social Work; Jump-Start and New Signers programs; and GSR 101 first-year students.
- Coming Out programming (Oct. 2014) featuring: videos of LGBTQ and ally students sharing coming out stories; LGBTQA history and culture trivia; Psychology Department Colloquium on Coming Out; LGBTQA Resource Center reception and social. Day’s events attended by a total of nearly 200 students, staff, and/or faculty members.
- 15 Gallaudet students and staff attend and present at the D.C. LGBTQA Studies Symposium, a daylong conference on LGBTQ activism and research. (Nov. 2014)
- Pride Presenters Series: featuring presentations by S. Bear Bergman (transgender author/performer/educator) and Mara Keisling (Executive Director, National Center for Transgender Equality)
- Transgender Awareness Week (Trans\* Awareness Week): featuring kick-off presentation by Gallaudet alumnus Alex Leffers; presentation by 2014 AmeriCorps Legal Fellow, Milo Primeaux; screening of the documentary “TRANS” with commentary by Producer Mark Schoen (in conjunction with Counseling and Psychological Services) (November 2014)

#### Spring 2015

- LGBTQA Resource Center invited to have a presence on SART (Sexual Assault Response Team) to consult on sexual assault and intimate partner violence in the LGBTQA community
- Pride Month (April 2015):
  - o Pride-Themed LGBTQA Brown Bag Lunch meeting open to the entire campus; 30 students, staff, and faculty members reached
  - o Pride-themed LGBTQA Student Game Night; 20 students attended
  - o LGBTQA movie screenings and film discussions; 25 students attended
- ColorFEST (theme – “Metamorphosis”): LGBTQA Resource Center supported the student-led weekend-long educational and social awareness-raising event for Deaf, DeafBlind, and Hard of Hearing LGBTQ college students. ColorFEST 2015 featured a variety of educational workshops on LGBTQ topics of interest along with a Drag Show/Pageant and a student social dance. (April 2015) Over 150 students were reached.
- Lavender Graduation (May 2015): The last and largest yearly event of the LGBTQA Resource Center, this annual celebration acknowledges the achievements and contributions of Gallaudet University’s LGBTQA students and those who have worked tirelessly to improve the campus climate for the LGBTQA community.

#### Year-Round

- LGBTQA Students of Color Dinner & Discussion Group
- LGBTQA Undergraduate Students Meet-Up Group
- LGBTQA Graduate Students Meet-Up Group
- LGBTQA Pride Brown Bag Lunches (informal lunches for all LGBTQA Gallaudet community members to meet and chat)

## Goal B: Persistence and Graduation

### Student Affairs and Academic Support: Student Contact Hours for AY 2014-15

Support Unit	Number of Contact Hours
Dean's Office	2,496
Academic Advising and Tutorial and Instructional Programs	15,400
Student Success	17,861
Career Center	8,408
Counseling and Psychological Services	12,377
Office for Students with Disabilities	34,488
Residence Life-Housing	71,747
Student Center Programs and Services	2,000
Alcohol and Other Drugs Services	968
Campus Activities	10,018
Commuter Programs	3,549
Health and Wellness Programs	3,592
New Student Orientation	960
Office of Campus Ministries	640
Office of Student Conduct	4,840
Athletics and Intramurals	52,177
Office of Diversity and Equity for Students	3,462
<b>TOTAL</b>	<b>244,983</b>

*Class of 2015 graduates Dhruv Dhawan (left) and Sungho An jump for joy on the steps of Chapel Hall to show their exhilaration about graduating.*

Photo by Zhee Chatmon









*The photography exhibition, #RealGallaudet, featured some of the best works from digital photography, photojournalism, and studies in photography students. The exhibition, on display at the Washburn Art Building from March 24-April 6, was co-sponsored by the Office of Administration, Office of University Communications, and H & P Pizza.*

Photo by Zhee Chatmon

## Strategic Plan Goal C: Resource Efficiency

This chapter enumerates a series of steps taken to ensure that Gallaudet University has control of various financial resources to complete its mission, included are steps to control spending as well as to increase revenue. Included in three separate sections are steps taken during the current year and then those taken during previous years. Also included are demographics—gender, deaf/hearing status, and race/ethnicity statues—for employees by category of employment, including administrators, faculty, Clerc Center teachers, professional staff academic/student support, professional staff administrators/instructional support, secretarial/clerical, technical, service, and maintenance. The contents of this chapter reflect the major accomplishments performed during FY 2015 in support of Goal C of the Gallaudet Strategic Plan.



## Goal C: Resource Efficiency

### I. Recent Resource Efficiency Steps

Gallaudet University continued to pursue revenue growth opportunities and carefully manage its resources in FY 2015. This section provides a brief summary of the actions completed and initiated since FY 2010.

#### Fiscal Year 2015

1. Preparations were underway for the launch of an international design competition for Gallaudet University's 6th Street property development project. Shortly after the end of FY 2015, the university selected four finalists to compete in the second stage of the competition with assistance from The JBG Group. The two-stage design competition is intended to create a new campus gateway and redefine the university's urban edge as a vibrant, mixed-use, creative and cultural district, generating long-term revenue for Gallaudet under a long-term lease to begin in a few years.
2. Gallaudet continued working with consultant Noel Levitz on maximizing enrollment and net tuition revenue through the strategic use of scholarships. Despite a decline in enrollment by headcount from 1,753 students in fall 2013 to 1,691 in fall 2014, Gallaudet essentially managed to meet the net tuition revenue budget goal of \$17.5 million with actual net tuition revenue of \$17.4 million at the end of FY 2015 (unaudited). The decision to increase tuition by 4% for FY 2015 helped to offset an increase in scholarships awarded.
3. An analysis of fall 2015 enrollment numbers shows that although the total enrollment number is slightly lower, the yield rate actually increased and Gallaudet exceeded the budgeted goals for enrollment. A lot of progress has been made to address the recommendations from Noel-Levitz, but there is still more work to be done. The primary goal for fall 2016 is to increase the number of incoming freshmen, as well as continue the university's progress toward improving yield and retention rates.
4. During FY 2015 Gallaudet raised \$7.9 million, bringing the 2010-2015 fundraising total to \$28.6 million. The alumni engagement rate during FY 2015 was 34 percent, which includes alumni giving, as well as involvement and service to the university.
5. Gallaudet hired a new executive director for development, further strengthening the university's focus on fundraising.
6. The university is now an approved nonprofit as part of the Combined Federal Campaign, which is a workplace giving program for federal civilian, postal and military personnel.
7. The Abraham Lincoln Legacy Society and its website are currently being reinvigorated to attract more bequests for Gallaudet, which are expected to be a pathway for more and larger endowment gifts.
8. Gallaudet completed the conversion of the third floor of the conference center to hotel use for additional hotel room revenue. Previously the floor housed mostly Gallaudet administrative offices.
9. The Board of Trustees approved a budget totaling \$173 million for FY 2016, which is slightly higher than the FY 2015 budget of \$172.6 million. The planned operating surplus is set at \$2.6 million, \$300,000 more than in FY 2015. The budget contains an assumption of a flat federal appropriation from the FY 2015 level.
10. The budget calls for a reduction in headcount from 930 to 910 during FY 2016 and \$2 million to be set aside for a general pay increase to be awarded to eligible faculty and staff at the discretion of the president. Under the budget, the pay increase is contingent upon receiving a federal appropriation in FY 2016 equal to the FY 2015 federal appropriation.
11. The Trustees further approved an increase of 3% to student tuition to take effect in fall 2016.
12. The FY 2016 budget also includes a recommendation for a review of programs and services to determine their true costs, to identify which programs are viable and in demand, and to reassess non-academic administrative programs to maximize efficiencies.
13. The University continued several other initiatives such as the establishment of an online infrastructure to facilitate the creation of online course offerings.

## Goal C: Resource Efficiency

14. Gallaudet also continued pursuing new funding for research for the Technology Access Program as well as the award of a highly competitive grant from the National Science Foundation's Integrated NSF Support Promoting Interdisciplinary Research and Education (INSPIRE) grant to VL2.
15. The Board also approved a new risk management and insurance program in the Department of Business to be offered as both a major and a minor. This program evolved with the support of an outside donor from the insurance industry and has already led to two internships this past summer, one leading to a job offer, and more than 20 students participating in the program. This program holds great promise for successful career outcomes for Gallaudet's students in this industry.
16. To support Gallaudet's long-term recruitment and retention efforts, the university expended \$10.3 million during FY 2015 on the construction of a \$17 million new Science, Technology & Math lab in Hall Memorial Building. This project is expected to be completed in 2016.
17. To bring more robust information technology support for Gallaudet's financial management processes, the university is carrying out major upgrades to the Human Capital Management and Financial Aid modules of the PeopleSoft information management system. These upgrades are expected to add numerous enhancements and will bring the software to current status. The project is expected to be completed in the third quarter of 2016.
18. A three year project to upgrade and build out a Tier 2 data center with redundancies to continue operations, in case of a power outage, was completed. A secondary data center, which did not meet minimum standards, on campus was decommissioned in preparation for a true disaster recovery posture utilizing the cloud. This allowed us to consolidate services for greater efficiency, and the capital investments including, but not limited to replacing the UPS, HVAC system, air suppression system, and generator(s). These improvements have resulted in a safer, greener, and redundant data center.

### Fiscal Year 2014

1. Standard & Poor's affirmed Gallaudet's credit rating of A+, in part based on the university's financial performance during the sequestration in the FY 2013 federal government appropriations; Moody's affirmed the rating of A2.
2. After considering four responses to the Request for Proposals, the Gallaudet University Foundation received approval from the Board of Trustees to enter into exclusive negotiations with The JBG Companies for a development agreement for the university's properties adjacent to the campus on 6th Street. The Foundation recommended The JBG Companies based on its experience in the District, as well as the incorporation of DeafSpace design elements into its proposal. The development, to occur in phases over the next 10 years, is expected to create opportunities for Gallaudet students, staff, and faculty in terms of employment, internships, training, and collaborations.
3. We recently worked toward earning a five-year \$4.75 million grant from the US Department of Education for the University's Technology Access Program. The program conducts research related to communication technologies and services, with the goal of producing knowledge useful to industry, government, and deaf and hard of hearing consumers. The goal for the grant is to provide the tools, methods, and knowledge that will bridge the gaps between the capabilities of modern technologies and the ability of consumers to take full advantage of them.
4. Gallaudet and outside contractors completed Operation Green Light, a campus-wide energy conservation project that started in FY 2013. Most of the work involved coupling low-power, instant start ballasts with occupancy sensors for the optimal balance between energy savings and the DeafSpace design guidelines, as well as exterior lighting replacements. This work is expected to simplify long term maintenance and replacement requirements.
5. With approval from the Board of Trustees, the annual payout on 67 underwater endowment accounts was suspended for one more year. This continued an action taken by the Board in FY 2012 to suspend the annual payout for individual endowment funds with a market value that was less than the historical principal value.
6. To reduce employee benefit costs, the maximum limit for the annual leave carryover hours was reduced to 240 during FY 2014.

## Goal C: Resource Efficiency

7. We carried out the Voluntary Retirement Incentive Program (VRIP), reducing regular status employee headcount by 66.
8. A recent analysis done by an independent consultant of Gallaudet's staff employees' salaries showed that they continued to be competitive in the marketplace, and the staff employees' salaries continued to be appropriately distributed.
9. Despite restoration of the sequestration cut in the federal government appropriation support to Gallaudet, operating divisions did not receive the \$1.25 million permanent budget reductions that were carried out at the division level in the preceding year. The FY 2015 budget does not provide for an automatic restoration of the reductions because of the continued uncertainties over another potential sequestration.
10. Gallaudet continued working with consultant Noel Levitz on maximizing enrollment and net tuition revenue through the strategic use of scholarships. Net tuition revenue increased from \$16.7 million in FY 2013 to \$17.6 million (unaudited) in FY 2014.
11. A new vice president of development and alumni relations was hired, bringing 15 years of experience in higher-education development that includes recognitions for notable accomplishments.
12. To support Gallaudet's long term recruitment and retention efforts, we continued to design and plan a \$16 million new science, technology, and math lab in Hall Memorial Building to be completed in 2016.
13. The Board of Trustees approved the FY 2015 operating budget of \$172.6 million with a goal of achieving an operating surplus of \$2.3 million. The budget also includes an assumption of \$2 million for salary increases to be awarded at the president's discretion.
14. The Board of Trustees approved the suspension of an automatic nine percent annual increase in the student housing rates, effective FY 2016 and FY 2017. Gallaudet administrators will recommend the rate of increase for room and board costs as part of the annual budget process. This is intended to support efforts to fill Gallaudet's residence halls.
15. As part of the FY 2015 budget development process, the Board of Trustees approved the goal of a regular status employee headcount of 930, the same as FY 2014.
16. The Board approved a four percent increase in tuition, effective FY 2015.
17. The trustees approved a reallocation of \$4 million from the President's Endowment Fund toward enrollment stabilization and research innovation initiatives. Distributions are expected to total approximately \$100,000 per year for each initiative.
18. Planning is underway for a "campus gateway" at the 6th Street and Florida Avenue corner with the potential for supporting auxiliary revenue.
19. The renovation of the first and second floors of the conference center, to accommodate larger scale conferences and events, has been completed. We are also designing and developing guest rooms on the third floor of the conference center for additional hotel room revenue.
20. We authorized the creation of a director of business development position to generate additional revenue by soliciting outside groups to use university facilities. Search is currently underway.

### Fiscal Year 2013

1. Division administrators identified permanent budget reductions of \$1.25M, and an additional estimated \$2.343 million of savings for the year were identified through this process; all reductions and savings were chosen to have the least educational impact on strategic plan implementation.
2. The Board of Trustees provided the administration with the authority to implement personnel actions as needed in the face of unknowns for FY 2014, resulting in the announcement of an FY 2014 Voluntary Retirement Incentive Program which currently has employees considering their participation options.
3. A change in the Staff Layoff policy reduced the layoff payout for regular status staff employees.
4. The program to reduce the amount of annual leave employees can carry over from year to year was accelerated, and no employees can carry over more than 240 hours of annual leave.
5. An agreement was made with the U.S. Department of Education to increase the percentage of hearing undergraduate students (HUGs) from 5% to 8%, with the



## Goal C: Resource Efficiency

increase occurring by one percentage point per year over a three-year period beginning in FY 2013. Additionally, for our on-line courses, the Department agreed to the elimination of the 5% HUGs cap for a period of five years to allow those programs to grow and to enable the university to develop a stronger framework for supporting on-line activity. Both of these actions will allow enrollment to grow, resulting in an increase in revenue.

6. Tuition and fees were raised by 8% at the start of FY 2013 and will be raised by the same amount at the start of FY 2014.
7. Room rates were increased by 9% at the start of FY 2013 and will be raised the same amount at the beginning of FY 2014. A policy was adopted requiring freshmen and sophomore students to live on campus beginning in the fall of calendar year 2014.
8. Neither salary increases nor one-time payments were provided to employees in FY 2013.
9. Selected capital improvement projects were deferred, resulting in decreased depreciation expenses.
10. Our FY 2013 budget called for the elimination of 26 positions; that reduction was achieved at the end of FY 2013. For FY 2014 we intend to further reduce the number of employees by 34.
11. Operation Green Light, part of the campus-wide energy conservation project, involving engineering teams from the Facilities Department and outside contractors, is retrofitting lighting in classrooms, offices, and conference rooms with energy efficient solutions in a project scheduled for completion in FY 2014. In addition, the installation teams are updating and replacing exterior lighting throughout the campus.
12. The manner in which capital improvement projects are initiated, approved, and followed has been revised with the establishment of a University-wide committee working on principles that: consider all facilities as controlled by the university, not by budget units; recommend controls, budgeting, and space allocations to the President for final decisions; uses the Gallaudet Strategic Plan as the basis for project approvals; makes recommendations in a transparent process; manages facilities to optimize utilization; and works at a high standard of performance. For the first time, a three-year capital budget expenditure plan has been prepared creating a better picture of capital

expenditures and allowing for better planning for all projects.

13. Hiring of student employees has been centralized in the Career Center, resulting in common, transparent student hiring practices.
14. The Office of Communications and Public Relations is now available to meet requests free of charge for creative media services for marketing-related materials, reducing the need to hire these services from outside vendors; that office is also available to negotiate printing discounts from vendors.

### Fiscal Year 2012

1. As mentioned in previous years below, Johnson Controls International (JCI) is implementing an Energy Saving Program that retrofits existing buildings by improving electrical, plumbing, and mechanical systems to reduce Gallaudet's energy usage significantly. This work includes: solar system drawings and design are now complete, and equipment order review, scheduling, and construction permits are in progress; electric and water sub-meter programming is now complete; exterior and interior lighting mock-ups are now complete, with final reviews for campus-wide installs in progress; boiler replacements are progressing well; a community energy kiosk "Green Scene Kiosk" planning is underway for the Jordan Student activity Center; and a campus-wide underground piping infrastructure system review is in progress.
2. A new program review process has been established to evaluate the viability of new academic programs proposed by faculty. This process will work to ensure that newly proposed programs are established to generate more enrollment while also ensuring that we do not bring on new programs that will take resources from strategic initiatives. This process involves our administration much earlier in the process than has been the case in the past.
3. Academic Affairs is currently in the ending stages of an extensive restructuring activity that has involved the development of a list of guiding principles for the process, the collection of information from departments and units affected by the restructuring, recommended restructuring, the identification of areas needing further attention, and the suggestion of the steps necessary to carry out the implementation. In addition, a listing of specific programs with recommendations about their assigned location



## Goal C: Resource Efficiency

within the Academic Affairs was created. Once fully implemented there should be efficiencies obtained from this restructuring.

4. The University Planning and Budget Committee (UPBC) has been established to supersede the previously functioning University Budget Committee (UBC). With new members and a new charge to actively consider planning, this group is now working to ensure resources are aligned or re-aligned to support strategic planning efforts.
5. The Living and Learning Residence Hall 6 is complete, students are living in the building, the geothermal field is at work, and documents will be submitted to the United States Green Building Council to finalize the building's anticipated LEED Silver sustainability rating.
6. The Residence Hall Interiors Project which renovated the public spaces in all five dorms has been completed.
7. An outside consultant is at work with our financial aid and admissions offices to create the most effective strategies for the allocation of financial aid.
8. Our FY 2013 budget calls for the elimination of 26 positions and the reduction of \$1.25M of expenditures. These goals are constantly be reviewed in terms of the revenue anticipated for this fiscal year.
9. We have raised tuition by 8% for the fall 2013 and room rates continued their rise, increasing by 9% for fall 2013.
10. Neither salary increases nor one-time payments were provided to employees for FY 2012.
11. A uniform External Relations policy has been created and adopted regarding a variety of actions which have previously been left to individual units to determine on their own. This single policy now regulates Governmental Relations, Media and Public Relations, International Relations, Donor and Alumni Relations, Obtaining Sponsorship of On-campus Activities, Sponsorship of External Activities, and Product and Vendor Endorsements. An individual or an office has been made responsible for each area which will result in efficiencies from the coordination of activities such as requesting financial support from outside organizations.
12. Extensive work was completed with regard to the usage and adoption of the new University logo; these established policies regarding the use of the logo, and the prohibitions on developing new single unit logos will result in efficiencies as units have begun to use templates available University-wide instead of needing to hire outside designers to create material from scratch.
13. A new banners policy has been adopted which specifies the size and source of banners acceptable for using on light posts, buildings, and so on. This should result in efficiencies as templates are used and as controls are placed on the replacement of banners.
14. An extensive web policy has been developed and is under review. Once modified as needed, and then adopted we should see efficiencies as individual units who would previously have established non-standard web pages now follow pre-established templates with the resultant efficiencies attendant to that common usage.

### Fiscal Year 2011

1. We approved contracting with an outside audit and consulting firm to conduct our internal auditing function, effectively replacing what had been an internal audit resource. This has significantly increased the audit capability available to the University. At this point a risk assessment was conducted, an internal audit plan was approved by the Board of Trustees, our Internal Audit Charter was updated to be in compliance with the Institute of Internal Audit Standards, three reports were issued, fieldwork was completed for several more audits, and planning and fieldwork commenced for additional audits.
2. As mentioned below for Fiscal Year 2010, a Benefits Task Force was at work. Their assignment has been completed and the Board of Trustees in May, 2011, approved benefits changes including: reducing the maximum amount of annual leave carry over from 480 hours to 240 hours by 2016; having employees share the cost of the University's dental plan, basic life insurance plan, and long-term disability insurance plan, effective January 1, 2012, with the shared costs at 50% of the premiums; and eliminating the University 403(b) tax deferred retirement plan in 2012 while providing for employees in this plan with the opportunity to either roll the funds to the Thrift Savings Plan (TSP) or an IRA account. All other University benefits were unchanged.
3. As mentioned below for Fiscal Year 2010, the Program Prioritization Task Force made recommendations including the elimination of programs and the realignment, reorganization, or integration of programs. In February,

## Goal C: Resource Efficiency

2011, the Board of Trustees approved all recommendations made by this Task Force.

4. Although we reported for Fiscal Year 2010 below that no salary increases would be provided to employees in Fiscal Year 2011, we note that the Board subsequently approved a one-time 2%-of-salary payment to employees in that year.
5. In May 2011 Gallaudet University entered the capital markets with its first-ever tax-exempt bond issue. The Series 2011 revenue bonds issue raised \$40 million to fund the new Living and Learning Residence Hall next to Peet Hall that is now under construction, as well as an ambitious cost-savings energy initiative and other important capital improvement projects for the campus. The trustees passed a resolution at the May 12 business meeting authorizing final approval of the transaction for these 30-year, fixed-rate bonds. The University received favorable credit ratings of A+ from Standard & Poor's and A2 from Moody's.
6. The Board of Trustees approved the opening of an interest bearing account to ensure we are receiving the maximum daily interest on deposited funds.
7. We have tightened controls over "frequent travelers" who drive at least 12 or more trips for Gallaudet on an annual basis. This will enable us to comply with insurer mandates as well as meet other standards.
8. The role of the University Budget Committee expanded to include planning and assessment.
9. We are beginning to examine the use of student financial aid to ensure that it is being allocated in the most effective manner.
10. We have begun to open the process used for the selection of University capital projects and will now include the Cabinet and University Council in discussions of proposed improvements, each providing advice to the President where final decisions will be made.
11. We are actively underway on the generation of a master plan for the University for the 10 years from 2012 to 2022; once adopted by the Board of Trustees, this will serve to ensure that project approval is conducted within a framework that has been approved for the future of the University.

### Fiscal Year 2010

1. Most significantly we laid off 39 individuals from across the University. We had learned that we completed the previous year in balance, but with an extremely small surplus of less than one-third of one percent of our total budget. We learned that our Federal allocation—the primary source of our funds—would be the same this year as it was last year. We learned from President Obama during his State of the Union address that he will seek to freeze discretionary Federal spending, a category including Gallaudet University, for the next three years. Finally, we learned from a U.S. Department of Education official that we should not anticipate Federal funding increases in coming years. We took this step to maintain the fiscal health of the University.
2. At the same time we froze 40 open positions, with hiring for critical positions requiring Presidential approval.
3. We have implemented strict controls on the number of employees, with Presidential approval required for the opening of a new position. In recent years we have made significant reductions in the number of employees; from fiscal year 2007 when we had a headcount of 1,050 employees to fiscal year 2010 when we had reduced headcount to 909, a reduction of 141 headcount or a reduction of 13 percent.
4. No salary increases were provided to employees in FY 2010.
5. No salary increases will be provided to employees in FY 2011.
6. We asked individuals to reduce voluntarily from 12-month appointments to 10- or 11-month appointments.
7. A task force, the Program Prioritization Task Force (PPTF) was initiated to review all academic programs. This significant University-wide effort produced a report which is now under review that recommended: the retention and enhancement of 19 programs; the monitoring and addressing of identified issues for 29 programs; the realignment, reorganizing, or integration of 12 programs; the closing in their current form and replacement of 2 programs; and finally the elimination of 20 programs. The next chapter of this report on Academic Programs contains additional information on this action.

## Goal C: Resource Efficiency

8. Intended as a companion process to that of the Gallaudet University Academic Program Prioritization Task Force (PPTF), the Administrative Programs and Services Review Committee (APSRC), was established to review all University non-academic programs and to recommend how to reallocate administrative resources in a manner that best addresses Gallaudet University's strategic priorities. Their report was recently submitted and will soon be under University-wide review before any of its recommendations are adopted.
9. A Benefits Task Force was established because the University, along with so many other employers, has faced continued escalation in the employer portion of benefits in recent years, resulting in the need for a thorough, thoughtful, and considered review of the benefits the University provides. With this in mind, this task force was charged with comparing Gallaudet's benefits with local and national universities, with reviewing best practices and trends, and with proposing cost-cutting options to cover an anticipated deficit in the benefits budget. At this point, no decisions have been made and the University will be collecting community feedback before final recommendations are produced by the task force.
10. A new University Budget Director position was created and filled. Among other responsibilities, this individual directs the development of the University's annual budget request to the Department of Education and Congress, provides budget material for government agencies, directs long-range planning strategies for future budget development activities, works collaboratively with the Finance Office to ensure stringent fiscal controls are in place, and leads the important University Budget Committee.
11. A major utility efficiency study was completed and the Board of Trustees has approved the investment now of significant resources that will significantly reduce utility expenditures via a high-payoff in future years.
12. Individuals were encouraged to use their annual leave thereby reducing the amount of 'banked' annual leave they accumulate and the cost to the University to set aside funds to cover potential future payouts for banked leave. We asked the community to reduce leave carry-over by taking as much leave this year as possible. This was a successful campaign that saved significant funds this year.
13. A new telecommunications device policy was implemented.
14. A bulk-purchase plan was implemented for the purchase of computer equipment.
15. Controls were placed on international travel, and the President must now approve all such travel.
16. The Board of Trustees approved increases in room fees to help fund the building of a new student housing facility which is expected to open in the fall of 2012.
17. The Board of Trustees approved a 7 percent increase in tuition fees. While the University has achieved several significant cost-saving measures recently, they are offset by several factors, including a federal appropriation that has remained flat over the past two years, with projections indicating that it will remain the same in the current fiscal year as well.
18. A new Vice President of Development and Alumni Relations was hired and changes implemented to increase fundraising. We are meeting with foundations and corporations and others regarding future funding; thus we are significantly expanding our development fundraising efforts.
19. A number of individuals worked aggressively and successfully to take steps that resulted in the renewal of our VL2 grant. Complete information on research grants is contained in the chapter on Research and Outreach.

## Goal C: Resource Efficiency

### II. Employee Demographics

The first five tables of this section provide the number of employees by various categories, with the first table providing a total of all employees, and then four tables each with a differ-

ent category of employee. Additional tables provide historical summaries of employees by category.

**Total All Types Employees as of October 1, 2015**

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	TOTAL Each Category
Administrators	48	74	58	64	92	30	122
Faculty	69	106	92	83	128	47	175
Clerc Center Teachers	19	32	45	6	39	12	51
Professional Staff Academic/ Student Support	58	117	124	51	110	65	175
Professional Staff Administrators/ Institutional Support	58	112	78	92	111	59	170
Secretary/Clerical	2	31	5	28	8	25	33
Technical	30	28	44	14	30	28	58
Service	79	38	37	80	45	72	117
Maintenance	14	20	2	32	2	32	34
<b>TOTAL</b>	<b>377</b>	<b>558</b>	<b>485</b>	<b>450</b>	<b>565</b>	<b>370</b>	<b>935</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

*Student Zoe Marie Rodriguez does some gardening at Gallaudet's student garden, cared for by the Green Grow Organization. Nested between the Ballard North and West dormitories, the Green Grow garden produces vegetables that are later sold during seasonal, bi-weekly farmer's markets held on campus.*

Photo by Zhee Chatmon



## Goal C: Resource Efficiency

### Regular Status Employees as of October 1, 2015

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	TOTAL Each Category
Administrators	46	70	55	61	86	30	116
Faculty	69	106	92	83	128	47	175
Clerc Center Teachers	19	31	44	6	38	12	50
Professional Staff Academic/ Student Support	56	107	115	48	102	61	163
Professional Staff Administrators/ Institutional Support	54	103	73	84	100	57	157
Secretary/Clerical	2	27	5	24	7	22	29
Technical	29	26	42	13	28	27	55
Service	76	33	29	80	41	68	109
Maintenance	14	20	2	32	2	32	34
<b>TOTAL</b>	<b>365</b>	<b>523</b>	<b>457</b>	<b>431</b>	<b>532</b>	<b>356</b>	<b>888</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

### Extended Temporary Employees as of October 1, 2015

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	TOTAL Each Category
Administrators							
Faculty							
Clerc Center Teachers		1	1		1		1
Professional Staff Academic/ Student Support	1	1	2		2		2
Professional Staff Administrators/ Institutional Support	2	1	3		2	1	3
Secretary/Clerical		1		1	1		1
Technical							
Service							
Maintenance							
<b>TOTAL</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>1</b>	<b>6</b>	<b>1</b>	<b>7</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

## Goal C: Resource Efficiency

### Grant Funded Employees as of October 1, 2015

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	TOTAL Each Category
Administrators	1	1	1	1	2		2
Faculty							
Clerc Center Teachers							
Professional Staff Academic/ Student Support		2		2	2		2
Professional Staff Administrators/ Institutional Support	1	4	2	3	5		5
Secretary/Clerical							
Technical	1	1	2		1	1	2
Service							
Maintenance							
<b>TOTAL</b>	<b>3</b>	<b>8</b>	<b>5</b>	<b>6</b>	<b>10</b>	<b>1</b>	<b>11</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

### Auxiliary Funded Employees as of October 1, 2015

	Male	Female	Deaf/Hard of Hearing	Hearing	White	TUG <sup>1</sup>	Total Each Category
Administrators	1	3	2	2	4		4
Faculty							
Clerc Center Teachers							
Professional Staff Academic/ Student Support	1	7	7	1	4	4	8
Professional Staff Administrators/ Institutional Support	1	4		5	4	1	5
Secretary/Clerical		3		3		3	3
Technical	1	2	2	1	2	1	3
Service	3	5	8		4	4	8
Maintenance							
<b>TOTAL</b>	<b>7</b>	<b>24</b>	<b>19</b>	<b>12</b>	<b>18</b>	<b>13</b>	<b>31</b>

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

## Goal C: Resource Efficiency

### Deaf and Hard of Hearing Individuals in the Workforce in Percents

Fiscal Year	Administrators %	Faculty %	Teachers %	Professional Staff %	Support Staff %	All %
1996	30	35	43	41	24	33
1997	35	35	47	44	25	35
1998	37	36	46	41	25	35
1999	40	38	53	44	25	37
2000	40	37	53	49	25	38
2001	37	39	54	46	32	40
2002	38	39	54	46	32	40
2003	36	38	56	48	33	40
2004	34	40	59	51	31	41
2005	40	41	60	50	32	42
2006	41	40	56	50	32	42
2007	37	42	64	52	34	43
2008	36	46	66	55	34	45
2009	38	45	68	53	35	45
2010	41	48	76	56	34	47
2011	45	48	72	58	35	48
2012	47	49	79	60	36	50
2013	49	49	80	59	37	51
2014	50	52	86	60	37	52
2015	48	53	88	59	37	52

Note: All sources of funding, regular status and extended temporary status. As of the end of the fiscal year.



## Goal C: Resource Efficiency

### Members of Traditionally Underrepresented Groups in the Workforce in Percents

Fiscal Year	Administrators %	Faculty %	Teachers %	Professional Staff %	Support Staff %	All %
1996	9	9	22	26	61	34
1997	14	10	23	27	60	34
1998	15	10	23	27	61	34
1999	16	11	19	26	61	33
2000	17	11	24	27	62	34
2001	21	14	15	30	62	37
2002	26	14	22	28	61	36
2003	26	14	27	28	61	37
2004	29	16	23	28	63	37
2005	23	17	17	29	67	38
2006	24	18	18	29	67	38
2007	31	18	23	27	67	39
2008	22	19	21	32	67	40
2009	25	20	23	33	67	40
2010	21	21	30	35	67	40
2011	24	22	28	35	67	40
2012	24	22	25	36	65	40
2013	26	24	27	36	68	41
2014	24	24	26	37	67	40
2015	25	27	24	36	65	40

Note: All sources of funding, regular status and extended temporary status. As of the end of the fiscal year.

## Goal C: Resource Efficiency

### FY 2015 Staff Hire Demographics by Grade for Regular Status Employees

Grade and Number of Positions		Applicants					Hired					
Grade	#	#	Race		Hearing Status		Race		Sex		Hearing Status	
			White/Unknown	TUG <sup>1</sup>	Hearing	Deaf/Hard of Hearing	White/Unknown	TUG <sup>1</sup>	Male	Female	Hearing	Deaf/Hard of Hearing
Union	4	95	25	70	75	20	0	4	3	1	4	0
1												
2												
3	5	83	45	38	60	23	0	5	2	3	4	1
4	3	26	15	11	23	3	1	2	3	0	2	1
5	4	67	44	23	8	59	4	0	2	2	1	3
6	8	92	64	28	37	55	6	2	4	4	3	5
7	11	101	75	26	83	18	7	4	5	6	8	3
8	5	58	42	16	38	20	4	1	3	2	3	2
9	7	53	41	12	23	30	5	2	5	2	2	5
10	4	41	35	6	18	23	4	0	4	0	1	3
11 - 14 <sup>2</sup>	6	57	46	11	31	26	5	1	4	2	4	2
<b>SUBTOTAL</b>	<b>57</b>	<b>673</b>	<b>432</b>	<b>241</b>	<b>396</b>	<b>277</b>	<b>36</b>	<b>21</b>	<b>35</b>	<b>22</b>	<b>32</b>	<b>25</b>
Open positions	21	Final data are not available because these positions were opened or on hold at the end of the year.										
Canceled positions	11	Hiring data are not available as these positions were cancelled during the year.										
Temporary positions	0											
<b>TOTAL POSITIONS</b>	<b>89</b>											

<sup>1</sup>Traditionally Underrepresented Group includes: Black or African American, Asian, Hispanic, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and two or more races.

<sup>2</sup>Data are combined for four grades because of small numbers of positions.

## Goal C: Resource Efficiency

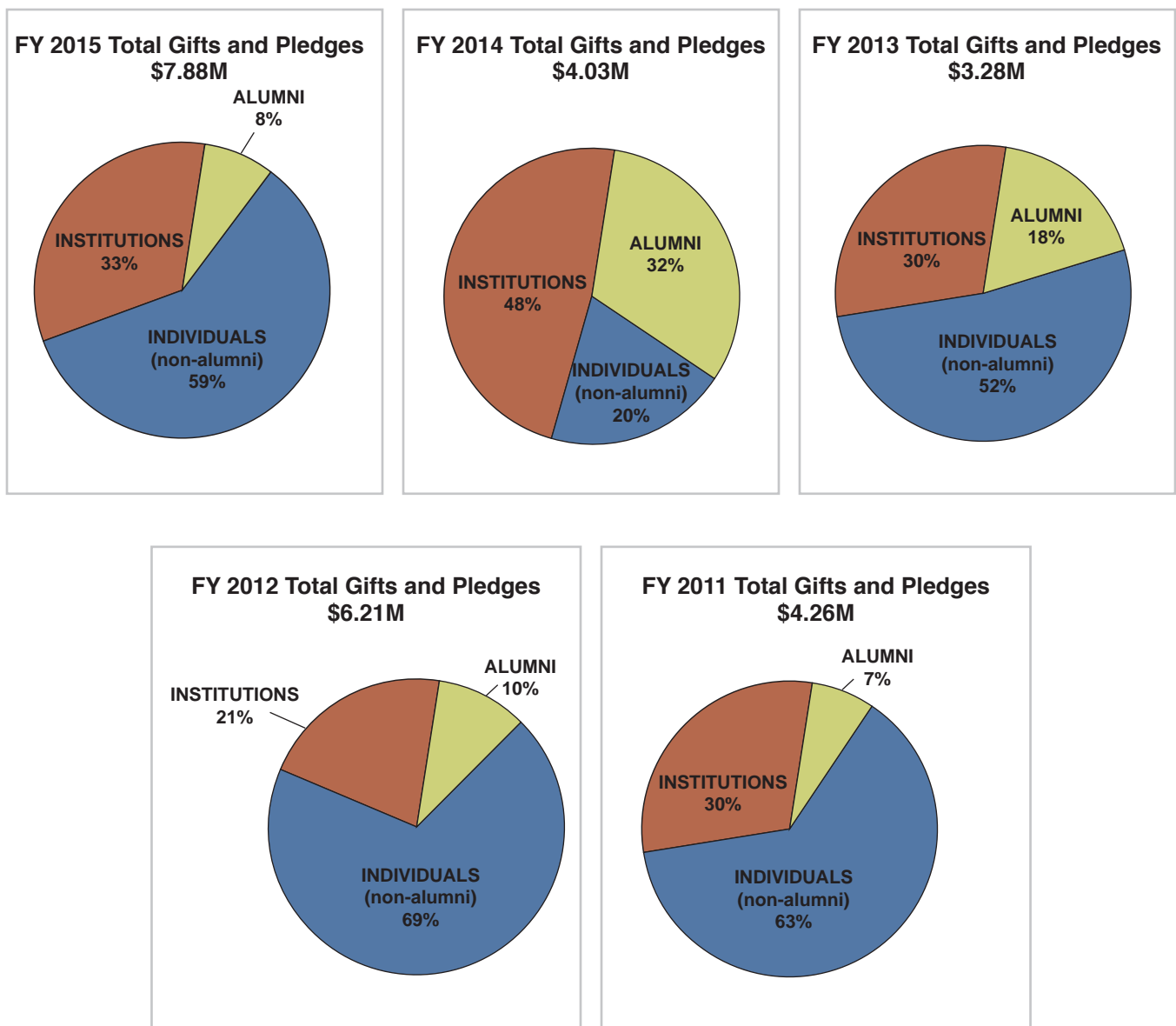
### III. Development and Alumni Relations

The mission of Development and Alumni Relations is to engage alumni, families and friends, foundations, and corporate partners in the life of the university. We work to ensure an active and committed alumni community, and to encourage financial investment in Gallaudet programs and scholarships from all constituents.

During fiscal year 2015, the Office of Development and Alumni Relations exceeded the previous year's fundraising.

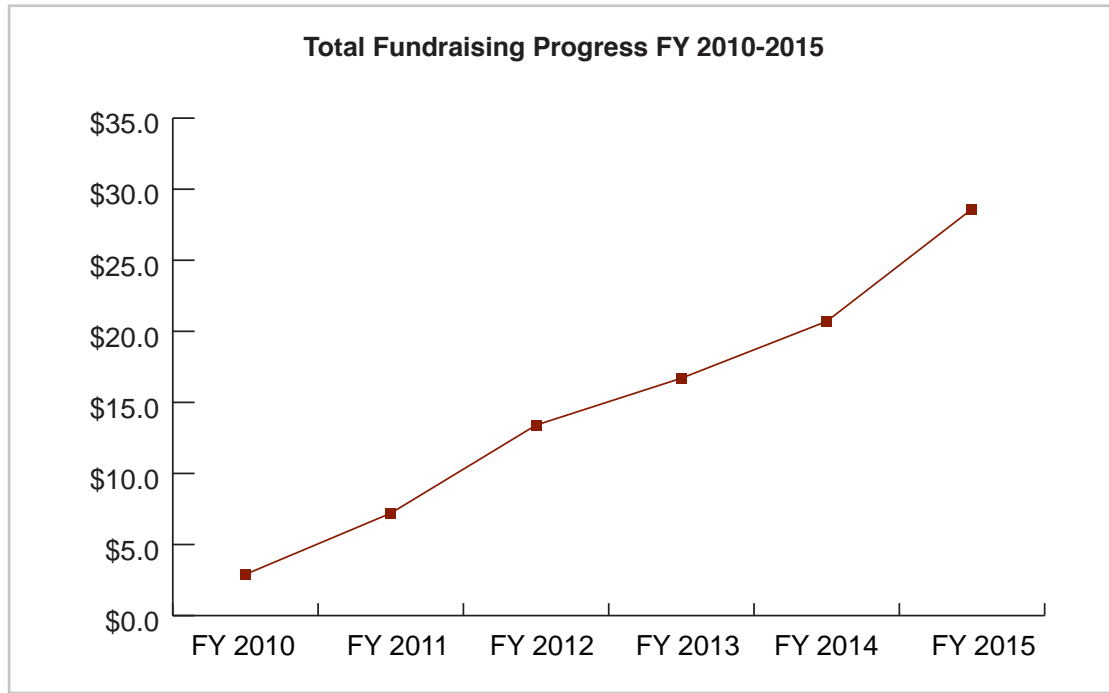
The university has renamed the Alumni Participation Rate to Alumni Engagement Rate, which measures involvement with university activities, giving, and volunteer service. For FY 2015, the Alumni Engagement Rate is 34 percent.

The charts below provide a five-year look at major constituencies giving to Gallaudet:



## Goal C: Resource Efficiency

Below is a graph depicting cumulative fundraising during the presidency of Dr. T. Alan Hurwitz:



### Major Gifts to the University by Individuals in FY 2015—\$10,000 or more

Mr. Paul and Dr. Mary Jan Bancroft  
Dr. Stephen Burstein, M.D.  
Mr. Michael Frank Conte  
Mr. Ruben and Mrs. Barbara Cortina  
Dr. Samuel K. Weisman and Dr. Nancy J. Crown  
Dr. T. Alan and Mrs. Vicki T. Hurwitz  
Mr. James J. and Mrs. Frances M. Maguire  
Ms. Trudy Miller  
Mr. Ronald Mortzfeldt  
Ms. Jacqueline A. Muller

Dr. Jane Norman  
Mr. S. Bruce and Mrs. Amy Pascal  
Ms. Helena Schmitt  
Dr. John S. and Dr. Betty J. Schuchman  
Mr. Joel M. Silberstein  
Dr. Ronald E. and Mrs. Agnes M. Sutcliffe  
Mrs. C. Ann Tennis  
Ms. Patricia A. Underbrink  
Mr. J. Sterling and Mrs. Lucie M. White  
Mrs. Joan Williams  
Anonymous (3)

## Goal C: Resource Efficiency

### Major Gifts to the University by Corporations, Foundations, Organizations in FY 2015—\$10,000 or more

AT&T	The Maguire Foundation
The Hilda E. Bretzlaff Foundation	The Charlotte W. Newcombe Foundation
The Morris and Gwendolyn Cafritz Foundation	Raytheon Company (MG)
GUAA-National	Schwab Charitable Fund
The Theodore R. & Vivian M. Johnson Scholarship Foundation	Side by Side Foundation Custody
Kantor Foundation	Sorenson Communications, Inc.
W. M. Keck Foundation	The Spencer Foundation
	Hattie M. Strong Foundation

### Major Bequests to the University in FY 2015—\$10,000 or more

Estate of Jo Anne Gunter	Estate of Clara F. Mertens
Estate of Beatrice C. Heimerdinger	Estate of Frances M. Parsons
Estate of Robert N. Lowry	Estate of Marguerite Smyt

### Members of the Abraham Lincoln Heritage Society in FY 2015 (Planned gifts)

Ms. Beverly Barker	Dr. Jack R. and Mrs. Rosalyn L. Gannon
Ms. Elizabeth A. Barron	Mr. Nicholas T. Gould
Mrs. Doris W. Blanchard	Ms. Bennie Hart
Mr. Dominick V. and Mrs. Helene K. Bonura	Dr. Rachel M. Hartig
Dr. Bernard N. Bragg	Ms. Shirley D. Hicks
Mr. Les E. Bruening	Mr. Henning Irgens
Dr. Gerald Burstein	Ms. Allie M. Joiner and Ms. Estie L. Provow
Mrs. Nancy A. Calderone	Mrs. Elizabeth Justice
Dr. Simon J. Carmel	Mr. Thomas P. and Mrs. Susan Kearney
Mr. Morris S. Cohen	Mrs. Rose Kempf
Mrs. Jean Cordano**	Mr. Robert G. and Mrs. Sally F. Kerr
Mr. Albert J. Couthen and Ms. Coletta A. Fidler	Dr. Cynthia M. King
Ms. Jo Ann Duplechin	Ms. Shirley J. Lane
Mr. Richard A. Dysart**	Mrs. Betty L. Lawson
Mrs. Kathryn J. Dysart	Ms. Evelyn Lawyer
	Mr. Joel M. and Mrs. Harriet D. Marcus

## Goal C: Resource Efficiency

### Members of the Abraham Lincoln Heritage Society in FY 2015 (Planned gifts) continued

Mr. John P. and Mrs. Paula B. Mathews  
 Mr. Joseph W. and Mrs. Sally A. Maxwell  
 Ms. Vira O. Milbank  
 Mr. Elwood L. and Mrs. Peggy A. Miles  
 Ms. Trudy Miller  
 Mr. James N. Neeley  
 Mr. Tony E. Nelson  
 Dr. Jane Norman  
 Dr. Gina A. Oliva  
 Mr. James N. and Mrs. Kathryn J. Potter  
 Mrs. Marthada Reed  
 Ms. Edith Rikuris  
 Mr. Clifford R. and Mrs. Nancy C. Rowley  
 Prof. Raphael J. and Mrs. Thanh Thanh T.  
 Saint-Johns  
 Ms. Sylvia Saloshin  
 Ms. Florence Sandler  
 Dr. John S. and Dr. Betty J. Schuchman

Ms. Elvi Siitonen  
 Mr. Joel M. Silberstein  
 Mr. Jan and Mrs. Margott L. Skrobisz  
 Mrs. Norma D. Smith\*\*  
 Dr. Ronald E. and Mrs. Agnes M. Sutcliffe  
 Mrs. C. Ann Tennis  
 Mr. Steven L. Titlebaum  
 Mr. Harry A. Tremaine, Jr.  
 Dr. Norman L. Tully  
 Mr. Gary L. Viall  
 Mrs. Robin B. Viall  
 Mr. John A. Walla  
 Mr. A. Peter Walsh  
 Ms. Elizabeth Weyerhaeuser  
 Dr. Roberto E. Wirth  
 Anonymous (4)

\*\* = donor deceased during 2015

As Gallaudet enters its 151<sup>st</sup> year since its federal charter was signed by President Abraham Lincoln, the university is advancing its efforts toward research, innovation and collaboration. Recent achievements include:

- A three-year, \$900,000 grant by the W. M. Keck Foundation to fund a multi-disciplinary research team led by Cognitive Neuroscientist and Developmental Cognitive Neuroscientist Dr. Laura-Ann Petitto, who is based at Gallaudet, to study and develop methods for enhancing early language acquisition in infants.
- A two-year, \$250,000 grant from the Morris and Gwendolyn Cafritz Foundation for the development of ASL Connect, a new distance learning initiative to provide ASL instruction online.
- A three-year, \$500,000 gift from The Maguire Foundation to The Maguire Academy of Risk Management and Insurance to establish an undergraduate concentration in

risk management and insurance, and provide internship opportunities in the field.

- The University is fast-tracking an entrepreneurship concentration to build an interdepartmental academic program with funding from donors.
- A new planned giving website was launched at [plannedgiving.gallaudet.edu](http://plannedgiving.gallaudet.edu) to provide information and market estate planning and lifetime gifts that benefit the University.

Gallaudet University continues to develop and innovate its academic programming, and foster more opportunities for job training and placement through our internship programs, for the professional development and success of our students.

### IV. The Gallaudet University 2022 Campus Plan

The Gallaudet University 2022 Campus Plan is a ten-year campus development plan required by the District of Columbia Zoning Commission. The Campus Plan provides guidance for the development of capital projects to support the mission and goals of the Gallaudet Strategic Plan 2010-2015 (GSP) while ensuring the best use of the university's physical assets and fiscal resources.

The Campus Plan sets a bold vision for the campus that builds upon the goals of the 2002-2012 Facilities Master Plan and responds to changes in higher education, the university's strategic goals, and the surrounding community. Given the dynamic nature of academia in the 21st century and the university's physical surroundings, the Campus Plan is intended as an aspirational guide and a vision for future development. It is also intended to serve as a foundation for the university's capital budget planning process.

Led by a steering committee consisting of representatives from a cross-section of Gallaudet students, faculty and staff, the Campus Plan is the culmination of input from the campus community and beyond. Over 18 months, students, faculty, and staff participated in a series of campus workshops focusing on the facility needs related to academics and research, sustainability and accessibility, campus life, and DeafSpace design concepts. The Urban Land Institute led a week-long workshop to assist Gallaudet planning staff in developing strategies for building stronger physical and programmatic connections with the surrounding community. Broadly stated, these workshops yielded a commitment to the following planning principles:

- Accommodate enrollment growth and support Gallaudet Strategic Plan goals.
- Increase and enhance on-campus housing.
- Revitalize the heart of the campus and increase density.
- Integrate physical accessibility and sustainability.
- Build new connections with the local community.

The Campus Plan will accommodate a range of enrollment growth over the next ten years, from a conservative 1.0 percent annual growth rate that is in-line with projected national trends to a more aggressive 3.0 percent that represents an aspirational goal consistent with the GSP. The recommendations in this Campus Plan are based on a maximum projected enrollment of 2,327 for the combined enrollment at the university and the Clerc Center.

The Campus Plan lays out an ambitious series of projects that aim to transform the current campus and includes several major new building projects. A state-of-the-art Learning Commons located on the current Edward Miner Gallaudet Memorial Building site will replace the Merrill Learning Center. A new mixed-use housing development along 6th Street will open the campus to the city via a new pedestrian entrance at the corner of Florida Avenue and 6th Street while acting as a catalyst for new development in the 6th Street/Capital City Market Area. A newly renovated Hall Memorial Building will become the new student center at the heart of the campus and a new academic building will create a premiere facility for student learning and research. In addition, the Model Secondary School for the Deaf at the Clerc Center will be transformed with a new residence housing and an academic complex.

This new construction will enhance the Gallaudet experience with state-of-the-art buildings and grounds in which to teach, learn, study, live, and socialize. The Campus Plan will realize stronger connections within the campus and with the neighborhood and city beyond with new buildings and campus spaces designed in accordance with DeafSpace principles and to preserve and enhance the architectural and landscape legacy. By fostering new physical and programmatic connections and supporting creative new avenues in deaf education and research the 2022 Campus will lead Gallaudet into a new era "from isolation to innovation."

See the next page for a map of the 2022 Campus Plan.



## Goal C: Resource Efficiency



101 Chapel Hall	231 Student Union Building	538 University Dining Hall	795 Sixth Street Parking Garage
102 College Hall	232 Student Academic Center	569 Central Receiving	A New Student Learning Commons
103 Dawes House	243 Central Utilities Building	581 MSSD House 100/200	B New Academic Building
104 Kendall Hall	248 Field House	582 MSSD House 300/400	C New 6th Street Mixed-Use Apartments
105 Fowler Hall	265 Sorenson Language & Communication Ctr.	589 MSSD Gym. & Pool Building	D New Innovation Lab/Business Incubator
106 Gate House	290 Penn Street	641 Kendall Demonstration Elementary School	E New Visitors Center
107 EMG Residence	317 Peet Hall	771 Security Kiosk	F New Recreational Gym
108 Ballard House	318 Living Learning Residence Hall	772 Grandstand	G New MSSD Residence Hall
109 Fay House	327 Ballard Hall – West	791 Field House Parking Garage	H New MSSD School
110 Denison House	328 Ballard Hall – North	792 Hanson Plaza Parking Garage	
115 Peikoff Alumni House	335 Clerc Hall	793 KDES Parking Garage	
214 Kellogg Conference Center	336 Benson Hall	794 MSSD Parking Garage	
219 Hall Memorial Building	345 Carlin Hall		
223 Elstad Auditorium	537 Health Center		
229 Washburn Fine Arts Building			

### V. Communication Access—Gallaudet Interpreting Service

Gallaudet Interpreting Service (GIS) is a campus resource offering:

- Communication access services to students, faculty, and staff for the purpose of excellence in education including:
  - Interpreting services used by students, faculty, staff, and visitors for academic and employment-related activities at Gallaudet, the Clerc Center, and the Consortium of Universities
  - Captioning services for the campus community
- Comprehensive after-hours emergency response program for on-campus emergencies
- Captioning services program, which focuses on increasing quality and options of captioning services available to students while also reducing expenses to the University for such services
- Deaf-Blind Paraprofessionals Program, which increases inclusion of both deaf-blind students and students seeking to explore working with deaf-blind persons
- “Results! Mentoring Program,” which provides mentoring, training, consultation and supervision to practicum and intern interpreting students and freelance interpreters
- External revenue streams
- Workshops on a variety of topics

GIS employs approximately 30 staff interpreters and 75 additional part-time, contract interpreters. GIS interpreters are nationally certified and bring at least five years of professional interpreting experience. While the majority of GIS services are American Sign Language (ASL)-English and deaf-blind interpreting services for academic endeavors, all of the following services can be requested through GIS:

- ASL-to-English, and English-to-ASL interpreting
- Deaf-blind interpreting
- Captioning, on-site and remote Communication Access Realtime Translation (CART) and TypeWell
- Transcription services, i.e., an ASL video translated to

written English

- Legal and law enforcement interpreting
- Medical/mental health interpreting
- Consultation/workshops
- Video Remote Interpreting
- International interpreting

While GIS is a service unit that supports communication needs in educational, employment and administrative functions, GIS also has an integral role as a collaborating department to the Department of Interpretation. The shared goals of these two departments include career preparedness for many Gallaudet students and advancement in the field of signed language interpreting. Currently, these interpreting academic and service departments are collaborating on the Deaf-Blind Paraprofessionals Program, which is increasing services available to deaf-blind students in non-academic campus life activities, while providing greater career exploration opportunities for Gallaudet under-graduate and graduate students who serve as paraprofessionals. Student employees in this program are required to take a special topics course in working with deaf-blind persons, as well as participating in additional training, supervision, and mentoring sessions.

GIS administers the “Results! Mentoring Program,” which provides structured support to students with emerging interpreting skills, and to professional working interpreters, who desire skills refinement or skills specialization. All staff interpreters have received training in mentoring. As a result they better meet collaborative needs of the University by providing continued professional development and internship supervision opportunities for students from the Department of Interpretation and professional interpreters from the greater community.

GIS provides emergency communication support to faculty, staff, and students both at Gallaudet University and at the Clerc Center (Model Secondary School for the Deaf and Kendall Demonstration Elementary School campuses). GIS works closely with the Department of Public Safety (DPS), Residential Life staff, and external emergency support personnel in assessing, determining, and providing communication support. This model program is staffed with interpreters who are nationally certified; many hold additional specialty certifications

## Goal C: Resource Efficiency

for interpreting in legal situations. Additionally, interpreters have specialized training in interpreting for law enforcement, medical, and other emergency situations.

The tables and graphs below provide the number of hours

of direct student services, including interpreting for all direct services, such as classroom, internships, externships, student teaching, and consortium courses, as well as for other services provided for students. For the Clerc Center, this includes the Parent-Infant Program and Emerging Signers program.

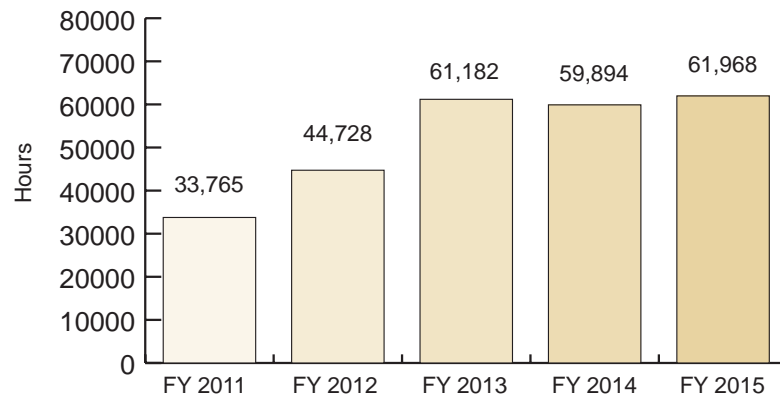
**Courses Supported by Semester by Service**

	Academic Year 2011-12			Academic Year 2012-13			Academic Year 2013-14			Academic Year 2014-15		
	Fall 2011	Spring 2012	Total	Fall 2012	Spring 2013	Total	Fall 2013	Spring 2014	Total	Fall 2014	Spring 2015	Total
Captioning	20	32	52	47	39	86	52	46	98	34	43	77
ASL-English	47	56	103	78	88	166	89	73	162	102	86	188
Deaf-Blind	90	96	186	85	91	176	83	75	158	75	93	168
<b>TOTAL</b>	<b>157</b>	<b>184</b>	<b>341</b>	<b>210</b>	<b>218</b>	<b>428</b>	<b>224</b>	<b>194</b>	<b>418</b>	<b>211</b>	<b>222</b>	<b>433</b>

**Direct Student Services Hours Provided by by Area**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
President	47	13	39	28	7
Administration and Finance	19	134	32	274	
Academic Affairs	27,596	38,522	52,951	50,496	54,536
Clerc Center	6,103	6,059	8,160	9,096	7,425
<b>TOTAL</b>	<b>33,765</b>	<b>44,728</b>	<b>61,182</b>	<b>59,894</b>	<b>61,968</b>

**Direct Student Services (hours) Provided by Fiscal Year**

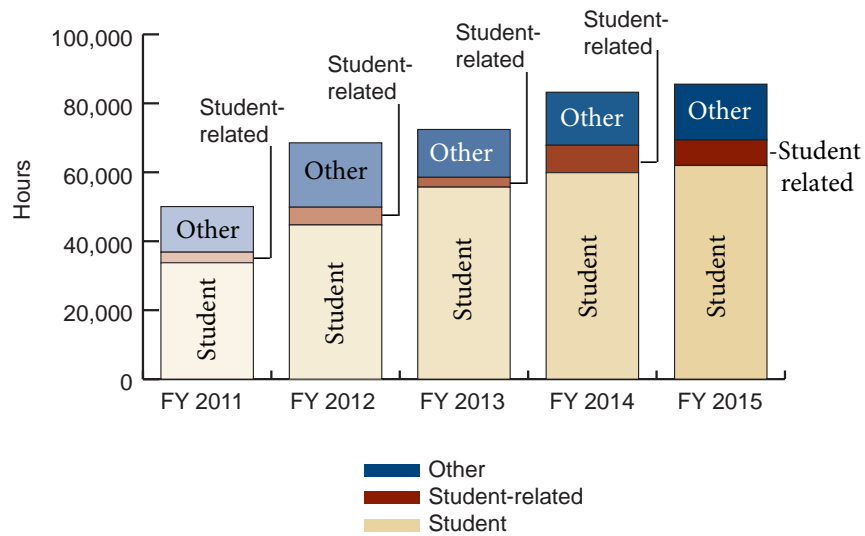


## Goal C: Resource Efficiency

**Hours of Direct Total Services Provided University-wide by Type**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Student	33,765	44,728	61,182	59,894	61,968
Student Related	3,067	5,141	2,845	7,962	7,417
Other	13,223	18,680	13,885	15,373	16,169
<b>TOTAL</b>	<b>50,055</b>	<b>68,549</b>	<b>77,912</b>	<b>83,229</b>	<b>85,554</b>

**Hours of Direct Total Services Provided University-wide by Type**



**Percent of Student Services (Direct and Related) Provided University-wide**

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Percent of student services	74%	73%	82%	82%	81%



*In their EDU 707: The Structures and Application of American Sign Language and English in the Classroom course, Danielle Berrigan and Ann Whited give a presentation about the teaching of fingerspelling. This course is one of the requirements for the Master of Arts in Education: Teacher Preparation Program.*

Photo by Zhee Chatmon

## **Strategic Plan Goal D: Academic Programs**

This chapter includes data on academic programs at the University level, with separate data contained in the Clerc Center chapter for their students. Included are: a summary of the academic programs; an assessment of the institutional student learning outcomes; a summary of the center of bilingual teaching and learning; enrollment trend data for graduate students by degree program and discipline and for undergraduate students by majors and minors; enrollment trend data for hearing students by majors and minors; and the results of a recent survey of alumni which includes employment data by occupational group for those surveyed. The contents of this chapter reflect the major accomplishments performed during FY 2015 in support of Goal D of the Gallaudet Strategic Plan.





## Goal D: Academic Programs

### I. Academic Programs

During FY 2015, the Division of Academic Affairs implemented several new initiatives.

1. Within the College of Arts and Sciences (CAS), the Department of American Sign Language and Deaf Studies is creating “ASL Connect,” a one-stop location for a variety of programs and services that support the acquisition of American Sign Language featuring innovative, interactive ways to learn American Sign Language in an online environment. These services include free ASL content, ASL and deaf studies online classes, ASL placement testing, and tutoring. ASL Connect will promote a greater understanding of and respect for American Sign Language and deaf communities as vital aspects of our nation’s linguistic and cultural diversity.
2. The Department of Science, Technology, and Mathematics (STM) is developing a new degree program (major and minor) in public health. Three concentrations that reflect current trends and rapid growth in employment opportunities in public health are: global health, behavioral and community health, and environmental health. The curriculum will support an increased awareness and understanding of public health principles, including the core scientific concepts underlying disease prevention, environmental protection, and health promotion. Students will be prepared for employment in high-demand, fast-growing private and public sector occupations in public, community and allied health, global health, medicine, health education, epidemiology, biostatistics or environmental health. A cooperative agreement with the University of Maryland, School of Public Health, which will enable qualified Gallaudet graduates with a degree in public health to enroll in the M.P.H. or Ph.D. in public health graduate programs at that institution, is also forthcoming. Renovation of the STM academic and research science labs supporting this curricular initiative, and current STM majors in biology and chemistry will be completed during the current academic year.
3. Within the School of Education, Business, and Human Services (SEBHS), the Department of Counseling revised the M.A. in Mental Health Counseling program, renaming the program M.A. in Clinical Mental Health Counseling, revising the curriculum extensively and converting the mode of delivery to a hybrid structure. The revision keeps the program current with accreditation standards and knowledge in the field, and is more consistent with best practices in counselor education. The hybrid format, in which the first year is in residence at Gallaudet and the second year is a fieldwork placement with continued coursework online, makes it possible for the students to experience a longer internship, which strengthens their professional identity and preparation.
4. The Department of Interpretation finalized articulation agreements with Austin Community College and Front Range Community College. This brings to three the number of articulation agreements between Gallaudet University and selected community colleges across the country designed to create pathways for students in the community colleges to transfer to the B.A. in Interpretation program at Gallaudet University. The first articulation agreement, between Gallaudet University and Central Piedmont Community College, was signed on December 5, 2014. The department continues to actively explore and develop additional partnership opportunities.
5. The Department of Business established a new major and minor in risk management and insurance to prepare students for careers in the financial services industry. The new risk management and insurance programs significantly broaden the Department of Business academic offerings, increase private sector career opportunities for students, and prepare them for new job opportunities in insurance companies, banks, and securities firms, for example, with higher earning potential.



## Goal D: Academic Programs

6. Distance Education: Following a search for an online education vendor that involved developing a request for proposals and meeting with several potential bidders, Gallaudet entered a year-long partnership with Blackboard, Inc., on April 1, 2015, in order to support and expand our distance education offerings. As part of this agreement, Blackboard, Inc., is providing Gallaudet with several services: strategic planning for the expansion of our distance education programs, including an institutional readiness assessment; project management for ASL Connect; and course development services for 16 online/hybrid courses. Blackboard visited Gallaudet multiple times through the summer of 2015 to gather information on our infrastructure for distance education. In addition, they conducted marketing analyses to identify programs with significant potential for growth if delivered in an on-line or hybrid format. The ultimate goal of this initiative is to pilot the online delivery of a small number of existing programs and determine the feasibility of expanding distance education programs for boosting enrollment and raising revenue for the university.

### Faculty

The university began the 2015-2016 academic year with 182 full-time, regular faculty members. Seven faculty members retired in 2014-15 and 10 new full-time, regular faculty members joined the following departments: ASL and Deaf Studies; Counseling Department; Department of Interpretation; Government and Public Affairs; Physical Education and Recreation; and Science, Technology, and Mathematics. The Office of the Provost has welcomed two new faculty fellows to the office, providing opportunities for three faculty fellows at the division level. In addition, faculty fellows are gaining administrative and leadership experience in undergraduate admissions and outreach, Gallaudet Technology Services, the Office of Academic Quality, the Center for Deaf Documentary Studies, the Center for Bilingual Teaching and Learning, and the Center for Deaf Documentary Studies.

Faculty governance, the administration, and the Board of Trustees continued to explore ways to optimize their commitment to shared governance of the university. To that end, the Board of Trustees created an ad hoc committee entitled the Faculty Administration and Board (FAB) Shared Governance Ad Hoc Committee. The committee includes two administrators, two faculty, and two trustees, as well as three ex-officio members, one from each constituency. The committee met in October 2014 to discuss the charge, membership, and operational details and in February 2015, the FAB held its first dialogues among trustees, administrators and faculty.



*Students at Gallaudet can expect a classroom environment that is encouraging, supportive, and collaborative.*

Photo by Zhee Chatmon

### II. Institutional Student Learning Outcomes: The General Studies Program and Assessment of all Outcomes

The General Studies Program of General Studies Requirements (GSR) courses was established in 2007 as a response to calls for reform of the General Education curricular design at Gallaudet. The mission statement of the GSR curriculum states that the program is designed to “provide a rigorous academic program that prepares students for successful learning in a complex world where traditional academic disciplines are interrelating, merging, and overlapping.” The program provides students with a high-quality sequence of coursework intended to prepare them for their chosen majors, for life-long learning, and for challenging careers. The General Studies program begins with Freshman Foundations (GSR 100-level courses), continues with Integrated Courses (interdisciplinary GSR 200-level courses) and concludes with a Capstone Course (GSR 300).

Gallaudet University has five Student Learning Outcomes (SLOs) that were established for all undergraduate students and that represent the knowledge, skills, and attitudes that students should acquire to successfully complete the requirements of the General Studies program, the undergraduate majors, and the baccalaureate degree. The five SLOs are:

Language and Communication  
Identity and Culture  
Critical Thinking  
Knowledge and Inquiry  
Ethics and Social Responsibility

Gallaudet and the General Studies program have adopted the Value Rubrics developed by the American Association of Colleges and Universities (AACU) for assessment of the five SLOs in the GSR courses.

The Language and Communication SLO for American Sign Language and written English is assessed in the entire range of GSR courses. The other four SLOs are assessed in the GSR 200 level courses.

Data on literacy measures was collected for the first time in academic year 2008-2009 in all GSR courses at the freshman and sophomore level. During academic year 2009-2010, baseline data was used to establish proficiency target scores in each of the five categories used to determine literacy in ASL and in written English. Similar work was done in 2009-2010

and 2010-2011 to establish proficiency target scores for the categories for the rubrics used to assess the four other SLOs.

Based on this work, the following values have been assigned for the six rubrics used for assessment of the five SLOs in GSR courses as presented in the following tables and graphs:

**Score and Value**

Score	Value
1	Developing student (lowest level)
2	Progressing student
3	Benchmark – target score
4	Exceptional student (highest level)

#### Language and Communication

1. The Language and Communication SLO states, “Students will use American Sign Language (ASL) and written English to communicate with diverse audiences, for a variety of purposes, and in a variety of settings.”

#### Assessment of this SLO

Gallaudet has adapted the AACU Oral Presentation rubric as the ASL Public Presentation rubric to assess ASL in presentations. The AACU Written Communication Value Rubric is used for assessment of written English.

#### Assessment of ASL

##### GSR 100 AY 2015 ASL Public Presentation Data

At the 100-course level, the plurality or majority of students received the benchmark score of 3 for the four of the five skill areas except for Delivery which was split between 2 (progressing) and 3. There were also a significant number of students with scores of 1 or 2 (developing and progressing) for all the categories assessed. The skill categories of “Organization” and “Delivery” showed the lowest overall means, indicating areas that require implementation of pedagogical strategies to help students improve in these skill areas in future GSR 100 courses.

## Goal D: Academic Programs

### GSR 100 AY 2015 ASL Public Presentation Data

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	6%	6%	8%	4%	4%
2's	35%	27%	37%	36%	28%
3's	46%	53%	36%	41%	48%
4's	13%	14%	19%	19%	20%
N	114	114	114	114	104
Mean	2.61	2.70	2.62	2.72	2.79

#### GSR 200 AY 2015 ASL Public Presentation Data

At the 200 course level, in comparison with the 100 data, there is a noticeable shift to scores of 3 and 4 (benchmark and exceptional) for all skill areas and a significant decrease in the number of students scored at 2. Student scores for the lowest level (1 or developing) appear to be stagnant. Student skill

performance seem to be consistent across all five skill areas with 70 to 75% of the students scoring at 3 and 4 compared to a range of 55 to 68% for the same scores at the 100-course level. Mean scores are consistently higher for the 200- course level compared with the 100-course level across all five skill areas but fail to achieve the benchmark score of 3.

### GSR 200 AY 2015 ASL Public Presentation Data

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	4%	6%	5%	5%	5%
2's	26%	19%	25%	23%	24%
3's	46%	50%	48%	45%	43%
4's	24%	25%	22%	27%	29%
N	221	218	216	222	220
Mean	2.88	2.91	2.84	2.91	2.93

#### GSR 300 AY 2015 ASL Public Presentation Data

At the 300-course level, in comparison with the data for 100 and 200, the majority or the plurality of the students are scored at 4 (exceptional) for all skill areas. For three skill areas (Organization, Language and Central Message) there were no

1's scored. Student skill performance appears to be consistent across all five skill areas with 78 to 96 percent of the students scoring at 3 and 4. Mean student scores consistently exceed the benchmark score of 3 for all skill areas and are significantly greater than for students at the 200-course level.

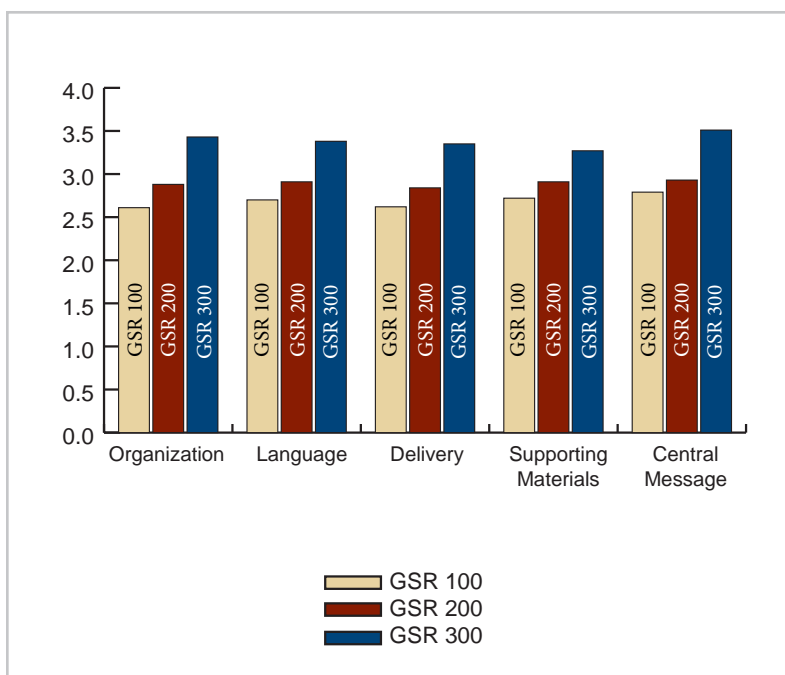
### GSR 300 AY 2015 ASL Public Presentation Data

	Organization	Language	Delivery	Supporting Materials	Central Message
1's	0%	0%	1%	1%	0%
2's	10%	9%	11%	20%	4%
3's	36%	43%	39%	29%	41%
4's	54%	47%	48%	49%	55%
N	99	99	99	99	99
Mean	3.43	3.38	3.35	3.27	3.51

## Goal D: Academic Programs

The graph below compares the average ASL public presentation scores for students at the three course levels of the General Studies program and indicates steadily increasing skill improvement as students progress from the Freshman Foundation courses (100 level) to the Capstone Course (300

level). While students in the GSR 200 courses show slight improvement compared with the GSR 100 courses, they do not achieve the benchmark score of 3. On the other hand, the students in the GSR 300 courses perform significantly better and exceed the benchmark target.



*Students at Gallaudet University are encouraged to work collaboratively to emphasize inclusion, support, and leadership development; ample technological access contributes to providing an academically rich learning environment.*

Photo by Zhee Chatmon



## Goal D: Academic Programs

### Assessment of Written English

#### GSR 100 AY 2015 Written Communication Data

At the 100 course level, the plurality of students received the benchmark score of 3 for three categories (Context, Content Development, and Sources) and a plurality had a score of 2 for two categories (Genre, Syntax). Student skill performance

appears to be consistent across all five skill areas with 70 to 86 percent of the students scoring at 2 and 3. There were also a significant number of students with scores of 1 for all the categories assessed. The skill categories of “Genre” and “Control of Syntax and Mechanics” showed the lowest overall means, indicating areas that require implementation of pedagogical strategies to help students improve these skills in future GSR 100 courses.

#### GSR 100 AY 2015 Written Communication Data

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	6%	5%	5%	6%	6%
2's	38%	40%	48%	40%	43%
3's	42%	46%	38%	44%	41%
4's	13%	9%	9%	10%	10%
N	112	112	112	111	112
Mean	2.58	2.54	2.46	2.51	2.50

#### GSR 200 AY 2015 Written Communication Data

At the 200 course level, in comparison with the 100 data, the number of students with scores of 1 has increased. However, there is also a significant increase in the number of students scoring at 4 indicating a bimodal distribution between 1 and 4. There is a noticeable spread of scores of 2, 3 and 4 for all skill areas with a plurality of 3's for four categories (Context,

Content, Genre, and Sources) and a plurality of 4 for the Syntax category. Student skill performance appears to be consistent across all five skill areas with 61 to 67 percent of the students scoring at 3 and 4. Mean scores are consistently higher for the 200 course-level compared with the 100-course level across all five skill areas but do not achieve the benchmark score of 3.

#### GSR 200 AY 2015 Written Communication Data

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	11%	13%	11%	13%	10%
2's	23%	23%	23%	26%	26%
3's	39%	38%	39%	32%	31%
4's	28%	27%	27%	29%	33%
N	200	215	215	214	215
Mean	2.82	2.76	2.80	2.74	2.85

## Goal D: Academic Programs

### GSR 300 AY 2015 Written Communication Data

At the 300 course level, in comparison with the data for 100 and 200, there is a noticeable shift to scores of 3 and 4 for all skill areas. There were no 1's scored for the Content category and only 1 to 2 percent for the other four skill areas assessed. Student skill performance appears to be consistent for three

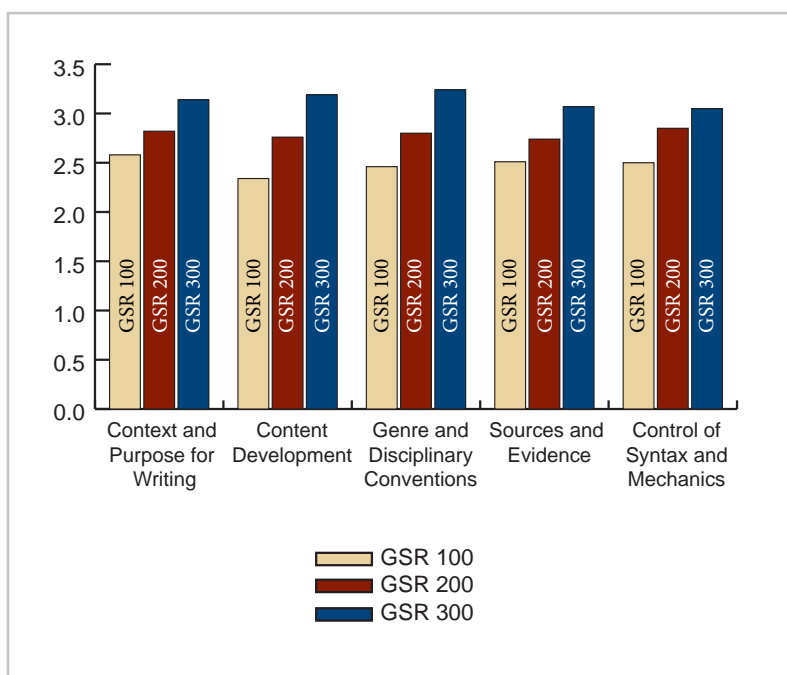
skill areas (Context, Content, Genre) with 81 to 84% of the students scoring at 3 and 4. Only 74 to 75 percent of the students achieved scores of 3 or 4 for "Sources and Syntax." Mean scores are consistently higher for the 300-course level compared with the 200-course level across all five skill areas and exceeding the benchmark score of 3.

### GSR 300 AY 2015 Written Communication Data

	Context and Purpose for Writing	Content Development	Genre and Disciplinary Conventions	Sources and Evidence	Control of Syntax and Mechanics
1's	1%	0%	2%	1%	1%
2's	17%	19%	13%	24%	25%
3's	48%	42%	42%	41%	41%
4's	34%	39%	42%	34%	33%
N	83	83	83	83	83
Mean	3.14	3.19	3.24	3.07	3.05

The graph below compares the average written communication scores for students at the three course levels of the General Studies program and indicates steadily increasing skill improvement as students progress from the Freshman Foundation courses (100 level) to the Capstone Course (300 level). The GSR 200 students do not meet the target score of 3 but

still demonstrate significant improvement in written English compared with the GSR 100 students. The GSR 300 scores demonstrate continued improvement in all five skill areas and exceed the target score of 3 but the rate of skill improvement for the Syntax category is not as satisfactory as for the other four skill areas.





## Goal D: Academic Programs

### Critical Thinking

- The Critical Thinking SLO states that “Students will summarize, synthesize, and critically analyze ideas from multiple sources in order to draw well-supported conclusions and solve problems.”

This SLO has been assessed for GSR 200-level courses using the AACU Critical Thinking Value Rubric.

#### GSR 100 AY 2015 Critical Thinking Data

While there were few students (1 to 3 percent) scoring 1 for this SLO, the majority of the student scores clustered around

2 and 3 for a range of 81 to 86 percent for all five skill areas. For three of the skill areas (Explanation, Position, Conclusions), a plurality scored 3 but scored only 2 for the other two areas (Evidence and Influence). None of the means met the benchmark target and the Evidence category had the lowest mean (2.56) for the four 200-level SLOs, and this outcome is not assessed later in 200 level courses, therefore conclusions about meeting the benchmark on this outcome can be better achieved by assessing students later, perhaps in their majors or in a senior level assessment. This SLO requires continued analysis, assessment, and strengthening through pedagogy to improve student skills over time.

#### GSR 100 AY 2015 Critical Thinking Data

	Explanation of Issues	Evidence	Influence of Context and Assumptions	Student's Position	Conclusions and Related Outcomes
1's	1%	3%	3%	2%	2%
2's	26%	45%	43%	42%	39%
3's	55%	39%	38%	44%	43%
4's	18%	13%	15%	12%	15%
N	93	92	91	93	92
Mean	2.84	2.56	2.60	2.60	2.72



*Gallaudet University promotes outside-the-classroom learning that enhances the academic curriculum, supports at-risk students, promotes leadership development, and ensures an inclusive and supportive social environment.*

Photo by Zhee Chatmon



## Goal D: Academic Programs

For the following three SLOs, the data for the various GSR 200-level courses (sophomore level) indicate that the mean scores for the various skill areas demonstrate a range of values (2.61 to 3.23) and tend to cluster around the target score of 3.

### Identity and Culture

- The Identity and Culture SLO states, “Students will understand themselves, complex social identities, including deaf identities, and the interrelations within and among diverse cultures and groups.”

This SLO has been assessed for GSR 200-level courses using the AACU Intercultural Knowledge and Competence Value Rubric.

### GSR 200 AY 2105 Intercultural Knowledge/Competence Data

A plurality or a majority of the 200-course level students show scores of 3 for all six skill areas. For three skill areas (Cultural Knowledge, Verbal/Nonverbal, and Curiosity), 19 to 25 percent of the students have scores of 2, indicating areas that need to be addressed in future GSR 200 courses. There are very few or no students scoring 1 except for 7% in the Cultural Knowledge category. Sixty-nine to 93 percent of students score 3 and 4 across the six skill areas and the means range from 2.78 to 3.23. Skill areas that exceeded the benchmark target were Cultural Self-awareness, and the Attitudes: Curiosity, and Openness. The Openness category had the highest mean score (3.23) of all four SLOs for the 200-level courses.

### GSR 200 AY 2015 Intercultural Knowledge/Competence Data

	Knowledge: Cultural Self-Awareness	Knowledge: Knowledge of Cultural Worldview Frameworks	Skills: Empathy	Skills: Verbal and Nonverbal Communication	Attitudes: Curiosity	Attitudes: Openness
1's	2%	7%	5%	0%	2%	0%
2's	5%	25%	9%	20%	19%	15%
3's	75%	53%	71%	64%	47%	49%
4's	18%	16%	15%	16%	32%	36%
N	57	57	55	56	53	53
Mean	3.09	2.78	2.97	2.98	3.13	3.23

### Knowledge and Inquiry

- The Knowledge and Inquiry SLO states that “Students will apply knowledge, modes of inquiry, and technological competence from a variety of disciplines in order to understand human experience and the natural world.”

This SLO has been assessed for GSR 200-level courses using the AACU Inquiry and Analysis Value Rubric.

### GSR 200 AY 2015 Knowledge and Inquiry Data

For the four SLOs addressed at the 200-course level, there are significantly more students scoring 1's (4 to 14 percent) for this SLO (Knowledge and Inquiry) and for the Ethical Reasoning SLO (to be discussed in the next section). Mean scores are consistently below 3 except for “Topic selection” which has a mean of 3.01 with 74 percent of the students scoring 3 and 4. However, a plurality of the students consistently scored 3 across all skill areas and 24 to 32 percent of the students achieved scores of 4 for all categories. This indicates a bimodal distribution of student performance and requires an investigation on how to address student skill development for the lower scoring students.

## Goal D: Academic Programs

### GSR 200 AY 2015 Knowledge and Inquiry Data

	Topic Selection	Existing Knowledge, Research, and/or Views	Design Process	Analysis	Conclusions	Limitations and Implications
1's	4%	9%	11%	11%	12%	14%
2's	22%	29%	19%	20%	15%	23%
3's	42%	34%	46%	40%	45%	35%
4's	32%	29%	24%	29%	28%	28%
N	95	94	95	95	95	95
Mean	3.01	2.83	2.84	2.88	2.91	2.78

### Ethics and Social Responsibility

- The Ethics and Social Responsibility SLO states that “Students will make reasoned ethical judgments, showing awareness of multiple value systems, and taking responsibility for the consequences of their actions. They will apply these judgments, using collaboration and leadership skills, to promote social justice in their local, national, and global communities.”

This SLO has been assessed for GSR 200-level courses using the AACU Ethical Reasoning Value Rubric.

### GSR 200 AY 2015 Ethical Reasoning Data

This 200-course level SLO has a significantly high percentage of students scoring 1 (9 to 22 percent) compared to the previous SLOs. None of the means achieved the benchmark target but clustered around 2.61 to 2.91. The five skill areas show that 55 to 68 percent of the students scored 3 and 4. The data indicate a bimodal distribution of student performance and require an investigation on how to address student skill development for the lower scoring students.

### GSR 200 AY 2015 Ethical Reasoning Data

	Ethical Self-Awareness	Understanding Different Ethical Perspectives and Concepts	Ethical Issue Recognition	Application of Ethical Perspectives and Concepts	Evaluation of Different Ethical Perspectives and Concepts
1's	9%	9%	12%	22%	22%
2's	23%	27%	20%	18%	23%
3's	31%	35%	30%	27%	24%
4's	36%	28%	38%	34%	31%
N	74	74	74	74	74
Mean	2.91	2.79	2.89	2.69	2.61

### III. Center of Bilingual Teaching and Learning

Since its founding in 1864, Gallaudet University has offered a unique, bilingual learning environment. In 2007, the Board of Trustees adopted a new mission statement, which commits the university to become more intentional about leveraging the advantages of bilingual education for deaf and hard of hearing students. In the transformation from “default bilingualism” to a model of “intentional and inclusive bilingualism,” the University has undertaken a number of steps to implement the mission, including defining student learning outcomes, developing curricula and assessments, offering professional development opportunities, creating learning materials, supporting research projects, and hosting a series of lectures, workshops and campus-wide dialogues.

In order to support faculty in aligning teaching and learning activities with the bilingual mission, the Provost established the Center of Bilingual Teaching and Learning (CBTL) in August 2014. This Center brought together work previously coordinated by the Office of Bilingual Teaching and Learning (OBTL) and the Gallaudet Scholarship on Teaching and Learning Initiative (GSTLI) into one place unifying resources and research about bilingual teaching and learning.

The primary responsibility of CBTL has been to support faculty in developing capacity to engage in best practices in bilingual teaching and learning. For more information on the various activities of CBTL, visit [bilingual.gallaudet.edu](http://bilingual.gallaudet.edu).

The Center of Bilingual Teaching and Learning is under the supervision of the provost, Dr. Carol Erting. It is supported by:

- Kristin Mulrooney, Director, Center of Bilingual Teaching and Learning
- Lisa Sentelle, Digital Media Specialist
- Debi Duren, ASL Gatherings Coordinator and ASL Coach
- Joseph Santini, Graduate Assistant
- Amber Marchut, Graduate Assistant

The Center of Bilingual Teaching and Learning has supported the following initiatives and projects in support of the bilingual mission:

#### ASL Gatherings

ASL Gatherings began in fall of 2013 and is a casual, seminar-like environment where faculty come together to discuss ASL as a language, techniques for improving their usage of ASL, and techniques/technology to incorporate ASL into the classroom. This program is offered Mondays, Wednesdays and Fridays, 12-1 p.m.

During AY 2014-2015, 84 distinct ASL Gatherings sessions were offered, with 42 hours of direct contact per semester. In the fall 2014 semester, there were 32 participants, averaging seven at each session. In the spring 2015 semester, there were 29 participants averaging six at each session. All participants were given certificates in which documented how many sessions the participant attended during the semester.

#### Bilingual Approaches Seminar

Since its inception in 2010, the Bilingual Approaches Seminars (BAS) have offered learning opportunities for faculty and staff in bilingual theory and pedagogical practices. After intensive two-week-long summer workshops led by a CBTL faculty fellow, faculty and teaching staff then intentionally apply specific bilingual methodologies in the following fall classes. Over the past several years, 85 members of Gallaudet faculty and professional staff have participated in the Bilingual Approaches Seminars.

Of the 19 participants in the May 2014 two-week seminar, 10 of them continued their involvement during the fall 2014 and spring 2015 semesters. CBTL filmed nine participants to provide feedback on the application of the participants’ bilingual approach.

In summer 2015, the annual Bilingual Approaches Seminar was offered with six participants who are currently preparing to apply their new teaching strategies. These participants have plans to create an online e-showcase at the end of the 2015-2016 year to disseminate new learnings to Gallaudet faculty.

## Goal D: Academic Programs

### Bilingual Consultation

Bilingual consultation and support is CBTL's most rapidly growing area. In January 2015, a digital media specialist was hired and this allowed CBTL to provide full support for faculty who are developing teaching materials in ASL. Since that time, CBTL has collaborated extensively with several departments on campus. The consultation includes pedagogical support, design suggestions, ASL coaching, English coaching, filming support for ASL products, and suggestions for the incorporation of products into online media and websites. Below is an overview of several projects in which CBTL has been and currently are engaged, organized by department served:

#### Department of Art, Communication and Theatre

During the summer of 2015, CBTL worked in conjunction with arts faculty to create materials for a semester-long hybrid flipped classroom. CBTL employed ASL coaching, pedagogical support, filming and editing to create several videos for student viewing in ASL. We are currently finalizing an online glossary of 75 art-related technical terms. This project has historical impact, as it is the first time we have seen technical art vocabulary translated into ASL. This project is an extension of the faculty member's participation in BAS 2014.

#### Department of Education

During spring and summer 2015, CBTL partnered with faculty from the Department of Education to create several videos for use on their website. The primary purpose of these videos was the dissemination of information about the department; an important secondary purpose is their use in increasing enrollment and possibly retention.

During spring 2015, CBTL supported the Department of Education with the production of a bilingual survey involving more than a hundred questions. The survey was used to collect data about ASL personnel nationwide for a research project.

#### Department of History

During spring 2015 CBTL was contacted by the history department about support for their new documentary studies course. Taught by a professor with extremely limited skills in ASL, the course had a high enrollment and interest. We began to collaborate and share ideas to make the course more accessible for students and the professor. CBTL will continue this collaboration with the history department in the coming academic year. Our goal is to provide resources in both languages and support both faculty and students in the creation

of appropriate academic materials for use in the course and by the department in general.

#### Department of Interpretation

In spring 2015, the Department of Interpretation began a new initiative to disseminate student research at the doctoral level. We worked with department chairs to develop a program titled "Research Chats," short five-minute videos in which students summarized their work in ASL. The first of these chats is currently live on the Department of Interpretation website, and we are scheduling three more for the fall. Our work may be viewed on the department website.

#### Department of Linguistics

In February and March of 2015, we partnered with faculty from the linguistics department for the creation of model book summaries composed in ASL. These example book summaries would serve as resources for master's students in the linguistics graduate program.

#### Department of STM: Biology

In spring 2015, we worked with the biology department to develop a bilingual reflection assignment with Google forms to be used in BIO 105 courses and for a research project.

#### Emerging Signers Program/Jumpstart

In spring 2015, we were pleased to begin an ongoing collaboration with Gallaudet Interpreting Service and the Emerging Signers Program, to assess student skills currently under development, which will give participants more specific information about student language development and maintenance in ASL.

#### Research Support and International Affairs

Faculty and administrators from the University of Warmia and Mazury in Olsztyn, Poland, were sponsored by Research Support and International Affairs (RSIA) to visit Gallaudet University to research how to educate deaf and hard of hearing students. The Center for Bilingual Teaching and Learning (CBTL) helped RSIA coordinate this visit and provided presentations about teaching and learning in bilingual classrooms.

In spring 2015, RSIA contacted CBTL about two separate projects. Initially, RSIA needed a complete revision of its website and wished its website to become more bilingual, incorporating both ASL and English. We created drafts of the information and data on the website in ASL, currently under review, and devised a plan to support existing faculty in RSIA

## Goal D: Academic Programs

in the creation of online mini-biographies serving to identify them by services provided.

Near the end of the spring 2015 semester, RSIA completed the development of Gallaudet's new research priorities and needed support for the development of an online bilingual survey incorporating questions and collecting responses in both ASL and English, per the participants' preference. The goal is to devise a system for collecting the broadest possible range of responses. CBTL coordinated the contracting of a programmer who completed a working frame for the survey and filmed the research priorities and questions involved. We are currently waiting for the final site to be built for dissemination of the survey in October 2015.

### Blackboard Action Group

A committee with representatives from Gallaudet Technology Services and the faculty met during the spring 2015 semester to address the question: How do we leverage learning management system technology for teaching and learning at Gallaudet University? The director of CBTL was a co-chair of this group and the CBTL provided administrative assistance to this group. A final report was written and given to the executive director of GTS in June.

### Classroom Discourse Observation

In 2008, the Faculty Senate passed a measure requiring the development of multiple measures to evaluate faculty proficiency in American Sign Language, which is one key aspect is the evaluation of language and discourse within the classroom. After an ad-hoc committee developed the classroom discourse checklist, the Center of Bilingual Teaching and Learning (CBTL) and the ASL-Diagnostic and Evaluation Services (ASL-DES) conducted a pilot study to determine appropriate procedures, protocols and measures involved in Classroom Discourse Observation (CDO). Data on faculty proficiency in classroom discourse continues to be collected as ASL-DES continues to conduct the CDO. In addition, ASL-DES has created a resource page that features video clips that help to explain key concepts used in the CDO. This resource can be found at [http://www.gallaudet.edu/asldes/cdo/cdo\\_video\\_samples.html](http://www.gallaudet.edu/asldes/cdo/cdo_video_samples.html)

### Faculty Development Support

CBTL continues to provide support to the Office of Academic Quality and Faculty Development. In February 2015, CBTL gave a presentation about language assessment to the campus at large. CBTL taught bilingual teaching strategies as a five-week online course for adjunct faculty during the spring 2015 semester. Five adjunct faculty enrolled in the course and four completed it. CBTL began to create bilingual teaching materials to be made available on our website for faculty to use and incorporate into their classes.

### Faculty Language Support

Currently, CBTL is coordinating with the Office of Faculty Development, ASL-DES, and the ASL as a Second Language program to formalize the ASL program for faculty. Our goal is to provide faculty with support in both of Gallaudet's languages of instruction. ASL and English tutoring is now being coordinated by the Center of Faculty Development to facilitate faculty members' development of language skills. If faculty members are interested in pursuing tutoring, they must contact the faculty fellow and provide documentation of their rank, tenure status, and ASLPI level. Priority for tutoring will first go to full-time tenured and non-tenured faculty who have completed ASL IV, but have yet to attain an ASLPI Level of 3 (under certain circumstances, faculty who are enrolled in courses below ASL IV may also receive tutoring to support their classroom experience). Lowest priority for tutoring arrangements will be given to faculty who have already attained an ASLPI score of 3 and wish to improve their score.

For more information on ASL support for faculty, please visit the new faculty page and click the "ASL Tutoring Policies and Procedures Brochure" link located at the top of the page.

### Gallaudet Scholarship of Teaching and Learning

The Center of Bilingual Teaching and Learning (CBTL) and the office of the Associate Provost for Research received a two-year, \$200,000 grant from the Booth Ferris Foundation to support the Gallaudet Scholarship of Teaching and Learning Initiative (GSTLI). This project was designed to create a learning community of teacher-scholars who, over a period of two years per cohort, to investigate, reflect upon, document,

## Goal D: Academic Programs

and enhance teaching practices designed to meet the needs of visually oriented and linguistically diverse learners in Gallaudet classrooms.

The initial cohort of five participants conducted their research projects and disseminated their work into a volume published by Gallaudet University Press in 2014, *Teaching and Learning in Bilingual Classrooms: New Scholarship*. With the support of designers and programmers, this group of researchers developed the framework for a showcase website; their work is available online at the Gallaudet GSTLI Gallery.

The second GSTLI cohort began their two year participation in January 2015. The participants received a course release to allow them to focus on their research and attend bi-weekly meetings. The six selected participants spent the spring 2015 learning about the Scholarship on Teaching and Learning (SoTL). Over the summer each participant identified a research question and developed a plan for carrying out the research over the next three semesters. Data collection for all the participants will happen during the fall 2015 semester. CBTL will be providing support in the form of classroom filming and focus group filming. Bi-weekly meetings will also continue during the fall 2015 semester.

### Grant Support

As part of our ongoing mission to serve the Gallaudet community, CBTL is constantly exploring options for grants so we can fund and expand services to meet the clearly growing need of an increasingly bilingual and multilingual community. We applied for a Spencer Foundation small grant in spring 2015 and are currently working on submitting a grant to the Andrew J. Mellon foundation to support our work creating bilingual educational materials in conjunction with the Department of Art, Communications and Theatre.

### Senior Literacy Assessment

The Center of Bilingual Teaching and Learning (CBTL) was asked by Office of Academic Quality (OAQ) to collaborate on a process for assessing student achievement of student learning outcome: “Language and Communication - Students will use American Sign Language (ASL) and written English to

communicate effectively with diverse audiences, for a variety of purposes, and in a variety of settings.” During the spring 2015 semester, OAQ and CBTL invited faculty from all departments to meet three times to work on an assessment tool for this SLO. The committee drafted a prompt and rubric to be piloted during the fall 2015 semester.

### Studio and Filming

With the addition of Lisa Sentelle, our digital media specialist, in spring 2015 CBTL was able to expand its array of services to include a much higher level of video and editing support and expertise for faculty. We created an online reservation form with guidelines for filming, which can be found on our website. Our studio is available to any member of faculty and staff who need support in the creation of bilingual materials for the classroom, communications for the campus community, and other forms of language/film support.

### Website Development and Outreach

Throughout the summer of 2015, the CBTL team worked together to create a new, completely bilingual website. Our goal was twofold: first, to create a “Purpose Driven Website” with specific, clear functions to support faculty and staff; secondly, to create a model bilingual website to guide and jump-start the creation of more bilingual online materials. The website went live in August of 2015 and has already had several hundred visits; we have already seen an uptick in requested services.

Brochures for CBTL services have been designed and printed to increase publicity of our services. An information wall was added outside our offices to provide additional information and resources to people who walk-in.



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### IV. Academic Enrollment Trends

Note that in addition to the data below, the Highlights chapter and the Goal A Enrollment chapter contain considerable additional information regarding enrollment at the University and

the Clerc Center contains enrollment data for that organization

#### Fall Undergraduate Degree-seeking Enrollment Trend by Declared Major

	2010	2011	2012	2013	2014
Accounting	19	19	22	14	16
American Sign Language	10	19	13	9	5
Art	1				
Art and Media Design				12	23
Art History	3	2	2		
Biology, B.A.	12	7	4	10	11
Biology, B.S.	13	10	16	22	16
Business Administration	24	29	33	39	40
Chemistry, B.A.	1	3	1	2	1
Chemistry, B.S.	7	5	3	1	1
Communication Studies	43	35	30	24	36
Computer Information Systems	4	1			
Computer Science B.A.	1	1	1		
Computer Science, B.S.		3	1		
Deaf Studies	20	27	40	32	27
Digital Media	8	9	4	1	
Economics					
Education	24	17	15	13	23
English	7	13	19	14	14
Family & Child Studies	18	15	12	4	1
Finance					
French	2				
Government	15	7	14	18	18

	2010	2011	2012	2013	2014
Graphic Design	10	13	8	6	1
History	17	18	20	17	15
Information Technology	6	13	16	14	17
International Studies	5	13	20	19	26
Interpretation	43	46	45	47	39
Liberal Studies		2	2		
Mathematics, B.A.	11	4	5	6	7
Mathematics, B.S.	2	9	2	4	1
Philosophy	2		1	3	4
Photography	8	7	7	5	1
Physical Education	32	35	30	16	6
Physical Education & Recreation			7	26	44
Psychology	46	50	51	46	35
Recreation & Leisure Studies	3	2	1		
Recreation and Sports Program	17	22	19	12	3
Self-directed Major	3	1	1	3	3
Social Work	31	42	37	42	44
Sociology	15	16	12	6	11
Spanish	4	2	2	4	4
Studio Art	2	5	5	3	
Theatre Arts	15	21	16	11	7
<b>TOTAL PLAN ENROLLMENT</b>	<b>504</b>	<b>543</b>	<b>537</b>	<b>505</b>	<b>500</b>

<sup>1</sup>This is not a headcount; dual degree enrollments are included, but students who have not yet declared a major are not. Declared majors are as of census date.



## Goal D: Academic Programs

### Fall Undergraduate Degree-seeking Enrollment Trend by Declared Minor

	2010	2011	2012	2013	2014
Accounting	1			1	1
American Sign Language				1	2
Art	5	10	6	7	5
Athletic Coaching			5	24	26
Biology	1	2	3	3	3
Business Administration	4	2	5	1	1
Chemistry	6	4	3	6	4
Communication Studies	2	3	8	6	6
Computer Information Systems	2				
Dance				3	4
Deaf Studies	4	2	2	1	2
Economics & Finance	1	1	1	2	1
English	4	3	2	5	10
Family & Child Studies	12	8	6	5	
French	2	4	2	1	1
German			1		
Government	4	4	3	3	3
History	2	1	1	2	1
Information Technology	1	3	4	5	8
Linguistics	11	16	7	2	8
Mathematics		2	2	2	3
Philosophy	5	7	3	4	2
Physical Education	2	3	4		
Psychology	19	15	13	5	9
Recreation and Sports Program	10	10	13	5	4
Religion			2		
Sociology	5	9	9	9	10
Spanish	1	1	4	6	5
Theatre Arts	4	4	3	3	2
Women's Studies	1	2			
<b>TOTAL ENROLLMENT<sup>1</sup></b>	<b>109</b>	<b>116</b>	<b>112</b>	<b>112</b>	<b>121</b>

<sup>1</sup>This is not a headcount; dual degree enrollments are included. Declared minors are as of census date.

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### Fall Hearing Undergraduate (HUG) Enrollment Trend by Declared Majors

	2010	2011	2012	2013	2014
American Sign Language	2	3	1		
Biology, B.S.		1	1	1	1
Chemistry, B.A.				1	
Communication Studies		2	1		1
Deaf Studies	2	4	7	3	3
Education	3	3	2	2	1
English		1	1	1	1
Family & Child Studies	1				
Government					1
History	1	1			
International Studies			1	1	2
Interpretation	13	8	5	3	3
Philosophy				1	1
Psychology	4	1	1	2	
Recreation & Sports Program		1	1		
Self-directed major				1	
Social Work			1	1	3
Sociology		1	1		2
Spanish			2	2	
Theatre Arts		2			
Undeclared	22	19	22	26	30
<b>TOTAL MAJORS DECLARED<sup>1</sup></b>	<b>48</b>	<b>47</b>	<b>47</b>	<b>19</b>	<b>49</b>
<b>TOTAL HEADCOUNT<sup>2</sup></b>	<b>46</b>	<b>43</b>	<b>47</b>	<b>43</b>	<b>49</b>

<sup>1</sup>Dual program enrollments are included. Declared majors and minors as of census. Total Majors Declared could exceed Headcount because some students have dual majors.

<sup>2</sup>Headcount includes students who haven't yet declared a major.

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### Fall Graduate Degree-seeking Enrollment Trend by Degree Program and Discipline

	2010	2011	2012	2013	2014
<b>CERTIFICATES</b>					
ASL/Deaf Studies				2	2
ASL/English Bilingual Early Childhood Education				2	2
Cultural Diversity and Human Services					
Deaf and Hard of Hearing Infants, Toddlers, and Families		8	11	11	19
Deaf History	6	4	1		
Deaf Students with Disabilities		1	1	1	4
Deaf Studies			1		
International Development	1				
Leadership	1				
Management	2	4			
<b>CERTIFICATES TOTAL</b>	<b>10</b>	<b>17</b>	<b>14</b>	<b>16</b>	<b>29</b>
<b>MASTERS</b>					
Administration	9	5	2		
Audiology		1			
Counseling: Mental Health	22	20	15	12	12
Counseling: School	10	22	19	18	14
Deaf Education: Advanced Studies	2	2	1	2	3
Deaf Education: Special Programs	6	2	1	3	3
Deaf Studies	31	26	24	26	13
Developmental Psychology <sup>1</sup>				1	
Education	46	34	34	25	21
Hearing, Speech, and Language: Non-clinical	1				
International Development	21	17	15	15	10
Interpretation	26	27	34	29	20
Interpreting Research				2	1

<sup>1</sup>The M.A. in Developmental Psychology is in the School Psychology, Psy.S. program. Students receive M.A. degrees upon completion of comprehensive examinations.

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	2010	2011	2012	2013	2014
Leisure Studies	8	4			
Linguistics	23	18	19	20	19
Psychology	8	5			
Public Administration			14	36	40
Sign Language Education					35
Sign Language Teaching		29	32	35	1
Social Work	28	35	45	48	42
Speech-Language Pathology	27	26	28	30	33
<b>MASTERS TOTAL</b>	<b>268</b>	<b>273</b>	<b>283</b>	<b>302</b>	<b>267</b>
<b>SPECIALISTS</b>					
Administration and Supervision					
Change Leadership in Education	11	1			
Deaf Education	1		1		3
School Psychology	14	11	14	13	17
<b>SPECIALISTS TOTAL</b>	<b>26</b>	<b>12</b>	<b>15</b>	<b>13</b>	<b>20</b>
<b>DOCTORATES</b>					
Administration: Special Education	17	10	7		
Audiology, Au.D.	37	40	40	44	45
Audiology, Ph.D.	10	9	8	6	2
Clinical Psychology	41	39	40	43	42
Critical Studies in the Education of Deaf Learners			13	18	12
Deaf Education	9	11	5	3	3
Educational Neuroscience				2	4
Hearing, Speech, and Language Sciences			5	7	8
Interpretation	10	14	24	26	33
Linguistics	12	14	13	10	8
<b>DOCTORATES TOTAL</b>	<b>136</b>	<b>137</b>	<b>155</b>	<b>159</b>	<b>157</b>
<b>TOTAL PROGRAM ENROLLMENT<sup>2</sup></b>	<b>440</b>	<b>439</b>	<b>467</b>	<b>490</b>	<b>473</b>
<b>TOTAL HEADCOUNT</b>	<b>413</b>	<b>410</b>	<b>446</b>	<b>469</b>	<b>443</b>

<sup>2</sup>Dual program enrollments are included. Enroute enrollment counted while student is pursuing another program.

### V. Alumni Survey Information

This section contains excerpts of data available from respondents to our Annual Survey of Recent Graduates (December 2012 – August 2013 graduates). Data below includes employment experience, employment fields, internship participation, and satisfaction with their preparation. Finally a full table of employment by occupational category and by whether the employment involves service to deaf or hard of hearing individuals is included.

The survey is sent to recent undergraduate and graduate alumni approximately one year after graduation. The survey is administered in the fall to those who graduated December through August of the preceding year. The Gallaudet University Annual Survey of Recent Graduates is produced by the Office of Institutional Research.

#### Post-graduation Employment Experience

One hundred sixty-eight (84%) of alumni are employed, 27 (13%) are pursuing additional education, and six (3%) are doing neither. During the year since graduation, and using all sources, the results show that in the years since graduation:

- Seventy-seven percent (77%) of bachelor's degree alumni who responded to the survey stated that they worked either full-time or part-time.
- Ninety-five percent (95%) of graduate degree alumni worked either full-time or part-time.
- Nineteen percent (19%) of bachelor's degree alumni were pursuing additional education.
- Four percent (4%) of graduate degree alumni were pursuing additional education.

#### Employment Fields

The most common fields for employment for all recent Gallaudet alumni are:

- Fifty percent (50%) are in education, training, and library occupations;
- Fifteen percent (15%) are in community and social services occupations; and
- Eight percent (8%) are in business and financial operations occupations.

Seventy-two percent (72%) of Gallaudet University alumni are working in the three fields listed above.

#### Internship Participation

- Eighty-six percent (86%) of all responding alumni participated in an internship while at Gallaudet—ninety-two percent (92%) of bachelor's level alumni and eighty-one percent (81%) of graduate degree alumni.

#### Hearing undergraduate outcomes

- Fifty-eight percent (58%) of the hearing undergraduates who responded to the survey stated that they were employed.
- Seventeen percent (17%) were pursuing additional education.

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### Current Employment by Standard Occupational Group and by Service to Deaf and Hard of Hearing Individuals

Major standard occupational group	Undergraduate (N= 59)	Graduate (N= 68)	TOTAL (N=127)	% of total for this row who provide service to deaf or hard of hearing people
Arts, Design, Entertainment, Sports, and Media	3%	0%	2%	0%
Business and Financial	15%	1%	8%	3%
Community and Social Services	15%	15%	15%	14%
Computer and Mathematical	7%	0%	3%	0%
Education, Training, and Library	29%	68%	50%	36%
Food preparation and serving related	0%	0%	0%	0%
Healthcare Practitioners and Technical	0%	12%	6%	4%
Healthcare Support	0%	0%	0%	0%
Installation, Maintenance, and Repair	2%	0%	1%	1%
Legal	3%	0%	2%	2%
Life, Physical, and Social Science	2%	1%	2%	2%
Management	5%	1%	3%	1%
Military	2%	0%	1%	1%
Office and administrative support	10%	1%	5%	2%
Personal Care and Service	2%	0%	1%	1%
Protective Service	2%	0%	1%	0%
Sales and related	3%	0%	2%	2%
<b>TOTAL RESPONDENTS</b>				69%

Note: Percentages may not sum to 100 percent due to rounding.







*As part of a multi-phase renovation of the Hall Memorial Building, the fourth floor science labs, encompassing modern, DeafSpace design, were completed prior to the start of the fall 2015 semester.*

Photo by Zhee Chatmon

## Strategic Plan Goal E: Research and Outreach

The University continues to make great strides in reaffirming its goal to be the epicenter of research, development, and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity. In FY 2015, faculty, often alongside students, vigorously pursued a wide range of research interests related to their academic disciplines. In this process, they demonstrated their commitment to sharing the broad base of knowledge that has built Gallaudet's international reputation as a center of academics and research by sharing this knowledge to enlighten and empower others.

Examples follow in the FY 2015 Overview section that demonstrate Gallaudet's international outreach and its investments to prepare tomorrow's deaf leaders. These combinations of enhancing the research expertise of Gallaudet's academic community, and sharing this knowledge with scholars overseas who are eager to benefit from it, reinforce Gallaudet's progress on Goal E.



### I. FY 2015 Overview

Through collaboration and grant writing, research accelerated in academic departments as well as in Gallaudet's dedicated research centers. A strong emphasis continues to be placed on how research findings can be applied to instruction and other issues of importance to the advancement of deaf and hard of hearing people. Gallaudet reinforced its commitment to global education and outreach as well by cultivating and strengthening international partnerships that benefit Gallaudet students and the worldwide deaf community, and encourage personal and academic growth for faculty and students alike through international and intercultural education opportunities.

From Gallaudet's recently established Center for Deaf Documentary Studies (CDDS) to a grant to the University's Technology Access Program (TAP) to increase the great strides it has made in making the latest communication technology accessible to deaf people, FY 2015 was an exceptionally eventful year for Gallaudet's research and academic achievements.

Through the CDDS, Gallaudet's research incorporates a new humanities focus. The center serves both as a mechanism to learn the art, science, and business of documentary work, and a research center exploring deaf life. Designed foremost to support students as they engage in documentary work, the CDDS takes an ambitious approach to building partnerships and offering courses, workshops, summer institutes, lectures, online and print publications, documentary films, exhibitions, and web-based media that brings deaf life to the University and the public.

Gallaudet received a National Institute on Disability and Rehabilitation Research grant for \$950,000 from the Department of Education's National Institute on Disability and Rehabilitation Research for a project by TAP Director Christian Vogler. TAP also received a subcontract from the Federal Communications Commission (FCC) for a project to improve video access. The grant was for Dr. Vogler's project, "Rehabilitation Engineering Research Center (RERC) on Improving the Accessibility, Usability and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC)." The funding will greatly benefit the RERC in its mission to maximize the potential for new technologies to improve the lives of individuals who are hard of hearing or deaf by carrying out a program of research, development, and training.

An excellent example of Gallaudet's international outreach in 2015 was the contributions of Dr. Laura-Ann Petitto and two students in the Ph.D. in Educational Neuroscience (PEN) pro-

gram in promoting the University of Hong Kong's (UHK) efforts to build a functional near-infrared spectroscopy (fNIRS) Neuroimaging Laboratory and to establish a Science of Learning Center in Hong Kong. Thanks to a supplemental grant to the National Science Foundation (NSF) won by Dr. Petitto, co-H5 Principal Investigator of the NSF's Science of Learning Center, Visual Language and Visual Learning, and a co-founder of the PEN program, Adam Stone, Geo Kartheiser, and Dr. Petitto spent one month in residence at the UHK. They joined scientists involved in UHK's The Science of Learning Initiative and to share Gallaudet's advances in educational neuroscience by leading lectures and an intensive workshop in fNIRS methods and analysis. The long-term goal of this initiative is to build scientific bridges between Asia and the United States.

The University was awarded a three-year, \$900,000 grant in 2015 from the W.M. Keck Foundation for a research team led by Dr. Petitto. The team will conduct basic science to address the early learning needs of vast numbers of children throughout the nation who are impacted by the devastating consequences of minimal or delayed language exposure, particularly deaf children.

Gallaudet also continued to strengthen its foundation by renewing investments at the department level to prepare future generations of deaf leaders. Construction began on innovative new "Living Laboratories," an unconventional approach to designing science labs with an acute awareness of the unique ways deaf people experience life. This is a natural extension of DeafSpace, a set of architectural design concepts Gallaudet employs to make its buildings attuned to deaf sensibilities by including features like abundant natural lighting, clear sightlines, eye-pleasing wall colors, and wider hallways.

The Center for the Advancement of Interpreting and Translation Research (CAITR) is another example of preparing present and future generations of leaders in the realms of academics and research. Gallaudet's Department of Interpretation established CAITR in 2012 to enhance opportunities for scholars and students in the interpreting profession to collaborate on projects and to promote initiatives that advance interpreting/translating research nationally and internationally. In FY 2015, CAITR hosted an International Symposium of Signed Language Interpreting and Translation Research, a Summer Research Institute, and published Selected Papers through the Gallaudet University Press.

## Goal E: Research and Outreach

Recognizing that a high level of research activity is essential to the mission of Gallaudet University and the well-being of its constituents, the Office of Research Support and International Affairs (RSIA) awards Priority Research Funds (PRFs) each year to assist faculty and staff with expenses associated with getting their studies underway, with the understanding that they will obtain external funding to expand and sustain work in their chosen area when the start-up funding expires. In FY 2015, PRFs were awarded to Dr. Marlon Kuntze, an associate professor in the Department of Government and Public Affairs, for “Insight from Child ASL on the questionable distinction between gesture and lexical sign”; and Dr. Mary Thumann, an associate professor in the Department of Linguistics, for “Examining the Use of Depiction across American Sign Language Proficiency Interview Assessment Levels.” In September of FY 2015, RSIA announced PRFs for 2015-2016 to Dr. Cara Gormally, an assistant professor in the Department of Science, Mathematics, and Technology, for “Developing Positive Attitudes toward Science in University Lab”; Terra Edwards, an assistant professor in the Department of Linguistics, for “Pro-Tactile American Sign Language”; and Dr. Deborah Chen Pichler, a professor, and Dr. Mary Thumann, an associate professor, both in the Department of Linguistics, for “L2 Acquisition of ASL in M1 and M2 Contexts.”

The Science of Learning Center at Gallaudet University on Visual Language and Visual Learning (VL2), an initiative of the National Science Foundation, made great inroads in FY 2015 on its overarching goal to improve the education and lives of all visual learners. VL2 and its four hubs reported 45 new or ongoing projects. VL2 presently has many memoranda of understanding with Universities and Institutions to ensure ongoing networking and collaborations with labs from around the country and around the world.

TAP received a subcontract from the Federal Communications Commission (FCC) for a project to improve video access. The FCC contract was awarded to VTCSecure LLC, a global leader in developing accessible communication solutions. The contract calls for VTCSecure to advance telecommunications access for deaf, hard of hearing, and speech disabled populations in the United States by developing a state-of-the-art Video Access Technology Reference Platform (VATRP). TAP, which conceived the VATRP concept, is collecting and providing information on the user requirements of the project and participating in feedback, testing, and outreach efforts.

In addition to research focused on deaf and hard of hearing people, Gallaudet’s faculty sustains a broad range of research

activity within their disciplines. A prime example is the Department of Science, Technology, and Mathematics’ diverse research productivity with STEM majors, who will pursue their studies in newly renovated labs later in 2015. Advances such as this are helping Gallaudet increase the number of deaf students represented in the ever-expanding STEM field, a move that will lead to more career opportunities and show the world the capabilities of deaf people.

The contents of the ensuing chapter reflect some of the major accomplishments performed during FY 2015 in support of Goal E of the Gallaudet Strategic Plan.

### Chapter Content

The research section of the chapter contains both profiles on active H3 Research Projects as well as individual faculty and staff members’ scholarly achievements, such as publications and presentations, both research-based and otherwise.

The section begins with a table showing the projects conducted by faculty, staff, students and collaborators on each of the university’s research priority areas. Next is an overview of student engagement in research, highlighting the most notable of their achievements—doctoral dissertations. Finally, is shown a profile of each research and demonstration project, and a citation for each reported scholarly product, arranged under the banner of the hosting research center and academic unit.

The reader can conveniently search through all of this information using the online database called “Research and Scholarly Achievement at Gallaudet University” at <http://research.gallaudet.edu/ara>. The database can be searched by department, individual, research priority, and other criteria in order to easily locate both prior and current projects and scholarly products. The reader who desires more in-depth information may contact the scholar directly.

The chapter also provides the Office of Sponsored Programs’ reports on submitted research proposals and received awards from external sponsors.

Finally, this chapter reports on a comprehensive array of outreach programs and services to Gallaudet’s many constituencies, both nationally and internationally.

Information about the research activity of the Laurent Clerc National Deaf Education Center can be found in a later chapter.

### II. Gallaudet Research Priorities

The current research priorities of the university reflect its unique responsibility and commitment to encourage research that aims to benefit the diversity of the Deaf and hard of hearing population on campus, across the United States, and internationally. These priorities are a framework for the work of the University's research centers and the Clerc Center. The framework guides the awarding of research support to our faculty and staff through the Gallaudet Priority Research Fund.

Since 2007, Gallaudet has pursued thirteen research priorities, as reported in this publication. The order of the priorities below does not indicate their relative importance. After the description of each priority, the projects that fall under its area of focus are listed. The reader can find all projects focusing on a particular priority using the "Filter Projects by Selected Priorities" feature of the online database at <http://research.gallaudet.edu/ara>.

The Education of the Deaf Act (EDA) and Goal E of the Gallaudet Strategic Plan require the University to establish its research priorities through input from constituent groups, consumers, and heads of federal agencies. Gallaudet faculty, staff, and students are offered the opportunity to provide their input by working together to identify areas that they feel are most essential to the University's mission to educate and empower Deaf and hard of hearing people.

Strategy E.1.1 of the 2010-2015 Strategic Plan calls for no more than five integrated research priorities, formulated by assessing compelling needs as well as current and potential strengths in fields such as visual language and learning, linguistic and communication access, genetics, and ASL/English bilingualism. An ongoing process to set these new priorities began in fall 2014 with three well attended campus-wide discussions where various University constituents shared their opinions on what Gallaudet's priorities should be. This was followed by a priority setting task force meeting during the spring semester that was composed of 33 faculty members and five staff representing 10 academic departments, three research centers, and the Clerc Center. This fall, a draft of the priorities will be presented to the campus for feedback using a bilingual survey. External feedback from key constituencies and federal agencies will also be gathered during the 2015-16 academic year, and a final presentation will be made to the Board of Trustees in early 2016.

#### 1. Development of Signed Language Fluency

Research aimed at understanding the sensory, cognitive, affective, linguistic, pedagogical, and socio-cultural

processes by which individuals acquire American Sign Language or other signed languages. This priority applies both to individuals acquiring signed language in childhood and to those who acquire or learn signed languages later in life.

[42 projects]

#### 2. Development of English Literacy

Research aimed at increasing understanding of the sensory, cognitive, linguistic, and socio-cultural processes by which Deaf and hard of hearing individuals learn to read and write, plus the relationship between literacy learning and the signed, printed, and spoken languages used in the individual's home, school, community, and cultural environments.

[34 projects]

#### 3. Psycho-Social Development and Mental Health Needs

Research focusing on biological, neurological, psychological, and sociological aspects of Deaf and hard of hearing people's psychosocial development and mental health throughout their life spans.

[31 projects]

#### 4. Teaching, Learning and the Communication Environment

Research on how pedagogical practices and accessibility of information affect learning for Deaf and hard of hearing students.

[62 projects]

#### 5. School, Home, and Community Relationships

Research aimed at understanding home, school, and community relationships, school readiness, family and community involvement, and dynamics in homes and schools with Deaf or hard of hearing members.

[25 projects]

#### 6. Transition through School and into Postsecondary Education and Work

Research aimed at understanding and identifying the transition processes of Deaf and hard of hearing students through school and beyond into post-secondary education, work, and independent living.

[15 projects]

#### 7. History and Culture of Deaf People

Studies of Deaf peoples' history, cultures, creative productions, and signed languages, including research into and preservation of the contributions of visual and tactile



## Goal E: Research and Outreach

ways of knowing and experiencing the world. This priority highlights studies of the origins and development of literature, the visual arts, and other creative, political, and social contributions of Deaf people around the world.  
[19 projects]

### 8. Linguistics of Signed Languages

Linguistic studies of signed languages, including phonological, morphological, and syntactic phenomena as well as meaning construction, discourse, and variation. This priority supports cross-linguistic comparison among signed languages as well as research on language contact and historical change.  
[26 projects]

### 9. Interpretation and Translation

Research examining processes, practices, and pedagogy involved in interpreting for hearing, hard of hearing, Deaf, and Deaf-Blind individuals in a broad range of settings. This priority relates to situations involving Deaf and hearing interpreters working with signed and spoken languages or other visual or tactile communication systems. In addition, this priority concerns literary and other translations involving signed languages.  
[26 projects]

### 10. Studies that Inform Public Policies and Programs

Research essential for the development, administration, and evaluation of public policies and programs affecting education, mental health, communication access, medicine, employment, and other services used by Deaf and hard of hearing people throughout their lives.  
[34 projects]

### 11. Technologies that Affect Deaf and Hard of Hearing People

Studies of technology's impact on the lives of Deaf and hard of hearing people, including research on and development of technologies and media aimed at enhancing communication.  
[35 projects]

### 12. Assessment

Research related to the development, translation, validation and practical application of appropriate tools, techniques, and models for assessing a wide range of characteristics, skills and abilities of Deaf and hard of hearing people.  
[34 projects]

### 13. Diverse Deaf and Hard of Hearing Populations

Research that examines multicultural awareness, knowledge and/or skills as well as methods of social advocacy related to diverse Deaf and hard of hearing children, youth, adults, their families and their communities. Diversity includes, but is not limited to differences of race, ethnicity, gender, age, creed, disability, socioeconomic status, sexual orientation, school experience, linguistic background, and immigration experience.  
[32 projects]

The following table lists all FY 2015 research and demonstration projects with cross-references to these research priorities. The projects are done by Gallaudet faculty, staff and students, as well as collaborators on Gallaudet's externally funded research grants.



*President T. Alan Hurwitz (back, left) and Jesse Saunders (back, right), associate director of Youth Programs, pose with the team from the Indiana School for the Deaf, national champions of the 2015 Academic Bowl, held April 25-28 at Gallaudet. This year's competition featured 24 teams, including one from Canada. The national competition followed five qualifying, regional tournaments.*

Photo by Zhee Chatmon

## Goal E: Research and Outreach

### Research Projects Organized by Research Priorities

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
"The committee in my head": Examining self-talk of American Sign Language-English interpreters									●				
'American Annals of the Deaf': Reference issue				●						●			
Acceptance of disability, coping strategies, and perception of social support among veterans with acquired physical disability			●							●			
Accessible communication for everyone (video relay services software)										●	●		
Acquiring an effective training method for at-home use for the made for mobile phone otoscope.				●	●								
Advancing students' science literacy				●									
Affective constructions in American Sign Language								●					
African-American Deaf community									●				
Alternative approaches: Exploring yoga as a treatment for PTSD			●										
An analysis of AEBPD teachers' beliefs about bilingual Deaf education and bilingual practices	●	●		●									
An analysis of Miranda warnings knowledge in Deaf community			●							●		●	
Annual Survey of Deaf and Hard of Hearing Children and Youth				●	●					●			
Artifacts of Cognition in ASL-to-English Interpretation									●				
ASL assessment toolkit	●			●				●				●	



## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
ASL co-activation study		●											
ASL-English bilingual story apps	●	●		●							●		
Assessing audiologists' exposure knowledge, and attitudes with deaf individuals				●									
Attention and retention of educators of the Deaf										●			
Auditory self-monitoring	●										●		
Beyond the ABCs: Multimodal texting by deaf youth		●					●						
The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)	●	●						●		●			
Body image, cultural, and media			●		●		●						
Cancer genetic education for the Deaf community				●									●
Capstone Honors				●									
Classroom discourse observation	●											●	
Cochlear implants and related neurotechnologies: Addressing Japanese perspectives in deaf neuroethics													
Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants		●								●	●		●
Cognitive and electrophysiological correlates of phonological processes in Deaf undergraduate readers		●	●										

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Collaborative research CI-ADDO-EN: Development of publicly available, easily searchable, linguistically analyzed, video corpora for sign language and gesture research	●							●			●		
Comparison of face-to-face and videoconferencing communication modalities for delivering anxiety and stress psychoeducation to Deaf individuals			●	●							●		
Competencies of healthcare interpreters: Narratives from American Sign Language-English interpreters									●				
Conceptualizing Disability			●										
Continuing medical education modules	●	●	●		●					●			
Continuous monitoring of urea concentrations and harmful algal productivity and physiology in the Anacostia River					●	●				●			
Creating a space of our own: A phenomenological study of the lived reality of African American ASL-English Interpreters									●				
Creation of a DNA repository to identify deafness genes							●						●
Cross-language activation during sentence comprehension in Deaf bilinguals	●	●											
Deaf consumers' perceptions of signed-to-spoken language interpretation in eight signed languages									●				
Deaf NYC							●						
Deaf perspectives on translating President Obama's 2009 inaugural speech									●				
Deaf stories corpus							●	●					●
Deaf Studies Digital Journal							●				●		●

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Deaf Weight Wise 2.0			●	●			●						●
Developing opportunities for instructional feedback to improve student outcomes in STEM courses				●									
The development of a web-based computer program to support early literacy skills for Deaf children		●									●		
Development of bimodal bilingualism	●							●		●			●
The development of perceptual span in beginning and developing deaf readers		●		●								●	
The development of visual processing in Deaf infants	●		●										
The diagnosis of Attention Deficit Hyperactivity Disorder in college-aged Deaf individuals: Exploring the accuracy of the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version			●										●
Directionality in ASL-English interpreting: Quality and accuracy in L1 and L2									●				
Display Rules of the Deaf culture: An evaluation of emotional expression			●										
Do young deaf bilinguals access ASL forms while reading English words?	●	●		●				●				●	
The effect of caffeine withdrawal on VNG oculomotor assessment												●	
Effect of eye gaze on amplitude of the ocular vestibular evoke myogenic potential (oVEMP)												●	
The effect of varied insertion depth on peripheral vestibular responses: An investigation of caloric irrigation clinical technique												●	
Effectiveness of mentoring in science research				●			●					●	

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
The effects of early visual language exposure on deaf children's linguistic and non Linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers	●	●		●							●		●
Electrophysiological indices of visual language experience on auditory and visual function	●	●		●									
Emotion recognition: Encoding of facial expression							●						
Emotion regulation and effortful control in deaf children as a function of parenting behavior and communication quality	●		●										
Empowering rural Deaf citizens in Africa through social movements							●			●			●
English acquisition through reading: Translation as a strategy		●		●						●			
Enhancing cancer genetic education bilingual materials and broadening outreach efforts in the United States Deaf community				●									●
Ethical practices website													●
Examining the correlations between social network ties and linguistic production					●			●					●
Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design	●	●		●							●		●
Examining the use of depiction across American Sign Language Proficiency Interview assessment levels	●							●				●	
The experience of running: A mixed methods approach			●										
Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers								●		●			
Exploring the hegemonic whiteness in sign language interpreter education. Program curricula: A discussion with students, faculty and administrators	●			●					●				●

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Family engagement among immigrant families with young deaf children				●	●								●
Feasibility study on the use of head mounted displays in parent child interaction therapy			●										
Fingerspelling development as alternative gateway to phonological representations in Deaf children	●	●											
Fingerspelling development that is independent of English	●	●		●				●					
Forward to professorship: "Pay it forward"				●	●	●						●	
Gallaudet Scholarship of Teaching and Learning Initiative — Cohort 1				●									
Gallaudet Scholarship of Teaching and Learning — Cohort 2	●	●		●				●				●	
Gaze-Following in Deaf infants	●			●									
Genetic deafness in alumni of Gallaudet University							●						
HCC small: DHH cyber-community - supporting Deaf and hard of hearing students in STEM	●					●		●	●				
Home, school, and early language factors impacting the acquisition of reading skills among Deaf children with and without cochlear implants, and with and without early exposure to sign language	●	●						●				●	
Image processing for NASA applications				●		●							
The impact of early visual language experience on visual attention and visual sign phonology processing in young Deaf emergent readers using early-reading apps: A combined eye tracking and fNIRS brain imaging investigation	●	●		●				●			●		

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Individual differences in deaf readers		●											
Insight from child ASL on the distinction between gesture and lexical sign	●			●	●			●		●		●	
Insight from child ASL on the questionable distinction between gesture and lexical sign	●	●		●	●			●				●	
Instructional videos on telecommunications access											●		
Interactive interpreting: teaching and learning strategies 2									●				
Interactive interpreting: teaching and learning strategies 3				●					●				
Interactive learning environment for optimizing technology use											●	●	●
Interpreting decisions and power: Interpreters working in legal settings				●	●		●	●	●				●
Investigating infant sign perception	●				●			●		●			
Investigating the water quality of two freshwater ecosystems: The Anacostia River (DC) and the Brainerd Area Lakes (MN)					●					●			
Investigation of the molecular mechanisms of tumor promotion													
Investigations of the effect of catalyst loading on cross-metathesis reaction				●							●		
Language acquisition and literate thinking in young d/Deaf children with Deaf caregivers	●												
Language acquisition, literacy learning, and literate thinking in young d/Deaf children				●	●								

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Leaders who are DeafBlind: A phenomenological study of educational experiences				●									●
Learning to read with visual languages: Investigation of the impact of native language ASL visual sign phonology training on emergent and developing literacy in English (new language)	●	●		●				●					
Learning to teach science as inquiry				●									
Lexical decisions and related cognitive issues in spoken and signed language interpreting: A case study of Obama's inaugural address									●				
Metalinguistic references in signed language interpreting: Discourse strategies used by ASL-English interpreters									●				
A model of Deaf scientists mentoring Deaf students			●	●	●	●						●	
Motion capture & nursery rhymes	●										●		
Motivation to learn and apply new knowledge and skills from training to the workplace				●									
Nanowire array production and characterization				●		●							
National space grant college fellowship program at Gallaudet University				●		●							
New signers: Acculturation and coping	●		●	●						●			●
Optical imaging of visual selective attention in deaf adults			●										
Overcoming barriers to STEM success for deaf undergraduates				●									
Parent-child interaction therapy among deaf persons			●		●				●	●	●	●	



## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Parents information package	●	●		●	●								
Partnership in reduced dimensional materials (PRDM): Preparation of molybdenum disulfide nanomaterials													
Partnerships for material research (PREM)				●	●		●					●	
Pediatric normative data on postural sway: CDP versus mCTSIB												●	
Perceptions and attitudes of pre-service teachers about inclusion: A close look at introduction to special education courses										●			
Persistence of Deaf students in undergraduate science, technology, engineering and mathematics programs				●	●	●				●			
Perspectives and experiences in the lives of deaf-blind college students													●
Perspectives of Deaf individuals on telemental health services			●										
Population genetics of connexin 26 deafness							●						●
Potential societal impact of advances in genetic deafness							●			●			
Preparation by American Sign Language-English interpreters: Methods, effectiveness, and perceptions									●				
Prevalence of dizziness and balance problems in deaf adults			●							●			
Priority Research Fund										●			
Professional autonomy in video relay service interpreting: Perceptions of American Sign Language-English interpreters									●				

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Professional identity development of ASL-English interpreters									●				
Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program										●	●		
Project D2: Context-sensitive assessment of real-world listening situations via integrated smartphones and hearing aids											●	●	
Project D3: Interactive learning environment for optimizing technology use											●	●	
Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology											●	●	
Project R2: User-driven customization of cochlear implant programming											●	●	
Project R3: Validation of hearing aid fitting for infants and toddlers											●	●	
A qualitative perspective on deaf women's experiences of sexual assault disclosure			●										
A quantifiable posturography screening measure using the Wii Fit Plus											●	●	
Quantifying the needs of people with hearing loss in using technology for daily and emergency voice telecommunication (R1)										●	●		
Receptive listening — narrowband vs. wideband with network impairments for the iPhone											●		
Resilience in Deaf children with additional disabilities: Factors that protect social and adaptive skills			●										
Resource and tool development to facilitate incorporation of accessibility in mainstream telecommunication										●	●		
The role of gesture in learning		●											

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
School experience of Deaf Malaysians who have achieved academic success					●	●							●
School personnel's perceptions of ASL instruction in preK-12 deaf education settings				●									
Seeing the Temporal Beats of Human Language	●	●		●	●			●		●	●		●
SFA1: Visual and cognitive plasticity													
SFA2: Language development and bilingualism	●	●		●									
SFA3: Reading and literacy in visual learning													
SFA4: Translation of research to educational practice				●					●				
SFA5: Integration of research and education				●							●		
Shared book reading using ASL and English for young signing deaf and hard of hearing children	●	●											
Signed language interpreter responses to interpreters in the media									●		●		
Signing with an accent: ASL L2 phonology and Chinese signers								●					●
Signs of aggression: Translating the peer conflict scales into American Sign Language			●						●		●	●	
Site-directed mutagenesis of RasGRP2													
Small Research Grants													

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Social justice education in sign language interpreting				●					●	●			●
The speed and accuracy of Washington, DC emergency vehicle siren localization in drivers with hearing loss											●		
Speed of visual sign language processing, and visual sign phonological awareness processing in young Deaf typically and atypically-developing bilingual-bimodal readers		●										●	●
The status of orientation in phonological representation								●					
Storyed classrooms: Narrative pedagogy in American Sign Language-English interpreter education						●							
A study of excellent teaching at Gallaudet University				●									
Survey of Deaf professionals and early intervention	●		●	●	●					●			●
Synchronization to auditory and visual rhythms in hearing and Deaf individuals			●										
Synthesis of bismuth telluride nanomaterials				●		●							●
Tegnspråk bok på iPad	●			●	●		●		●		●		
Telemental health services for Deaf individuals who live in rural areas			●								●		
The temporal and spatial dynamics of visual language perception and its relation to visual sign phonology: Eye-tracking in infants and children in a perceptual discrimination experiment of signs versus gestures	●							●				●	
Transition of deaf students from secondary to post-secondary settings						●				●			
Transitioning from high school to college: Student perceptions of preparation				●		●				●			

## Goal E: Research and Outreach

PROJECT	PRIORITIES (Numbers correspond to priorities earlier in this section)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
US Navy/NASA Experiments on Deaf Men							●						
Using ArcGIS and Carlson's Trophic State Index to monitor north-central Minnesota lakes		●		●									
A validation study of the signed paired associates test for children			●									●	
Visual span in Deaf readers		●											●
Visuospatial phonological loop in working memory	●											●	
VL2 national research volunteer program	●	●	●	●	●	●	●	●	●	●	●	●	●
VL2 shared data resource	●	●	●	●	●	●	●	●	●	●	●	●	●
WPPSI-IV & WISC-V special population study: Deaf and hard of hearing children			●									●	
<b>Totals: 175 projects reported</b>	<b>42</b>	<b>34</b>	<b>31</b>	<b>62</b>	<b>25</b>	<b>15</b>	<b>19</b>	<b>26</b>	<b>26</b>	<b>34</b>	<b>35</b>	<b>34</b>	<b>32</b>

### III. Students Actively Engaged in Research

Gallaudet has made a tradition of emphasizing to students the importance of being actively engaged in their majors through research. The University feels strongly that being involved in one or more research studies is the best way for students to express their ideas, putting their new-found knowledge to practical use. Furthermore, research gives students the unparalleled opportunity to apply theories from their classes in a way that makes connections to real-life situations. This critical approach to thinking leads to a deeper insight into their chosen field—and solidifies their foundation for a promising career in knowledge-based fields.

Of the 175 H3 Research Projects reported herein, 95 graduate and undergraduate students were involved in 78 projects. In FY 2015, there were 32 small research grants awarded to students conducting their own research or who are working under faculty members.

From serving as assistants for faculty investigators to carrying out their own studies, students are major contributors to the vitality of campus research scholarship. Across the University, there is a growing number of student researchers working on their own studies or assisting other researchers, from the physical sciences to social sciences to deafness-related disciplines. Student research assistants play vital roles in collecting responses from diverse participants, analyzing raw data, and presenting findings.

Many academic programs have classes that require H3 Research Projects as a final project, or as the focus of the entire course. This is indicated in the large amount of research coming from students in the Department of Interpretation's master's and Ph.D. programs, the Department of Education's Ph.D. program, the Department of Science, Technology, and Mathematics, and many others.

The University encourages student involvement in research activities through graduate assistantships, hiring under external grants, and direct funding of student research. In addition, research internships are being made available to students through various departments. Recently, there has also been a growth in Gallaudet's research labs, which continually expand their opportunities to include students.

Research by students benefits the institution as well. Gaining the insights of younger Deaf and hard of hearing people is essential to many topics that support Gallaudet's mission. Young minds frequently approach long-standing problems in new ways and lend fresh perspectives that may otherwise be overlooked.

The pinnacle of student contribution to knowledge is the doctoral dissertation. In FY 2015, 7 students completed their doctoral study (shown below).

Ainger, Timothy (2015). *Examining and Understanding the Executive Functioning Capabilities of a Schizophrenic Inpatient Population* (Doctoral dissertation). Gallaudet University, Washington, DC.

Edwards, T. (2014). *Language emergence in the Seattle Deaf-Blind community* (Doctoral dissertation). The University of California, Berkeley, CA.

Murphy, Leah (2014). *A Comparison Between The American Sign Language Receptive Skills Test and An English Based Test in Preschool Aged Deaf Children* (Doctoral dissertation). Gallaudet University, Washington, DC.

Roush, Daniel (2015). *The Translation of Event-Structure Metaphors Rendered by Deaf Translators from English to American Sign Language* (Doctoral dissertation). Gallaudet University, Washington, DC.

Santiago, R. (2015). *Co-Speech gesture in interpretation* (Doctoral dissertation). Gallaudet University, Washington, DC.

Scariff, Risa (2014). *Leaders who are DeafBlind* (Doctoral dissertation). Gallaudet University, Washington, DC.

Smith, Rebecca (2014). *Characteristics and Effects of Sexual Assault Disclosure Among Deaf Female Survivors* (Doctoral dissertation). Gallaudet University, Washington, DC.

The University is proud of these students' accomplishments. We look to them for intellectual leadership in the near future.

### IV. Research and Scholarly Activities by Research Center

The research and scholarly activity sections lists the FY 2015 H3 Research Projects and achievements by the dedicated research centers, including the Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC); Technology Access Program (TAP); National Science Foundation/Gallaudet Science of Learning Center (SLC) on Visual Language and Visual Learning (VL2) and its four hubs, including the Brain and Language Laboratory for Neuroimaging (BL2); and the Center for Deaf Documentary Studies (CDDS). (The work done in department laboratories is shown later under the part “Research and Scholarly Activities by Academic Units”.)

When a project has two H5 Principal Investigators from different units, a cross-reference note guides the reader to the placement of the full project profile. For each research project, the following fields are shown: the project’s title, status and timing, abstract, investigator(s) and their affiliation, funding sources, and products derived from that project.

At the end of each unit’s part there is a list of citations of scholarly and creative products that are not associated with a research project. The increased number of scholarly achievements by the faculty and staff is a sign of Gallaudet’s intellectual vitality.

#### Center for Deaf Documentary Studies (CDDS)

The Center for Deaf Documentary Studies (CDDS) educates students in the documentary arts and explores the lives of deaf people through research, documentation and dissemination.

Through the process of discovery and documentation, the center focuses on significant historical issues and endangered cultural knowledge specific to deaf peoples. Using film, photography, and narrative writing, the center disseminates stories of the deaf experience. Programs and products advance discourse on deaf lives, promoting a new level of awareness. The center also serves as a humanities-based resource for information on culturally and technically accessible documentary presentation.

CDDS adds to the public’s knowledge of the humanities in four focused areas: 1) Discovery — conducts research on deaf-specific topics through a variety of methods; 2) Documenta-

tion — engages in creation of film, photographs, and narrative writing; 3) Dissemination — organizes and hosts film screenings, lectures, and discussions in public and classroom settings, develops exhibitions, publishes articles, and produces multimedia website presentations and online bilingual (American Sign Language) publications; and 4) Education — trains students in the documentary process, including concept development and technical skills in film, photo, or text formats.

Gallaudet University’s Center for Deaf Documentary Studies seeks to enhance humanities scholarship through newly revealed perspectives on the meaning of deaf life, and by contrast, what it means to be hearing. Harnessing dispersed expertise the center takes an ambitious approach to building partnerships and offering courses, workshops, summer institutes, lectures, online and print publications, documentary films, exhibitions and web-based media that brings deaf history and contemporary life to the University and the public. A diverse team collaborates to discover, document, educate, and disseminate humanities content. Through fieldwork, the center identifies significant historical issues and endangered cultural knowledge.

#### Principal Investigator

- **Greenwald, Brian H.** • Director, CDDS, and Professor of History

#### Other Investigator

- **Bergey, Jean** • Associate Director, CDDS

#### Research Projects

##### Deaf NYC

**Status:** Ongoing

**End Date:** October 2015

Critical mass of deaf people in urban settings forms a unique cultural linguistic environment. For example, hundreds of Deaf people, mostly Jewish and Italian first-generation Americans, lived within a one-mile radius of the Gravesend section of Brooklyn, New York, in the 1950s, 60s and 70s. A designated bus to transport children to the nearest school for deaf students in Manhattan served the community. Deaf people lived in concentrated areas that were affordable, close to jobs, and offered an interwoven community. Very little documentation has been conducted on urban deaf life, with



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minimal “oral history” interviews on the mid-20th century city experience. Over eighty people have been identified as potential interviewees and the Center has formed a team of advisors to guide research. Comparison and contrast with hearing communities is part of this humanities research that examines the way groups wrestle with linguistic, educational and employment challenges.

### Principal Investigators

- **Bergey, Jean** • Center for Deaf Documentary Studies
- **Greenwald, Brian H.** • History, Philosophy, Religion, and Sociology

### US Navy/NASA Experiments on Deaf Men:

**Status:** Ongoing

**End Date:** October 2015

In the early 1960s, a joint research project hosted by the United States Navy and the National Aeronautics and Space Administration (NASA) sought deaf men from Gallaudet College (now University) to participate in experiments on balance, motion sickness, and weightlessness. Eleven deaf men, aged 25 to 48, most of whom became deaf from meningitis, participated in the research which began before the NASA 1961 manned suborbital flights of Project Mercury and continued until 1969. Of the eleven Deaf men labeled “Labyrinthine Defective,” six are living and involved with this project. The Center has collected over 130 images showing the experiments and will conduct oral interviews and digitize footage. An exhibition, including life size cutouts of the men in body casts preparing for centrifuge spins and free-falling in aircraft is being developed. Research will explore questions of patriotism and what it meant to be called “defective” by the federal government, unfit for military service, yet valuable to the nation.

### Principal Investigator

- **Greenwald, Brian H.** • History, Philosophy, Religion, and Sociology

### Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)

The Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC) is funded by the National Institute on Disability, Independent Living, and Rehabilitation Research, under the Administration for Community Living at the US Department of Health

and Human Services. The mission of the DHH-RERC is to provide consumers who are deaf or hard of hearing, as well as their families and clinicians, with the knowledge and tools necessary to:

- take control of their communication and hearing technologies, adapt those technologies to their needs in real-world environments, and achieve greater autonomy in their technology use; and
- derive full benefit of the shift from special purpose devices to increasingly powerful and interconnected consumer electronics.

Consumers who are deaf or hard of hearing, if given appropriate ways to control the technologies that they use, will be in the best position to meet their needs and make technology work for them. Instead of having to rely on clinical practitioners, hearing health providers, and other types of service providers, who all are one step removed from the firsthand experiences consumers need to be in charge of their communication needs. The technologies that are needed for this kind of paradigm shift have begun to emerge in recent years, and as a result people and devices have become increasingly interconnected. With respect to hearing loss, many rehabilitation and training activities that formerly could take place only face-to-face — such as in a clinical setting, or at dedicated events in buildings — can now potentially be done using consumer devices, online, and at every individual’s own pace. Parallel to this development, the advent of interconnected mobile and wearable devices, which are more powerful than the desktop computers of yesterday, is leading to a convergence of hearing devices and consumer electronics that are becoming increasingly integrated. Apps are already on the market to control hearing aid settings from a mobile device, and there are countless opportunities for closer integration between apps and hearing devices. The DHH-RERC supports this paradigm shift through research, development, and knowledge of translation activities. Additional information regarding the DHH-RERC can be found at [www.deafhhtech.org](http://www.deafhhtech.org).

### Principal Investigators

- **Vogler, Christian** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*

## Goal E: Research and Outreach

### Additional Investigators

- **Bernstein, Claire** • Hearing, Speech and Language Sciences
- **Parmanto, Bambang** • University of Pittsburgh
- **Kwon, Bomjun** • Hearing, Speech and Language Sciences
- **Firszt, Jill** • Washington University in St. Louis
- **Holden, Laura** • Washington University in St. Louis
- **Yoshinaga-Itano, Christine** • University of Colorado-Boulder
- **Gilley, Phillip** • University of Colorado-Boulder
- **Hamlin, Lise** • Hearing Loss Association of America
- **Devlin, Lisa** • Hearing Loss Association of America
- **Compton-Conley, Cynthia** • Hearing Loss Association of America
- **Shaewitz, Dahlia** • American Institutes for Research
- **Overton, Cynthia** • American Institutes for Research
- **Josias, Liza** • American Institutes for Research
- **Wu, Yu-Hsiang** • University of Iowa
- **Chipara, Octav** • University of Iowa
- **Barac-Cikoja, Dragana** • Hearing, Speech and Language Sciences
- **Brewer, Diane** • Consultant
- **Cole, Kevin** • Consultant
- **Julstrom, Stephen** • Consultant
- **Park, Jae-Heung** • Consultant
- **Kovacs, Lisa** • Consultant

### Research Projects

#### **Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program**

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

Technology is ubiquitous, playing a role in the lives of individuals from all generations. It is frequently viewed as a great equalizer that can improve the quality of a person's life, including the lives of people with hearing loss. Moreover, the trend toward interconnected smart devices offers consumers unprecedented opportunities to take control of their assistive technologies and hearing devices. However, consumers who are hard of hearing or deaf can take advantage of these opportunities only if they have knowledge of these technologies and how to use them. Unfortunately, research has shown that these consumers have trouble using their own hearing devices properly. Consumers may not even be aware of technologies included in hearing devices, such as telecoils, or their purpose. When technology problems arise, consumers may not know

how to engage with technology providers or industry manufacturers to try to solve their problem. They may also be unaware of their rights to communication access or when and how to inform policy makers if engaging with industry is not successful in solving a problem. Training is the key to addressing these issues in order to provide consumers who are hard of hearing or deaf themselves or are parents of hard of hearing or deaf children with the knowledge and skills to achieve the level of empowerment and control necessary to take full advantage of the hearing devices and other assistive and emerging technologies they might want or need to use. The RERC is developing a consumer-based technology-focused train-the-trainer (TTT) program, in collaboration with the Hearing Loss Association of America (HLAA), and Hands & Voices (HV) – a parent driven, non-profit organization dedicated to providing unbiased support to families with children who are deaf or hard of hearing. This TTT model emphasizes an active role for consumers who are hard of hearing or deaf and parents of children with hearing loss, one in which they share in the process of addressing their hearing health care needs, particularly related to assistive and emerging communications technologies.

### Principal Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Shaewitz, Dahlia** • American Institutes of Research

### Additional Investigators

- **Compton-Conley, Cynthia** • Hearing Loss Association of America
- **Devlin, Lisa** • Hearing Loss Association of America
- **Hamlin, Lise** • Hearing Loss Association of America
- **Josias, Liza** • American Institutes for Research
- **Julstrom, Stephen** (Consultant)
- **Kovacs, Lisa** • Consultant
- **Overton, Cynthia** • American Institutes for Research

#### **Project D2: Context-sensitive assessment of real-world listening situations via integrated smartphones and hearing aids**

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

In order to improve hearing aid outcomes, it is critical to understand listeners' perceptions with hearing aids in the real world so that problems/factors with them can be identified. To achieve this goal, field assessment tools are required that collect (1) perception data, (2) listening context information,

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which includes characteristics of listening activities, situations, and environments, and (3) hearing aid configuration. This is because (1) Listeners' perception, as well as the hearing aid configuration, are inextricably linked to listening context, and (2) Listening context changes from moment to moment. Traditional retrospective self-reports such as questionnaires, however, cannot fully characterize listeners' perceptions with hearing aids because they typically provide limited contextual information and collect average perception data. Traditional self-reports are further subject to recall bias for elderly listeners because their declining cognitive functions preclude them from correctly recalling listening experiences. To overcome the disadvantages of retrospective self-report assessments, a computer-based Ecological Momentary Assessment (EMA) system was developed. This system immediately and repeatedly records listeners' perceptions and listening context information in natural environments using mobile phones. AudioACE will be developed for this project, which builds on the previous system, and adds capabilities to respond to changes in listening context and intelligently records information that is relevant to the specific context; for example, silence and noisy conversational environments demand different types of data and responses. AudioACE will integrate hearing aids and mobile phones to capture hearing aid configurations for each listening context. Additionally, AudioACE will incorporate intelligent sampling techniques that trigger the delivery of momentary assessments based on the properties of the listening context (e.g., signal-to-noise ratio level). We will compare the sensitivity and efficiency of AudioACE and the previous system as part of a field study that evaluates the outcomes of directional microphone hearing aids.

### Principal Investigators

- **Wu, Yu-Hsiang** • Speech Pathology & Audiology • University of Iowa
- **Chipara, Octav** • University of Iowa

### Additional Investigator

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Product

Wu, Y. H., & Stangl, E. (2015, March). *Validity of ecological momentary assessment in audiology*. Presented at the meeting of the American Auditory Society, Scottsdale, AZ.

### Project D3: Interactive learning environment for optimizing technology use

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

For a person with hearing loss, technological developments continue to expand the sensory management options available through hearing devices. The diversity and sophistication of these new hearing enhancement options bring about an ever-increasing need for guidance and support in becoming a knowledgeable and effective user of a hearing device. There is also a growing realization that more realistic conditions during training may lead to greater transfer of acquired skills. Similarly, the importance of realistic expectations in setting aural rehabilitation goals both on the part of the hearing device user and the clinician/audiologist is universally acknowledged. To develop such expectations and ensure that the aural rehabilitation goals are challenging yet attainable for the user, an individualized and interactive process is needed. It is likely to include not only measurements of the person's hearing loss, but also a more efficient (sensitive and specific) assessment of his/her listening, comprehension, and communication abilities as well as aural rehabilitation goals and expectations. The goal of this project is to develop a prototype training/counseling program to simulate in some relevant ways, a variety of real-life listening situations so that a person can experience both the benefits and limitations of their new hearing device, and develop more realistic auditory rehabilitation goals and expectations. To accomplish this the training program will utilize an interactive learning environment based on self-directed exploration of the relationship between (i) acoustic factors that affect hearing/sound processing, and (ii) technological solutions and communication strategies that are aimed at improving sound detection, speech comprehension and the overall listening experience. The proposed training program is aimed at providing an alternative to the prevailing intensive learning paradigm and is believed to address several of its shortcomings. Realistic simulations of real-life listening situations will allow direct, structured experience that neither auditory training nor informational counseling provide.

### Principal Investigators

- **Barac-Cikoja, Dragana** • Hearing, Speech, and Language Sciences
- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*

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### Additional Investigator

- **Cole, Kevin** • NOVA Web Development

### **Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology**

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

The project aims to improve performance of cochlear implant users with enhanced aural rehabilitation (AR) strategies via telehealth technology, maximizing both access to auditory information and functional outcomes for individuals with hearing loss. Using a randomized controlled trial of AR via telerehab we will be able to demonstrate greater performance and usability of technology, and at the same time yield significantly greater accessibility to this effective intervention. Although there is great potential in AR services for CI users, there are both financial and non-financial barriers to AR service delivery. In surveys of U.S. adults, 21 percent reported nonfinancial barriers including accessibility (mobility, distance, and transportation problems), accommodation (too busy with work or caring for family), and availability. Those from rural areas report limited qualified providers, financial constraints, and reduced transportation access. As the population ages, which comprises a sizable portion of adults receiving CIs, mobility issues contribute a noteworthy barrier to AR access. Telehealth technologies are commonly regarded as promising options to improve access to health services. The previous RERC on hearing enhancement developed a state-of-the-art rehabilitation program conducted in clinical settings. Adapting this successful rehabilitation protocol for telerehab has the potential of greatly extending access to much needed rehabilitative services. It also lets consumers take advantage of the increasingly interconnected world in which they live.

### Principal Investigator

- **Bernstein, Claire** • Hearing, Speech, and Language Sciences

### Additional Investigators

- **Brewer, Diane** • Speech and Hearing Sciences • George Washington University
- **Parmanto, Bambang** • University of Pittsburgh

### Product

Bernstein, C. (2015, September). *Clinician directed auditory training with KTH Speech Tracking Software*. Retrieved from <http://hearingresearch.org/software/KTH/index.html>

### **Project R2: User-driven customization of cochlear implant programming**

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

Essential to the outcomes with a cochlear implant (CI) is the manner in which the external portion of the device, the speech processor, is programmed. Research has shown that each CI user requires an individualized set of programming parameters to achieve optimal performance. Importantly, no one set of parameters has been found to be optimal for all CI users. Presently, programming the speech processor is typically done heuristically in clinics following a procedure recommended by the manufacturer. Given the complexity of the programming space and limited guidance on effective programming protocols, clinicians tend to rely on “default” programming parameters recommended by the manufacturers. These default parameters may be used without exploration of other options, eliminating individualized optimization to achieve maximum performance. This trend is exacerbated by non-scientific factors such as limited manpower and clinic resources as well as low reimbursement for audiology services. As a result, individual customization of programming parameters for optimized speech understanding is not being accomplished. In this project, we aim to develop a consumer-driven, user-interface system assisting the programming process. The most notable feature of the proposed system is that it will allow CI users to control the programming of the device themselves and enable them to personally explore a wider range of programming parameters. Consequently, individual customization can be achieved to maximize performance at the individual level with less time from the audiologists. This also opens the door for user-driven customization of other types of hearing devices in the future, thereby giving consumers with hearing loss greater control over their use of technology.

### Principal Investigators

- **Kwon, Bomjun** • Hearing, Speech, and Language Sciences
- **Holden, Laura** • Washington University in St. Louis

### Additional Investigator

- **Park, Jae-Heung**



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### Project R3: Validation of hearing aid fitting for infants and toddlers

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

Current assessment protocols cannot be used to evaluate hearing aid settings in infants younger than 2.5 years of age, which poses a significant challenge when fitting amplification at such an early age. Further, the inherent variability of unconditioned behavioral responses in infants older than 6 months adds difficulty when making a clinical judgment of appropriate amplification. Identification of hearing in the newborn period requires a physiological protocol because reliable conditioned behavioral responses cannot be obtained in the first six to seven months of life. In the newborn period, a physiological protocol is also needed to validate hearing aid fitting of children with a speech discrimination procedure because obtaining a behavioral response for speech discrimination is not possible at this age. Likewise, there is a critical need to develop an objective behavioral measure of speech discrimination that can be reliable and valid for children between 7-9 months of age and 2.5 years of age, when auditory discrimination, the current standard for validation of hearing aid fitting, can be used. Two years is too long to wait to validate a hearing aid fitting done at 6 months of age, and 1.5 years is too long to validate a cochlear implant map for a 12 month old who has been recently implanted. A behavioral procedure needs to be done immediately after the fitting of amplification and this procedure needs to provide specific information about what the child is hearing with the amplification. The project aims to fill in the current gaps in validating amplification fitting for infants and toddlers below the age of 3 years, demonstrating that physiological measures can be used immediately after the first hearing aid fitting, followed by a behavioral validation beginning at 7 to 9 months of age. Coupled with improvements to parent report instruments, the project also aims to provide a procedure for assessing auditory development after the fitting of amplification that is developmentally sensitive, and these instruments will be used for progress monitoring rather than as an inadequate validation of hearing aid fitting in infants. The research will inform future technology developments: an app for visual reinforcement infant speech discrimination that will allow parents and early intervention providers to do discrimination work prelinguistically in the home, a LENA mobile reporting mechanism that will be consumer-friendly and provide parents feedback on their child's auditory environment, and a portable EEG unit that can be used to test for physiological responses in the infant's home.

### Principal Investigators

- **Yoshinaga-Itano, Christine** • University of Colorado-Boulder
- **Gilley, Phillip** • University of Colorado-Boulder

### Additional Investigator

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Products

Yoshinaga-Itano, C. (2015, March). *The past, present & future: Early hearing detection and intervention*. Keynote address presented at the Audiology Now Conference, San Antonio, TX.

Yoshinaga-Itano, C. (2015, March). *Universal newborn hearing screening: The evolution of a revolution*. Keynote address presented at the meeting of the American Acoustical Society, Phoenix, AZ.

### Quantifying the needs of people with hearing loss in using technology for daily and emergency voice telecommunication (R1)

**Status:** Completed

**Start date:** October 2009

**End Date:** September 2015

Research on needs and issues of hard of hearing persons with regard to accessibility has not kept pace with the expansive changes that have taken place in telecommunications. There is a need for direct measures of the actual communication difficulty experienced during telecommunications use by hard of hearing individuals, and also for an understanding of the day-to-day consequences of changes in telecommunication technology. A two-part project is documenting the needs of people with hearing loss in using new technologies for daily and emergency voice telecommunications. Part 1 is an Internet survey that will collect information on a respondent's attitudes and behavior toward hearing device and telecommunications products use, their opinions about the main telecom barriers faced at home and at work, and their experiences in attempting to find and use new telecommunications products. Part 2 involves direct performance measures and subjective ratings of audio and audio/visual signal characteristics to gather information about technical requirements that hard of hearing individuals have for effective speech understanding in newer telecommunication environments. Specific goals include examining the impact of audio and video signal alteration due to coding techniques and transport mechanisms and evaluating

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voice communication access in both quiet and noisy environments.

### Principal Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Vogler, Christian** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Williams, Norman** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Additional Investigator

- **Tucker, Paula** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Funding Source

- U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)-Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA)-UW-Madison subgrant

### Product

Kozma-Spytek, L. (2014, October). *Voice telecommunications accessibility for individuals with hearing loss II*. Presented at the meeting of the European Telecommunications Standards Institute's Technical Committee on Speech and Multimedia Transmission Quality, Prague, Czech Republic.

### Resource and tool development to facilitate incorporation of accessibility in mainstream telecommunication

**Status:** Completed

**Start date:** October 2009

**End Date:** September 2015

This project is focused on making access real in the lives of people with disabilities. It takes the best of what the research center knows and learns (both from our own work and others) and does whatever is necessary to move it out of theory and demonstration into products, standards, policies, and practices. This work covers all disabilities. Some of the targeted areas are identified but this project also is designed to be responsive to the needs of industry, consumer groups, and policy makers. The focus of this project is developing the information, tools, or reference designs, etc. needed to advance accessible tele-conversation and telecollaboration from research and development into products that consumers can buy and/or the technologies they encounter in emergencies, education, employment, civic participation, and everyday life.

### Principal Investigators

- **Vogler, Christian** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Vanderheiden, Gregg** • Industrial Engineering - Trace Research & Development Center • University of Wisconsin, Madison

### Additional Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Tucker, Paula** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Williams, Norman** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Funding Source

- U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)-Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA)-UW-Madison subgrant

### Products

Aström, L., & Vogler, C. (2015, August). *Seamless access to communication services - From legacy technology to total conversation without disruption*. Presented at the meeting of the Telecommunications for the Deaf and Hard of Hearing, Inc., Baltimore, MD.

Charmatz, M., Hall, A., Stout, C., Vanderheiden, G., & Vogler, C. (2015). *Comments on the ATBCB proposed rule: Information and communication technology standards and guidelines* (Docket No. ATBCB-2015-0002-0116). [Comments]. Retrieved from [www.regulations.gov](http://www.regulations.gov)

Hellström, G., Vanderheiden, G., & Vogler, C. (2015, September). *In the matter of petition for rulemaking to update the commission's rules for access to support the transition from TTY to Real-Time-Text technology, and petition for waiver of rules requiring support of TTY technology* (GN Docket 15-178). [Comments]. Washington, DC: Federal Communications Commission. Retrieved from <http://apps.fcc.gov/ecfs/comment/view?id=60001299135>

### Scholarly and Creative Activity

Julstrom, S., & Kozma-Spytek, L. (2014). Subjective assessment of cochlear implant users' signal-to-noise ratio requirements for different levels of wireless device usability. *Journal of the American Academy of Audiology*, 25(10), 952-968.

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Julstrom, S., & Kozma-Spytek, L. (2015, February). In the matter of request for updated information and comment on wireless hearing aid compatibility regulations (WT Dockets 07-250 & 10-254). [Comments] Washington, DC: Federal Communications Commission. Retrieved from <http://apps.fcc.gov/ecfs/comment/view?id=60001014596>

### Technology Access Program (TAP)

The Technology Access Program (TAP) is a research unit within the Department of Art, Communication and Theatre. TAP's primary mission is to advance accessibility and usability of communication technology for people with all types of disabilities. The current program is designed both to lay the foundation for access in next generation technologies and to create the bridge technologies needed to allow users to migrate to new technologies without losing access to emergency services or the ability to communicate with colleagues and family who are still on older telecommunications networks.

TAP currently maintains the Rehabilitation Engineering Research Center on Telecommunications Access (RERC-TA). The research and development program of this RERC-TA covers four areas:

1. To ensure that people with disabilities have effective communication for an emergency (and every day) when using new and emerging telecommunication technologies.
2. To ensure interoperable real-time text for people who depend on text for communication (Deaf, hard of hearing, physical disability, and speech disability).
3. To ensure the availability of accessible telecollaboration solutions for employment and participation, and
4. To increase the impact of research through better guidelines, standards, tools, sample codes, and other resources that enable more companies to implement accessibility in their telecommunication technologies.

In addition, TAP currently conducts research into online sign language technologies, funded by the National Science Foundation, and research into closed captions online, funded by TAP's operational budget.

#### Principal Investigator

- **Vogler, Christian** • Art, Communication and Theatre - *Technology Access Program (TAP)*

#### Additional Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Tucker, Paula** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Williams, Norman** • Art, Communication and Theatre - *Technology Access Program (TAP)*

#### Funding Source

- U.S. Dept. of Education — National Institute on Disability & Rehabilitation Research (NIDRR) (Subcontract from Trace Center, University of Wisconsin, Madison)  
Grant Number: H133E090001

#### Research Projects

##### Accessible communication for everyone (video relay services software)

**Status:** Ongoing

**Start date:** May 2015

**End Date:** July 2016

This project consists of developing a new breed of video relay services (VRS) software to address persistent interoperability problems, as well as the closed nature of the VRS ecosystem. This software was originally suggested by the Gallaudet University Technology Access Program, and adopted by the FCC in a 2013 order, and funded in 2015. This software will be open-source and serve as a baseline for enforcing interoperability among VRS videophones and software. It also is expected to jump-start independent research and development. The targeted systems are Windows, Mac, iOS, and Android.

#### Principal Investigator

- **Vogler, Christian** • Technology Access Program (TAP) - *Technology Access Program (TAP)*

#### Additional Investigator

- **Tucker, Paula** • Art, Communication and Theatre - *Technology Access Program (TAP)*

##### Instructional videos on telecommunications access

**Status:** Ongoing

**Start date:** November 2014

**End Date:** November 2015

A series of accessible instructional videos are being developed that provide in-depth information that consumers with hear-



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ing loss need in order to learn about the effective use of their hearing devices with telecommunications technologies. Each video will be informal, brief and cover a specific topic of concern frequently expressed by consumers. The information and instruction will provide general principles that can be applied across a single product category regardless of manufacturer. Each video production will undergo quality assurance measures and be disseminated to the public via the Internet.

### Principal Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Vogler, Christian** • Technology Access Program (TAP) - *Technology Access Program (TAP)*

### Additional Investigator

- **Julstrom, Stephen** (Consultant)

### Receptive listening — narrowband vs. wideband with network impairments for the iPhone

**Status:** Ongoing

**Start date:** October 2014

**End Date:** October 2015

In collaboration with AT&T, this research project addresses the needs and issues of hard of hearing people with regard to accessible telecommunications. This project involves direct performance measures and subjective ratings of audio signal characteristics to gather information about technical requirements that hard of hearing individuals have for effective speech understanding in newer telecommunication environments. Specific goals include examining the impact of audio signal alteration due to coding techniques and network impairments.

### Principal Investigators

- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Vogler, Christian** • Technology Access Program (TAP) - *Technology Access Program (TAP)*

### Additional Investigators

- **Tucker, Paula** • Art, Communication and Theatre - *Technology Access Program (TAP)*
- **Williams, Norman** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### Scholarly and Creative Activity

Jain, D., Findlater, L., Gilkeson, J., Holland, B., Duraiswami, R., Vogler, C., ...Froehlich, J. E. (2015, April). Head-Mounted display visualizations to support sound awareness for the deaf and hard of hearing. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (pp. 241-250). New York, NY: ACM.

Vogler, C. (2014, October). Technology access for the deaf and hard of hearing. Presented at the International Conference for Disability and Rehabilitation, Riyadh, Saudi Arabia.

Vogler, C. (2015, January). Research and emerging technologies. Panel presentation conducted at the US Access Board on Hearing Access, Washington, DC.

Vogler, C. (2015, July). Accessibility, the technology development cycle, and the crystal ball. Presented at American University, Washington, DC.

### Science of Learning Center on Visual Language & Visual Learning (VL2)

Hosted by Gallaudet University, the Science of Learning Center (SLC) on Visual Language and Visual Learning (VL2) is one of six SLCs funded by the National Science Foundation (NSF). These Science of Learning Centers were established by NSF to support interdisciplinary and cross-disciplinary research that presents new lines of thinking and inquiry into the science of learning.

A driving question in contemporary neuroscience is how the human brain and human learning are impacted by different sensory experience in early life. Much scientific focus has examined the role of sound and auditory processes in building abstract linguistic, cognitive, and social representations, leaving one of our species' most critical senses, vision, underspecified regarding its contribution to human learning. Within VL2, we focus on how early experience with a visual language changes the brain's visual attention and higher cognitive systems, language learning in monolingual and bilingual contexts, and reading and literacy—indeed changes that are distinct and separable from sensory differences (Deaf or hearing). How vision impacts learning in these domains constitutes a vital “missing piece” of knowledge in the promotion of productive, successful lives for all humans. A strong revolution in purpose derives from the strength and depth of the involvement of and collaboration with Deaf individuals in this research endeavor—individuals who rely significantly on vision, acquire

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naturally visual signed languages, and learn how to read and write fluently without prior mastery of the spoken form of written languages. The formal properties of visual languages, the enabling learning contexts, and the multiple pathways used to derive meaning from the printed word are leading to a better understanding of how visual language and visual learning are essential for enhancing educational, social, and vocational outcomes for all humans, Deaf and hearing individuals alike, consequently transforming the science of learning. Moreover, the identification of specific processing advantages in the young “visual learner” have already provided a significant conceptual challenge to prevailing societal views by offering an alternative to prior “deficit models.” They further provide new approaches to helping all young learners capitalize on visual processes.

While all the work of VL2 is collaborative and interdisciplinary, the activities of the Center are focused around five Strategic Focus Areas (SFAs):

- SFA1: Visual and cognitive plasticity
- SFA2: Language development and bilingualism
- SFA3: Reading and literacy in visual learning
- SFA4: Translation of research to educational practice
- SFA5: Integration of research and education

Descriptions of each SFA is given below along with the list of current projects and the 2012 achievements produced by its affiliated researchers (both from prior and current projects). Then there is a description of each current project followed by a list of other scholarly achievements of VL2

### Principal Investigators

- **Allen, Thomas** • Gallaudet University
- **Petitto, Laura Ann** • Gallaudet University
- **Corina, David** • University of California, Davis
- **Emmorey, Karen** • San Diego State University
- **Hauser, Peter** • National Technical Institute for the Deaf (NTID) • Rochester Institute of Technology (RIT)
- **Morford, Jill** • University of New Mexico
- **Singleton, Jenny** • Georgia Institute of Technology

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

Additional information regarding the Science of Learning Center on Visual Language & Visual Learning (VL2) can be found at <http://vl2.gallaudet.edu/>

### Research Projects

#### ASL assessment toolkit

**Status:** Ongoing

**Start date:** October 2011

Since its inception, VL2 has had an ongoing effort to develop and validate measures of ASL skill, especially those that are suitable for tracking and monitoring the development of ASL skill among young children. The researchers at VL2 have also been working to adapt and modify a broad array of neurocognitive measures with ASL translations and methods suitable for both children and adults. Ultimately, the goal is to build a “one-stop shop” ASL assessment portal that will provide access to the tools themselves and an online means for test administration.

### Principal Investigator

- **Allen, Thomas** • Education

### Additional Investigators

- **Baker, Sharon** • University of Tulsa
- **Clark, Diane** • Lamar University
- **Fernandez, Ralph** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **McQuarrie, Lynn** • University of Alberta
- **Paludnevicene, Raylene** • Psychology
- **Rodriguez, Yessica (Student)** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Simms, Laurene E.** • Education

### Funding Source

- National Science Foundation (NSF)

#### ASL-English bilingual story apps

**Status:** Ongoing

**End Date:** September 2015

VL2 has released first of planned ASL/English storybook apps, “The Baobab”, in early 2013 and “The Boy Who Cried Wolf”, “The Blue Lobster” and “The Solar System” in 2014. The research based design of storybook apps will encourage children to be immersed in a bilingual environment, with ASL storytelling and active vocabulary words. Selected vocabulary come with video components including signed and fingerspelled

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words. Storybook apps are designed for the iOS, and runs on all iPad versions. During 2014, VL2 designed and conducted a usability study of the storybook apps, and completed work on the “Storybook Creator”, a tool for automating the creation of “Storybook Apps” in the future.

### Principal Investigator

- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

### Additional Investigators

- **Allen, Thomas** • Education
- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Wang, Yiqiao** • Science of Learning Center on Visual Language & Visual Learning (VL2)

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Continuing medical education modules

**Status:** Ongoing

**Start date:** October 2012

Parents of babies newly diagnosed as being deaf are faced with many critical and immediate challenges. They rely, as “first responders,” on professionals in the medical profession: pediatricians, otolaryngologists, audiologists, etc. It is clear that decisions that parents make very early in a child’s life can have a profound impact on the trajectory of the child’s later success in society. It is therefore urgently important that members of the medical profession who will communicate with these parents understand deaf individuals as visual beings, and are aware of the communication and language options that are open to the child. As well, they need to know the underlying neurological and cognitive underpinnings of development for children who are deaf. VL2 is developing continuing education modules designed for this group of medical professionals to better prepare them to communicate important and relevant information to patients, clients, and their caregivers.

### Principal Investigator

- **Singleton, Jenny** • Georgia Institute of Technology

### Additional Investigator

- **Allen, Thomas** • Education

### Funding Source

- National Science Foundation (NSF)

### Cross-language activation during sentence comprehension in Deaf bilinguals

**Status:** Completed

**Start date:** September 2011

**End Date:** December 2014

Extensive research on spoken language bilinguals indicates that bilinguals do not “switch off” the language not in use even when it might be beneficial to do so. VL2 investigators recently found evidence that signs are active during print word comprehension for ASL-English and DGS-German deaf bilinguals. These results indicate that cross-language activation occurs even in the absence of phonologically or orthographically similar forms in the two languages (e.g., cognates and homographs). Cross-language activation in deaf bilinguals may occur post-lexically rather than pre-lexically given the lack of cognates and homographs. Ongoing investigation is exploring this question through a study of the time course of cross-language activation.

### Principal Investigators

- **Piñar, Pilar** • World Languages and Cultures
- **Dussias, Paola E.** • Pennsylvania State University
- **Morford, Jill** • University of New Mexico

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Deaf Studies Digital Journal

*See in ASL and Deaf Studies*

### The development of perceptual span in beginning and developing deaf readers

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

There is an intricate relationship between reading skill and American Sign Language skill. The earlier a deaf child has been exposed to sign language, and the more skilled he/she is with sign language, the better his/her chances are of becoming a skilled reader. Research using tasks tapping low-level visual attention processing suggests that deaf individuals have enhanced peripheral attention relative to hearing individuals. This enhanced visual attention distribution is believed to explain the wider perceptual span seen during silent reading

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in adult skilled deaf readers. deaf readers' age of ASL acquisition was also highly related with reading level. In light of the research with deaf adults and older deaf children linking low-level visual attention adaptations, reading skill, perceptual span size, reading skill, and ASL proficiency, the present project will expand the investigation to examine the relationships among these variables in severely to profoundly deaf children. Participants will be ASL users ages 7-9 years and 13-15 years. They will be compared to age-matched hearing readers. Eyetracking data will be collected using Eyelink 2K during a reading task. The main measure is the number of words read per minute to determine the size of the perceptual span. Other factors to be analyzed include ASL proficiency, age, reading level, and hearing status (hearing vs. deaf).

### Principal Investigator

- **Rayner, Keith** • University of California, San Diego

### Additional Investigators

- **Allen, Thomas** • Education
- **Bélanger, Natalie** • University of California, San Diego
- **Morford, Jill** • University of New Mexico

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### The development of visual processing in Deaf infants

**Status:** Completed

**Start date:** September 2011

**End Date:** September 2014

The visual system is segregated into parallel dorsal and ventral visual pathways that are responsible for coding different aspects of visual information, namely motion and objects/faces, respectively. This study contrasts performance on tasks that tap processing within these pathways: a dorsal global motion task and a ventral form segmentation task. Motion processing may be altered in Deaf individuals because of their deafness, and increased reliance on visual cues, or because of experience with ASL. For many perceptual tasks, Deaf perform similarly to hearing individuals. Most notably, robust group differences in brain laterality have been described. Specifically, both native Deaf and hearing signers show a left hemisphere advantage, while a slight opposite or no asymmetry is seen in nonnative signers or hearing nonsigners for motion processing. Thus, this laterality effect is most likely tied to early acquisition of ASL rather than deafness. The age when this hemispheric asymmetry emerges is unknown. This research study comple-

ments and extend these findings by examining the hemispheric development of form segmentation in an effort to understand the plasticity of ventral visual pathways in these same infants language skill.

### Principal Investigators

- **Allen, Thomas** • Education
- **Bosworth, Rain** • University of California, San Diego
- **Dobkins, Karen** • University of California, San Diego

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Do young deaf bilinguals access ASL forms while reading English words?

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

Extensive research on spoken language bilinguals indicates that bilinguals do not "switch off" the language not in use. Recent studies on cross-language activation in deaf bilingual adults show that they activate signs when they process spoken language words presented exclusively in print. This suggests that deaf bilinguals' path to reading might be based on mappings between orthographic representations and sign language form-meaning pairings. Research with children has found evidence of cross-language activation among deaf bilingual Dutch children in a print-picture matching task. We attempt a more stringent test of cross-language activation in children by evaluating whether signs are activated without pictures, only in the context of English print. This study investigates how the relationship between American Sign Language (ASL) and English changes across developmental stages and as proficiency in English increases. The study will provide new insight into which aspects of sign language form are being activated in the cross-language activation in ways that will help clarify the role of visual sign phonology in children's reading. We examine RT to semantic judgments of English words in 30 deaf ASL-English bilinguals, 30 hearing L2 English bilingual controls, and 30 hearing monolingual controls (n=90; 6th -8th grade). Participants view two sequentially presented English words and decide if the words are semantically related or unrelated. The translation equivalents of the stimulus pairs are either visual sign phonologically related in ASL or unrelated.

### Principal Investigator

- **Wilkinson, Erin** • University of Manitoba

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### Additional Investigators

- **Allen, Thomas** • Education
- **Morford, Jill** • University of New Mexico
- **Piñar, Pilar** • World Languages and Cultures

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Electrophysiological indices of visual language experience on auditory and visual function

**Status:** Completed

**Start date:** September 2011

**End Date:** December 2014

Early interventions during infancy and early-childhood provide the greatest benefit for developing language abilities. However, there is controversy over the best strategies to promote linguistic competencies in deaf children who are unable to process spoken language. While technological advances in cochlear implants (CI) may provide improved access to auditory information, linguistic development in deaf children raised in hearing households often remains compromised. One concern is whether exposure to visual language in the absence of auditory input will fundamentally change the organization of the auditory cortex, either by inducing cross-modal plasticity or making auditory cortex responsive to visual input ultimately resulting in reduced spoken language processing. This study uses electrophysiological measures to assess the impact of visual language exposure on auditory and visual cortical function in deaf toddlers with CI.

### Principal Investigators

- **Corina, David** • University of California, Davis
- **Sharma, Anu** • University of Colorado

### Additional Investigator

- **Allen, Thomas** • Education

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Ethical practices website

**Status:** Completed

**Start date:** September 2008

**End Date:** September 2014

Through the VL2 Center, deaf and hearing scientists from many research institutions are engaged in collaborative studies investigating questions about how the brain adapts to different sensory experiences and early exposure to a visual language. Many of the H3 Research Projects funded by the VL2 Center involve research participants who are deaf and who use American Sign Language. With the Center's collective experience we offer a set of guidelines for responsible and ethical conduct for researchers whose projects involve individuals who are deaf. VL2 is currently designing a website on which these principles will be presented, discussed, and sample ASL informed consent videos will be available for download and use by researchers in the future.

### Principal Investigators

- **Allen, Thomas** • Education
- **Singleton, Jenny** • Georgia Institute of Technology

### Additional Investigator

- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

### Funding Source

- National Science Foundation (NSF)

### Fingerspelling development as alternative gateway to phonological representations in Deaf children

**Status:** Completed

**Start date:** September 2011

**End Date:** December 2014

Deaf toddlers use fingerspelling as a part of their signed language competency without any explicit awareness of the mapping between handshapes and print representations. By school age, they begin to develop this awareness. Deaf children learn to fingerspell "twice", recognizing that the initial representation of fingerspelling is lexical in nature, and only subsequently do they identify the compositional structure of fingerspelled words. Research has shown high correlations between Deaf children's fingerspelling skills and later English print vocabulary. Despite the importance of fingerspelling, there is no test of fingerspelling skills. This assessment tool would incorporate a model that fingerspelling skills demonstrate knowledge of word internal structure and would assess



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elements such as: (1) coarticulation of consonantal clusters; (2) representation of word internal units comparable to syllables in spoken language; and (3) typical confusions made in finger-spelling due to similar handshapes. It would be based, in part, on tests of phonological awareness in spoken languages, and of orthographic awareness progress monitoring of fingerspelling development. Data collection for this project is completed, and a manuscript is in preparation.

### Principal Investigators

- **Allen, Thomas** • Education
- **Schick, Brenda** • University of Colorado

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Gaze-Following in Deaf infants

**Status:** Completed

**Start date:** September 2011

**End Date:** September 2014

For deaf children exposed to visual language, object exploration and receiving caregiver linguistic input requires sequential or alternation of eye gaze. Research shows that deaf toddlers exposed to ASL are adept at regulating their eye gaze without having to be explicitly alerted to do so. Furthermore, deaf adults exhibit distinct patterns of visual attending and executive functioning. This study investigates the developmental trajectory of gaze-following and attention shifting. This research considers these behaviors to be an important index of emergent self-regulation and executive functioning. From a neurocognitive perspective, the frontoparietal network is heavily implicated in the integration of bottom-up perceptual inputs as well as top-down influences, such as caregiver behaviors that socialize gaze-following.

### Principal Investigators

- **Singleton, Jenny** • Georgia Institute of Technology
- **Brooks, Rachele** • University of Washington
- **Corina, David** • University of California, Davis
- **Meltzoff, Andrew** • University of Washington

### Additional Investigator

- **Allen, Thomas** • Education

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Home, school, and early language factors impacting the acquisition of reading skills among Deaf children with and without cochlear implants, and with and without early exposure to sign language

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

Investigate, using statistical modeling, individual differences, multiple variables, and the impact of these factors on reading and cognitive development in young deaf readers. Particular scientific study involves the variability in communication background, language and sensory experience, age of first language exposure (AoE), Cochlear Implant use, and socioeconomic status (SES) that exist among young deaf readers. The researchers analyze the multiplicity of factors and contexts that underlie skilled reading in visual learners in our large Early Education Longitudinal Study (EELS) dataset that was collected during Years 5-7 of the Center. The longitudinal dataset followed deaf toddlers through early schooling. New here is the analyses of the home, school, and early language factors impacting the acquisition of reading skills among deaf children with and without Cochlear Implants, and with and without early-exposure to a visual sign language. This work requires a highly integrated effort around multiple measures of reading and reading-related skills as well as a variety of complex statistical models.

### Principal Investigator

- **Allen, Thomas** • Education

### Additional Investigators

- **Clark, Diane** • Lamar University
- **Fernandez, Ralph** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Letteri, Amy** (Student) • Psychology
- **Morere, Donna** • Psychology
- **Roberts, Rachel** (Student) • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Rodriguez, Yessica** (Student) • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Zimmerman, Heather** (Student) • Science of Learning Center on Visual Language & Visual Learning (VL2)

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

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### Individual differences in deaf readers

**Status:** Completed

**Start date:** September 2011

**End Date:** December 2014

This study examines individual difference variables that contribute to reading and comprehension skill in the hearing population, but that have not yet been investigated among the deaf. These variables include working memory capacity, verbal fluency, executive/attentional control, inhibitory control, processing speed, vocabulary knowledge, and ASL proficiency.

#### Principal Investigators

- **Allen, Thomas** • Education
- **Corina, David** • University of California, Davis
- **Morford, Jill** • University of New Mexico
- **Traxler, Matthew** • University of California, Davis

#### Additional Investigator

- **Long, Debra** • University of California, Davis

#### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Learning to read with visual languages: Investigation of the impact of native language ASL visual sign phonology training on emergent and developing literacy in English (new language)

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

Conducting a multi-site, school-based training study designed to examine the effects of intensive small group visual sign phonological awareness training both on ASL language and on English literacy outcomes over time (children grades K-4, approximately ages 5-9 years). It examines the individual characteristics and contextual conditions that impact reading and signed language vocabulary growth in K-4 students, with the goal of identifying powerful predictors of reading success in young visual learners. In turn, the visual sign phonology training will lay bare, and provide evaluation of, the components of training necessary to improve English reading and literacy trajectories in young deaf children. It further addresses the need for more longitudinal training studies that will advance our knowledge of optimal learning strategies to support all young deaf children in reading success, inclusive of deaf children with and without Cochlear Implants.

#### Principal Investigators

- **McQuarrie, Lynn** • University of Alberta
- **Enns, Charlotte** • University of Manitoba

#### Additional Investigator

- **Allen, Thomas** • Education

#### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Motion capture & nursery rhymes

**Status:** Ongoing

**Start date:** May 2014

The working project is to investigate the motion capture technology and develop a working “proof of concept” ASL nursery rhyme produced in mocap. This is also to strengthen collaborative work between Gallaudet University’s Visual Language and Visual Learning, Motion Light Lab, with Mocaplab, a leading motion capture Motion capture technology allows flexibility in developing stimulus for H3 Research Projects looking to identify the rhythmic temporal patterns in young infants, when they are engaged and learning; we are interested in finding the code and to further understand the structure in ASL rhymes and to improve our storytelling patterns for young children.

#### Principal Investigator

- **Malzkahn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

#### Additional Investigator

- **Bahan, Benjamin** • ASL and Deaf Studies

#### Funding Source

- National Science Foundation (NSF)

### Optical imaging of visual selective attention in deaf adults

**Status:** Completed

**Start date:** September 2011

**End Date:** December 2014

Deaf adults are better than hearing adults at detecting peripheral motion and localizing peripheral targets embedded within distractors. The way in which alternations in neural functioning underpin this behavioral advantage is still unclear. Two candidates not mutually exclusive are that (a) peripheral visual representations in occipital cortex are enhanced by top-down modulation from parietal areas; and (b) auditory processing



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areas in temporal cortex are co-opted to support peripheral visual processing. To examine these possibilities, it is hypothesized that, in a task requiring localization of a peripheral visual stimulus, Deaf observers will show elevated recruitment in temporal cortex relative to hearing observers. The spatial distribution of visual selective attention are being assessed in 10 profoundly Deaf and 10 hearing adults, using the Useful Field of View with peripheral targets at 7 and 20 degrees, in attentionally demanding and undemanding conditions. Behavioral performance will be used to determine individual thresholds. These same observers will then perform a modified version of the same task (with difficulty adjusted individually according to behavioral thresholds) while cortical activity is recorded using the optical imaging suite in the new Biomedical Imaging Center at the Beckman Institute. This equipment allows recording of both NIRS and EROS signals, providing excellent temporal and spatial resolution.

### Principal Investigators

- **Gratton, Gabriele** • University of Illinois
- **Dye, Matthew** • University of Illinois
- **Fabiani, Monica** • University of Illinois

### Additional Investigator

- **Allen, Thomas** • Education

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Parents information package

**Status:** Completed

**End Date:** September 2014

The parent information package, “Growing Together,” is a collection of appealing and accessible resources for hearing parents of deaf children. It is intended to share the science of learning or research-based information related to ASL/English bilingualism. The primary audience this product is intended for is hearing parents of deaf or hard-of-hearing children. The other groups may use this package to share with their customers, clients, or stakeholders such as educators, practitioners, and medical professionals. The next step is to study the usability (and accessibility) of this package. Focus groups will be set up and input solicited from them about the package as well as getting demographic information from people who are getting those packages and conduct survey questions to them about the content of the package. The first focus is on usability characteristics and the next focus of the study will be on efficacy of this package.

### Principal Investigators

- **Malzkahn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

### Funding Sources

- National Science Foundation (NSF)
- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### The role of gesture in learning

**Status:** Completed

**Start date:** September 2011

**End Date:** September 2014

Gesture is ubiquitous in speech, but its role in cognition and language is little understood. In hearing children, gesture and speech are in different modalities, but in deaf, signing children, gestural and linguistic expression share a single modality. If gesture helps hearing children because it is spatial, then deaf, signing children should show the same, if not better, benefit. But if gesture helps hearing children because it relieves cognitive load on speech, then deaf, signing children should show no benefit from using spatial and imagistic signs as they try to learn new concepts. The preliminary results of the study show that deaf, signing children do benefit from training, perhaps to a greater degree than hearing children. Two new groups of subjects were tested later in the study: hearing, non-signing children, and deaf, signing children of hearing parents. Data is currently being analyzed.

### Principal Investigators

- **Padden, Carol** • University of California, San Diego
- **Goldin-Meadow, Susan** • University of Chicago

### Additional Investigator

- **Allen, Thomas** • Education

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### SFA1: Visual and cognitive plasticity

**Status:** Ongoing

This research intends to determine the effects of variation in sensory and linguistic experience on the development of visual and higher cognitive systems. Using multiple methods

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and grains of analyses, spanning VL2's psychophysical and neurophysiological studies, VL2 researchers have made significant contributions to Theme 1, regarding our understanding of the impact that early visual sensory and visual language experiences can have on neural systems and higher cognitive processes following differences in early sensory experience. In years 8-9, and beyond, we use our foundational findings as a springboard to ask next-step questions, which is how do such visual affordances impact higher cognitive processes underlying healthy language processing and reading—indeed, higher cognitive processes that are central to achieving lifelong academic and societal success. SFA1 (led by Bosworth) studies 1-3 (PIs, Bosworth, Petitto, and Rayner, respectively) share a scientific goal of studying visual perception of language input, including the visual cues that make possible the young infant's capacity to differentiate visual language from gesture (where both reside in the same modality), and the behavioral and/or neural processes underlying ASL vocabulary, fingerspelling, orthographic decoding, and reading. All three studies in SFA1 are united by their advancement of the Center's scientific themes. They address the impact of differences in early visual sensory experience (Theme 1), the impact of ASL exposure when it is early versus late (critical/sensitive period hypothesis, Theme 2), and are united by their goal to understand the different learning mechanisms that make possible the child's capacities underlying visual sign phonology, and their relation to successful reading acquisition (Theme 3).

### Principal Investigators

- **Allen, Thomas** • Education
- **Corina, David** • University of California, Davis
- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Belanger, Natalie** • University of California, San Diego
- **Bosworth, Rain** • University of California, San Diego
- **Hwang, So-One** • University of California, San Diego • Student
- **Jasinska, Kaja** • Haskins Laboratories • Yale University
- **Langdon, Clifton**
- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Morford, Jill** • University of New Mexico
- **Rayner, Keith** • University of California, San Diego
- **Stone, Adam** • Educational Neuroscience-PEN

### Products

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Ferreira, & M. Miozzo (Eds.), *The Oxford handbook of language production* (pp. 393-416). New York, NY: Oxford University Press.

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Emmorey, K. (2014, October). *The neurocognitive underpinnings of reading skill in profoundly deaf adults*. Presented at the Australasian Deaf Studies Research Symposium, Sydney, Australia.

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### **SFA2: Language development and bilingualism**

**Status:** Ongoing

The goal of this research is to understand the principles and organization of linguistic competencies developed through the visual modality. Researchers in the language development and bilingualism strategic focus area at VL2 have discovered new support for the important role that timing, plays in early language acquisition (as in the Critical/Sensitive Period Hypothesis), especially early bilingual language acquisition. Some of the earliest studies completed in the Center investigated whether signs are activated during print word recognition in "print bilinguals." These studies of deaf adults involved the remarkable case of a new kind of bilingual, print bilinguals, whereupon deaf individuals had their first language exposure to ASL and gained access to their other language (English) through the printed word. This foundational work led to the surprising implication that visual sign phonology may not only play a role in sign language processing but also in recognition of English print when reading words. However, the role of visual sign phonology in young deaf children remains open as we do not yet know whether activation of sign parameters during reading emerges only after reading proficiency is achieved, or whether sign phonology is instrumental in the development of reading skills. This will be the focus of SFA 2 in Years 8-9, with these questions being specifically studied.

### **Principal Investigator**

- **Morford, Jill** • University of New Mexico

### **Additional Investigators**

- **Emmorey, Karen** • San Diego State University
- **Hauser, Peter** • National Technical Institute for the Deaf • Rochester Institute of Technology
- **Piñar, Pilar** • World Languages and Cultures
- **Quinto-Pozos, David** • Linguistics • University of Texas, Austin
- **Wilkinson, Erin** • University of Manitoba

### **Funding Source**

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

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### Products

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Geer, L., & Keane, J. (2014). *Exploring factors that contribute to successful fingerspelling comprehension*. Poster presented at the International Conference on Language Resources and Evaluation, Reykjavik, Iceland.

Hauser, P. C. (2014, October). *Impact of visual bilingualism on cognitive development*. Keynote address presented at the Bilingual Symposium, Sydney, Australia.

Hilger, A. I., Loucks, T. M. J., Quinto-Pozos, D., & Dye, M. W. G. (2015). Second language acquisition across modalities: Production variability in adult L2 learners of American Sign Language. *Second Language Research*, 31(3), 375-388.

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Morford, J. P., Anible, B., Kroll, J., Occhino-Kehoe, C., Piñar, P., & Wilkinson, E. (2015, May). *When does English print activate ASL signs in deaf sign-print bilinguals?* Poster presented at the International Symposium on Bilingualism, New Brunswick, NJ.

Morford, J. P., Kroll, J. F., Piñar, P., & Wilkinson, E. (2014). Bilingual word recognition in deaf and hearing signers: Effects of proficiency and language dominance on cross-language activation. *Second Language Research*, 30(2), 251-271.

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Singleton, J., & Martinez, D. (2015, March). *ASL learning among hearing students with language & learning impairments*. Presented at the meeting of the Society for Research in Child Development, Philadelphia, PA.

Twitchell, P., Morford, J. P., & Hauser, P. C. (2015). Effects of SES on literacy development of Deaf signing bilinguals. *American Annals of the Deaf*, 159, 433-446.

### SFA3: Reading and literacy in visual learning

**Status:** Ongoing

The purpose of this project is to determine the contribution of variation in sensory and linguistic experience on the development and mastery of reading and literacy. From our brain and behavioral studies of reading and literacy in visual learners comes a new understanding of how experiential change can impact the brain's structures and related functions underlying children's reading and literacy success, which, synergistically, also corroborates Theme 1. How children learn to read has tremendous theoretical and educational significance, and the study of early language learning and reading constitutes core scientific threads that bind VL2. Reading is a complex, multifaceted process and Center studies address reading from multiple levels. SFA 3 studies have a strong focus on the relative weight of these multiple factors including the sign-phonological, morphological, syntactic, semantic, and higher cognitive developmental factors that contribute to successful reading, as well as children's comprehension of reading. Moreover, SFA 1 and 2 focused on experimental studies in the lab and here in SFA 3 we focus on experimental studies in the classroom. Prior research in studies of how children learn to read have focused greatly on auditory sources of information, such as sound-based phonological awareness in the young reader, and less on understanding the role of visual input. VL2 studies have revealed that spoken language phonological processing skills do not account for much of the variance in reading achievement in deaf students. Instead the quality of first-language knowledge plays a more important role in predicting reading outcomes. However, exactly what aspects of the language are most important in predicting later reading remain undiscovered. In Years 8-9, this will be addressed in our SFA 3's studies.

### Principal Investigator

- **McQuarrie, Lynn** • University of Alberta



## Goal E: Research and Outreach

### Additional Investigators

- **Allen, Thomas** • Education
- **Enns, Charlotte** • University of Manitoba
- **Letteri, Amy** (Student) • Psychology
- **Morere, Donna** • Psychology
- **Traxler, Matthew** • University of California, Davis

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Products

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Baron, T., Lam, E., & McQuarrie, L. (2015, July). *Developing new technologies for children & with children: Using co-design for creating an instructional game*. Poster presented at the International Congress on the Education of the Deaf, Athens, Greece.

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Clark, M. D., & Simms, L. (2015, April). *Visual communication and sign language checklist: Updates*. Presented at the Early Childhood Education Summit VI, Washington, DC.

Clark, M. D., Hauser, P. C., Miller, P., Kargin, T., Rathmann, C., Guldenoglu, B., ..., Israel, E. (2014). The importance of early sign language acquisition for deaf readers. *Reading and Writing Quarterly*. Advanced online publication.

Emmorey, K., McCullough, S., & Weisberg, J. (2015). Neural correlates of fingerspelling, text, and sign processing in deaf ASL-English bilinguals. *Language, Cognition, and Neuroscience*, 30(6), 749-767.

Kuntze, M., Golos, D., & Enns, C. (2014). Rethinking literacy: Broadening opportunities for visual learners. *Sign Language Studies*, 14(2), 203-224.

Letteri, A., & Allen, T. (2015, May). *Effortful control and visual attention in deaf children: Explorations from the early education longitudinal study*. Poster presented at the meeting of the Association for Psychological Science, New York, NY.

McQuarrie, L., & Enns, C. (2015, February). *Classroom materials and technology tools to build American Sign Language phonological awareness*. Poster presented at the meeting of the Association of College Educators – Deaf/Hard of Hearing, St. Louis, MO.

McQuarrie, L., & Enns, C. (2015, January). *HandsUp! for literacy: Tapping into sign language phonological awareness training in the development of literacy in English for bilingual deaf children*. Poster presented at the Hawaii International Conference on Education, Honolulu, HI.

McQuarrie, L., & Enns, C. (2015, March). *Bilingual deaf children as co-design partners in developing ASL/English word learning technology tools*. Presented at the meeting of the Society for Research in Child Development: DHH Preconference, Philadelphia, PA.

McQuarrie, L., & Parrila, R. (2014). Literacy and linguistic development in bilingual deaf children: Implications of the "and" for phonological processing. *American Annals of the Deaf*, 159(4), 372-384.

## Goal E: Research and Outreach

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Musyoka, M., Andrews, J., Clark, M., & Gentry, M. (2015, February). *Early reading and signing deaf children*. Presented at the meeting of the Association of College Educators – Deaf/Hard of Hearing, St. Louis, MO.

Quinto-Pozos, D., & Parrill, F. (2015). Signers and co-speech gesturers adopt similar strategies for portraying viewpoint in narratives. *Topics in Cognitive Science*, 7(1), 12-35.

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### **SFA4: Translation of research to educational practice**

**Status:** Ongoing

Goal: To develop and test innovative instructional practices that are motivated by the discoveries made in Center research

SFA 4's translation in education (e.g., building visual phonological skills as a gateway to reading), translational products (e.g., development of bilingual reading apps), and vast methods of knowledge dissemination (e.g., multimedia dissemination of the Parent Information Package) unite synergistically discoveries about (i) the impact of early visual language experience on young visual learners' enhanced joint visual attention and eye gaze, which, in turn, can facilitate the acquisition of vocabulary, language, and literacy (Theme 1), (ii) the vital role of early language exposure, especially early bilingual language exposure, on children's development of enhanced linguistic and cognitive skills relative to monolingual peers (Theme 2), and (iii) the core role of "visual phonology" in successful early reading in the young deaf visual learner (Theme 3).

Educational Neuroscience: SFA 4 is powerfully aligned in content and resources to bridge the fruits of our VL2 laboratory research discoveries (as well as those in the field) to provide the richest input into principled and meaningful translational products, services, and knowledge dissemination for the benefit of society. Supporting these efforts is a theoretical framework developed by Petitto (2009) and others that links discoveries in behavioral and cognitive neuroscience investigations with their principled application to education (Educational Neuroscience, e.g., Petitto 2009). VL2 brings together individuals from diverse backgrounds, joined in their mutual commitment (a) to enhance our understanding of visual learning in developing children, (b) to understand the human visual learning capabilities over the life span (both in brain and in behavior), (c) to ground educational change for all students in the highly principled translation of research that employs both behavioral as well as a multitude of modern methodologies (including functional brain imaging), (d) to advance a common set of scientific tools/resources, interventions, training strategies, and research practices that can be made available to a broad set of stakeholders that includes scientists, educators, policy makers, students at all educational levels, and society at large.

### **Principal Investigator**

- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

### **Additional Investigators**

- **Allen, Thomas** • Education
- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Sonnier, Andrea** (Student) • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Wilkins, Erica** (Student) • Science of Learning Center on Visual Language & Visual Learning (VL2)

### **Funding Source**

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### **Products**

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## Goal E: Research and Outreach

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Schick, B., Lederberg, A., Webb, M-Y. (2015, March). *Fingerspelling development as alternative gateway to phonological representations and literacy in deaf and hard of hearing children*. Presented at the meeting of the Society for Research in Child Development: DHH Preconference, Philadelphia, PA.

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### SFA5: Integration of research and education

**Status:** Ongoing

In terms of VL2's future sustainability with intent to expand our programs of research, we have established as an integral goal: to train a new generation of scientists, skilled in interdisciplinary methods for advancing the Science of Learning of Visual Language and Visual Learning leading to a sustainable community of scholars, both Deaf and hearing, pursuing transformative research contributing to the science of learning. The highlight of FY2013 was the development and launch of the new interdisciplinary Ph.D. program in Educational Neuroscience which provides core training in cognitive neuroscience with an overarching emphasis on the application of scientific discoveries to the improvement of education. The program offers advanced coursework in cognitive neuroscience, neuroimaging techniques, neuroethics, and statistics. VL2 trains scientists at the undergraduate, graduate, and post-doctoral levels. VL2 has created a Science Mentorship Program to address the crucial issue of the retention of young students in science, including by linking undergraduates to young faculty. VL2 has established an effective student network of both Deaf and hearing students at all levels attending universities throughout our network. These students are pursuing advanced degrees in a variety of disciplines ranging from neuroscience to educational administration. We develop training opportunities, extensive inter-lab student internships and rich opportunities for research, leadership, and conference participation.

#### Principal Investigators

- **Allen, Thomas** • Education
- **Hauser, Peter** • National Technical Institute for the Deaf  
• Rochester Institute of Technology

#### Products

Contreras, J., & White B. E. (2014, November). *Language assessments and what they mean for researchers*. Presented at the Visual Language and Visual Learning (VL2) Student Retreat, Gallaudet University, Washington, DC.

Hauser, P. C., & Kartheiser, G. (2014). Advantages of learning a signed language. In H-D. L. Bauman & J. Murray (Eds.), *Deaf-Gain: Re-imagining human diversity*. Minneapolis, MN: University of Minnesota Press.

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## Goal E: Research and Outreach

### **Speed of visual sign language processing, and visual sign phonological awareness processing in young Deaf typically and atypically-developing bilingual-bimodal readers**

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

The present study investigates whether rate of sign language processing influences the comprehension abilities of typically and atypically developing Deaf children. Numerous studies have documented evidence that rate of processing is a primary factor in developmental language disorders of hearing children who acquire spoken language. No study has investigated rate of processing in deaf children who are suspected of having a signed language disorder. If signed and spoken languages are processed similarly by atypical learners, deaf children's comprehension is predicted to be affected by rapid rates of presentation. However, studies of signed language have suggested that there are some differences between signed and some spoken languages with respect to the rate at which units of meaning are produced in the two modalities. Alternatively the slower articulation of signs might support comprehension for atypical learners at fast rates of signing. ASL and English language/reading abilities will be investigated in 10-20 atypically developing deaf children ages 8-16 and 30 typically developing deaf children controls ages 5-16 (matched for age and reading/language age). Language processing measures will be used to determine general ASL language abilities, including measures of ASL visual sign phonological abilities. To investigate rate as a factor, short sentences and single words in ASL and English will be presented at normal and fast speeds (English print is shown using running text via captions). Comprehension of short sentences and identification of single words will be assessed.

#### **Principal Investigator**

- **Quinto-Pozos, David** • Linguistics • University of Texas, Austin

#### **Additional Investigator**

- **Allen, Thomas** • Education

#### **Funding Source**

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### **VL2 national research volunteer program**

**Status:** Ongoing

One of the difficult challenges faced by researchers working with culturally Deaf participants is the recruitment of these participants. To help facilitate this, VL2 is designing a web-based volunteer program whereby Deaf adults can volunteer over the web to become participants in H3 Research Projects, and parents of deaf children can volunteer on behalf of their children to become research participants. The VL2 Research Volunteer Program includes a brief online background questionnaire to help researchers to define and select subgroups of a broader d/Deaf population with specific characteristics for inclusion in proposed studies. Address information submitted to the database may also be used to disseminate valuable information about VL2 research and upcoming events of interest to a broad national constituency of deaf individuals and their families.

#### **Principal Investigator**

- **Allen, Thomas** • Education

#### **Additional Investigators**

- **Fernandez, Ralph** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Letteri, Amy** (Student) • Psychology

#### **Funding Source**

- National Science Foundation (NSF)

### **VL2 shared data resource**

**Status:** Ongoing

NSF requires that data collected with NSF funding be made available for data sharing for the benefit of future researchers. VL2 is developing an online resource for VL2 data that has been collected throughout its history. In this resource, data sets developed with Center funding will be described, their code-books published, and strategies for access to Center data will be presented. This resource will help ensure ongoing statistical analysis and publication from archived data covering the range of research topics undertaken by the Center.

#### **Principal Investigator**

- **Allen, Thomas** • Education

#### **Additional Investigators**

- **Fernandez, Ralph** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Letteri, Amy** (Student) • Psychology

## Goal E: Research and Outreach

### Funding Source

- National Science Foundation (NSF)

### Brain and Language Laboratory (BL2)

The state-of-the-art Brain and Language Neuroimaging Laboratory (BL2), led by Dr. Laura-Ann Petitto (Scientific Director, Founder), is a member of the NSF Science of Learning Center at Gallaudet University, Visual Language and Visual Learning, VL2. The team studies language and bilingualism, reading and literacy, including the important role of Visual Sign Phonology in successful reading in young Deaf children. They are further committed to powerful innovative translation and to providing meaningful knowledge to society, spanning parents, teachers, and educational policymakers. The team seeks to uncover the biological foundations and environmental influences underlying linguistic, reading and cognitive processing in monolingual and bilingual infants, children, and adults. A wide range of methods (behavioural, neuroimaging, genetic), languages (signed, spoken) and populations (infants, children, and adults, both monolingual and bilingual, Deaf and hearing, and cochlear implant users) are used to understand the fascinating processes by which infants discover the basic building blocks of their language as well as the most optimal conditions of learning language, reading, and literacy. Another important goal of BL2 is to provide state-of-the-art training to Gallaudet students in the world's most advanced neuroimaging. We are especially proud to be the neuroimaging training home for Gallaudet's pioneering new PhD in Educational Neuroscience program. BL2 features one of the world's most advanced brain imaging systems, called functional Near Infrared Spectroscopy (fNIRS), as well as an Infant Habituation Lab, Video-Recording and Editing studios, Video-Conferencing facilities, Cognitive Neurogenetic analysis studio, Experimental and Observation Chambers, State-of-the-art Tobii Eye-Tracking studio, Library, and more. Additional information regarding the Brain and Language Laboratory can be found at <http://petitto.gallaudet.edu/>

### Research Projects

**The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)**

**Status:** Ongoing

**Start date:** January 2011

The purpose of this study is to discover the neural participation and neural organization of bilinguals and what impact the age of first bilingual exposure has on the bilingual's capacity to process and read in two languages. We will examine how bilingual children learn to read in two languages. The way in which the child's first language impacts on reading development in the second language is of great theoretical importance to educators and for understanding language processing in general. (1) Bilingual babies have a greater and longer sensitivity to language distinctions that make up the world's languages, and showed unique patterns of brain activation for language; (2) Both bilingual children and adults showed greater extent and variability in neural recruitment of classic language brain areas during language processing relative to their monolingual peers; (3) Bilinguals seemed to have greater coordination between their two hemispheres as compared with monolinguals; (4) An age-related shift in the recruitment of brain areas has been observed supporting reading among monolingual and bilingual children; (5) Bilingual advantage in phonological awareness has been observed at the earliest stages of reading compared to monolingual children. Specific parts of language knowledge, and their contribution to reading mastery, are indeed altered as a result of bilingual language experience.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Abbott, Zachary** • Educational Neuroscience-PEN
- **Andriola, Diana** • Educational Neuroscience-PEN
- **Gauna, Kristine** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Hoglund, TraciAnn** (Student) • Psychology
- **Jasinka, Kaja** (Student) • Psychology
- **Kartheiser, Geo** • Educational Neuroscience-PEN
- **Kovelman, Ioulia** • Literacy Lab • University of Michigan
- **Stone, Adam** • Educational Neuroscience-PEN
- **Tian, Shuxu** • Educational Neuroscience-PEN
- **Twitchell, Paul** • Educational Neuroscience-PEN
- **White, Bradley** • Educational Neuroscience-PEN

## Goal E: Research and Outreach

### Funding Source

- National Institutes of Health (NIH)

### **Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants**

**Status:** Ongoing

**Start date:** September 2012

Controversy abounds regarding the specific impact of differences in language experience on the acquisition of spoken language in deaf individuals with cochlear implants (CI). Noteworthy are claims that early exposure to a signed language causes deviance to auditory language tissue development. Related claims are that young children with cochlear implants should not receive early exposure to a signed language for fear that the tissue devoted to auditory processes will be “taken over” by signed language processing (invoking principles of neural plasticity as a causal mechanism). We ask whether early exposure to a visual signed language impacts negatively, and/or causes neural deviance or abnormality to, classic left-hemisphere spoken language tissue development in deaf individuals who had early cochlear implantation, including left Inferior Frontal Gyrus (LIFG) and Superior Temporal Gyrus (STG) in deaf individuals with a CI. For the first time, we used state-of-the-art fNIRS brain imaging technology to address this question in healthy deaf individuals with cochlear implants, crucially, with and without early exposure to a visual signed language. Unlike other neuroimaging technology, fNIRS has revolutionized the study of individuals with Cochlear Implants because it is uniquely capable of imaging inside the human brain without causing damage to these CI individual or to the technology.

We find that early exposed deaf CI individuals showed entirely normal and robust activation in classic left-hemisphere language areas (LIFG). By contrast, late exposed deaf CI individuals showed greater activation in the right-hemisphere (RIFG), which are not classic left hemisphere language areas. This supports the hypothesis that early signed language exposure facilitates normal language processing and does not cause neural deviance or abnormality to classic left-hemisphere language tissue. Strong evidence of neural plasticity was not at work—specifically, auditory processes were not “taken over” by signed language processing in early-sign exposed individuals with cochlear implants. Instead, their language tissue activity was entirely normal. Rather than neural plasticity, the findings suggest instead that aspects of left hemisphere language tissue thought to be “auditory” is not, and instead is doggedly dedicated to processing highly specific patterns in natural language,

be they patterns on the hands or the tongue. We therefore conclude that early, but not later, exposure to a signed language supports typical, healthy and normal language development.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Abbott, Zachary** (Student) • Psychology
- **Andriola, Diana** • Educational Neuroscience-PEN
- **Harvey, Susie** (Student) • Psychology
- **Hoglund, TraciAnn** (Student) • Psychology
- **Jasinska, Kaja** • Haskins Laboratories • Yale University
- **Kartheiser, Geo** • Educational Neuroscience-PEN
- **Kovelman, Ioulia** • Literacy Lab • University of Michigan
- **Langdon, Clifton** • Educational Neuroscience-PEN
- **Stone, Adam** • Educational Neuroscience-PEN
- **Tian, Shuxu** • Educational Neuroscience-PEN
- **Twitchell, Paul** • Educational Neuroscience-PEN
- **White, Bradley** • Educational Neuroscience-PEN

### Funding Sources

- National Science Foundation (NSF)
- National Institutes of Health (NIH)

### **The effects of early visual language exposure on deaf children's linguistic and non linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers**

**Status:** Ongoing

**Start date:** January 2013

How do young children learn to read when using contemporary learning tools such as reading apps? Virtually nothing is known about this even though such learning tools are ubiquitous. How do young deaf children use, visually examine, and process complex visual information on a moving screen—especially involving, for example, early reading apps for the young deaf reader? For these questions, no studies exist, and our present studies are the first of their kind. We examine whether differences in early life visual language experience (AoE) impact visual attention and allocation in young deaf and hearing emergent readers. Early visual language experience affords enhanced visual gaze-shifting and visual attention in the young deaf visual learner which subsequently impacts book-sharing and literacy behaviors in toddlers and yields linguistic, reading and cognitive benefits. Little is known about how early visual language experience impacts the way young deaf children learn

## Goal E: Research and Outreach

to read in a bilingual learning context, where both languages are presented visually, but one is signed (ASL) and the other written (English.) We examine whether differences in early life visual language experience (AoE) impact visual attention and allocation in the young emergent reader. If early visual language is a significant factor in task performance in early sign-exposed children, it may suggest that select visual properties at the heart of visual sign phonology selectively enhances visual sight word recognition in ways that positively impacts those children's acquisition of English reading. Also, it will provide insights into when (at what age) young deaf children are best exposed to sign languages as to promote bilingual mastery and enhancements to English reading acquisition. Results from the present study will provide first-time research-based insights into all young children's visual attention to linguistic and non-linguistic visual information in dynamic moving scenes, as are commonly used in today's e-literacy technology.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Allen, Thomas** • Education
- **Andriola, Diana** • Educational Neuroscience-PEN
- **Gauna, Kristine** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Jasinska, Kaja** • Haskins Laboratories • Yale University
- **Kartheiser, Geo** • Educational Neuroscience-PEN
- **Langdon, Clifton**
- **Malzkahn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Manini, Barbara** • Brain and Language Laboratory for Neuroimaging (BL2)
- **Merla, Arcangela** • Laboratory of Infrared Imaging Institute of Advanced Biomedical Technologies • University Gabriele D'Annunzio, Chieti, Pescara
- **Scassellati, Brian** • Computer Science, Cognitive Science, and Mechanical Engineering NSF Expedition on Socially Assistive Robotics • Yale University
- **Shapiro, Ari** • USC Institute for Creative Technologies, Playa Vista, CA
- **Stone, Adam** • Educational Neuroscience-PEN
- **Tsui, Katherine** • Social Robotics Lab • Yale University
- **Twitchell, Paul** • Educational Neuroscience-PEN

### Funding Sources

- Gallaudet funding
- W.M. Keck Foundation

### Products

Petitto, L. A. (2015, January). *Foundation principles of fNIRS imaging*. Workshop conducted at the University of Hong Kong, Pokfulam, Hong Kong.

Petitto, L. A. (2015, January). *Sciences of learning: Why it matters to schools and families*. Presented at the University of Hong Kong, Pokfulam, Hong Kong.

Petitto, L. A. (2015, January). *The potential contributions of a science of learning center to the University of Hong Kong's advancement of science*. Presented at the University of Hong Kong, Pokfulam, Hong Kong.

Petitto, L. A. (2015, July). *Bilingualism in the early years: How to expand your child's language ability*. Presented at Victoria Educational Organization, Causeway Bay, Hong Kong.

Petitto, L. A. (2015, July). *The grand challenge University of Hong Kong*. Presented at the University of Hong Kong, Pokfulam, Hong Kong.

Petitto, L. A. (2015, July). *What makes human language human?* Presented at the University of Hong Kong, Pokfulam, Hong Kong.

Petitto, L. A. (2015, June). *fNIRS Workshop*. Workshop conducted at the University of Hong Kong Summerfest, Pokfulam, Hong Kong.

Petitto, L. A., (2014, November). *How the brain of the baby discovers language*. Presented at the Institute for Research in Social Science, University of Ulster, Belfast, Ireland.

Petitto, L.A. (2015, May). *Keck in-person meeting*. Seeing the Temporal Beats of Human Language, Gallaudet University, Washington, DC.

**Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design**

**Status:** Ongoing

**Start date:** January 2013

How do young children learn to read when using contemporary learning tools such as reading apps? Virtually nothing is



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known about this, even though such learning tools are ubiquitous. Do young Deaf readers use, visually examine, and process complex visual information on a moving screen—especially involving early reading apps designed for them? Present studies in this research are the first of their kind to address these questions. This project examines whether differences in early-life visual language experience impact visual attention and allocation in young Deaf and hearing emergent readers. Early visual language experience affords enhanced visual gaze shifting and visual attention in the young Deaf visual learner, which subsequently impacts book sharing and literacy behaviors in toddlers, and yields linguistic, reading, and cognitive benefits. Little is known about how early visual language experience impacts the way young Deaf children learn to read in a bilingual learning context, where both languages are presented visually but one is signed (American Sign Language) and the other is written (English). Whether differences in early visual language experience and age impact visual attention and allocation exist is examined. If early visual language is a significant factor in task performance, it may suggest that select visual properties at the heart of visual sign phonology selectively enhances sight word recognition in ways that positively impacts those children's acquisition of English reading. Results from the present study will provide research-based insights into all young children's visual attention to linguistic and non-linguistic visual information in dynamic moving scenes.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Allen, Thomas** • Education
- **Andriola, Diana** • Educational Neuroscience-PEN
- **Cullen, Don** (Student) • Science, Technology, and Mathematics
- **Farovitch, Lorne** (Student) • Science, Technology, and Mathematics
- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Hoglund, TraciAnn** (Student) • Psychology
- **Langdon, Clifton** • Educational Neuroscience-PEN
- **Malzkahn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Spurgeon, Erin** (Student) • Interpretation
- **Steyer, Elizabeth** (Student) • Linguistics
- **Twitchell, Paul** • Educational Neuroscience-PEN

### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers

**Status:** Ongoing

**Start date:** January 2011

Current approaches to classifier constructions have been characterized either as utilizing a linguistic system that can exploit iconicity or an exhaustively morphemic approach. To gain novel insight into the underlying basis of this American Sign Language system, fNIRS brain imaging methodology is utilized as a tool to adjudicate between the hypotheses that classifier constructions engage additional neural systems (H1) or that they are only processed by the same neural systems as other verbs that carry grammatical inflection (H2). If H1 is supported, it would suggest that sign languages are able to exploit iconic bases in a similar manner as spoken languages do with ideophones. If H2 is supported, it would suggest that the exhaustively morphemic approach is more felicitous than linguistic analyses that propose classifier constructions can be decomposed into gestural and linguistic components.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Andriola, Diana** • Educational Neuroscience-PEN
- **Farovitch, Lorne** (Student) • Science, Technology, and Mathematics
- **Gauna, Kristine** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Hoglund, TraciAnn** (Student) • Psychology
- **Jasinska, Kaja** • Haskins Laboratories • Yale University
- **Kartheiser, Geo** • Educational Neuroscience-PEN
- **Langdon, Clifton** • Educational Neuroscience-PEN
- **Spurgeon, Erin** (Student) • Interpretation
- **Steyer, Elizabeth** (Student) • Linguistics
- **Stone, Adam** • Educational Neuroscience-PEN
- **Twitchell, Paul** • Educational Neuroscience-PEN

### Funding Sources

- National Institutes of Health (NIH)
- National Science Foundation (NSF)

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### **The impact of early visual language experience on visual attention and visual sign phonology processing in young Deaf emergent readers using early-reading apps: A combined eye tracking and fNIRS brain imaging investigation**

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

Early visual language experience has been shown to afford enhanced visual gaze-shifting and visual attention in the young deaf visual learner. Little is known about the complexity of visual cues to which deaf, signing children attend when learning to read. Nothing is known about the relative weighting of visual attention and allocation to the visual stimuli in the learning input in the young deaf reader. Neuroimaging studies have revealed functional dissociation between orthographic, phonological, and semantic processing of words which can be utilized to discover developmental changes for depth of processing across different populations. Understanding how preschoolers attend to, allocate, and process visual cues in ASL-English bilingual learning tools, such as VL2's bilingual reading app will lay bare the core scientific visual and linguistic principles—especially visual sign phonology—and their relation to reading acquisition, and particularly as this relates to bilingual texts. Three groups of participants (deaf early-sign-exposed, deaf late-sign-exposed, hearing non-signers) in two age groups (4-4.5 years and 7-7.5 years) will participate in three tasks. Participants' eye gaze behaviors will be collected by a Tobii remote eye tracker. Functional Near Infrared Spectroscopy will record their neural activity. Learning Task: Pseudowords are taught (conditions: sign chaining v. speech chaining). Lexical Decision Task: Two competing words are presented (conditions: false font v. nonword v. taught pseudoword; v. novel pseudoword). Interaction Task: Participants interact with a VL2 ASL/English bilingual storybook iPad app.

#### **Principal Investigator**

- **Petitto, Laura-Ann** • Psychology

#### **Additional Investigators**

- **Herzig, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Langdon, Clifton**
- **Stone, Adam** • Educational Neuroscience-PEN

#### **Funding Source**

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

### **Seeing the Temporal Beats of Human Language**

**Status:** Ongoing

**Start date:** January 2015

We aim to discover what are the specific rhythmic-temporal frequencies permitting the young baby's ability to discover the smallest building blocks of human language—the phonetic-syllabic units—from which they will build all the words in their native spoken language or the signs in their native signed language. This biological capacity to segment the linguistic stream is utterly vital to typical language learning and lies at the heart of early reading success. We ask, are babies born with a peaked sensitivity to specific rhythmic temporal patterning at the nucleus of natural language structure, or to any rhythmic temporal patterning (even non-linguistic patterning)? Using fNIRS brain imaging, Thermal IR imaging, and Eye-Tracking, we will also study babies' emotional arousal and attention to different types of rhythmic temporal patterns. We will be the first to determine whether babies' early sensitivity to the patterning of human language is marked with peaked emotional arousal and attention. If so, we hope to identify an index of human babies' "Readiness to Learn" well before they are able to produce language. In turn, this finding will be key to permitting us to provide language samples to young deaf babies (1) with minimal or no early language input, (2) when they are most "ready to learn," and (3) during the right critical period of brain, language, and reading development.

Out of the cacophony of sights and sounds surrounding a newborn, all hearing babies discover the finite set of sound phonetic units from which they will build the words and infinite number of sentences in their native language—and do so by around 10 months. The baby's capacity to segment the linguistic stream is vital for healthy language learning, and, later, for phonetic sound-to-letter decoding as a young reader. Remarkably, earlier studies by Petitto have discovered that this is also true of young deaf babies. Deaf babies discover the finite set of sign phonetic units on the hands that facilitate later reading success, but only with early visual language experience. This is because early experience-dependent brain changes to the human visual system render them with peaked sensitivity to visual (over sound) rhythmic temporal contrastive units that help babies segment and categorize the continuous linguistic stream.

Results from the present study will provide first time scientific discovery of babies' temporal linguistic sensitivities and their emotional-attentional "readiness to learn"—even before they are able to produce communicative language. Our findings will provide fundamental information to build the preliminary,

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first steps of a revolutionary Robot Avatar thermal Enhanced learning tool (RAVE), a project that will be further advanced in the NSF INSPIRE grant. The present work is further significant in its inclusion of diverse scientific teams (e.g. Developmental Cognitive Neuroscience, Applied Psychophysiology, Robotic and Avatar technologies). Both the present BL2 science advancements, and the preliminary building of the first RAVE prototype learning tool, will make the core components of human language available to very young children with minimal language exposition during critical period of language development affording specific lifelong advantages to their cognitive, language, and, ultimately, reading, academic, and social success.

The design and execution of the basic fNIRS experimentation, including the Thermal IR imaging and Eye-Tracking integration is presently underway (Petitto, PI; Professor Arcangelo Merla/Italy, Project PI; Dr. Barbara Manini, Post-Doctoral Fellow, and, crucially, inclusive of intensive graduate and undergraduate training). The stimuli creation is presently underway with the Keck-Purchased state-of-the-art Motion Capture equipment in collaboration with Melissa Malzkuhn (Motion Light Lab/ML2 Director). We anticipate reaching our promised Keck experimental goals, as per our Keck Time Line.

### Principal Investigator

- **Petitto, Laura-Ann** • Psychology

### Additional Investigators

- **Gauna, Kristine** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Kartheiser, Geo** • Educational Neuroscience-PEN
- **Kirkland, Julian** • Visual Language and Visual Learning, (VL2)
- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Manini, Barbara** • Brain and Language Laboratory for Neuroimaging (BL2)
- **Merla, Arcangela** • Laboratory of Infrared Imaging Institute of Advanced Biomedical Technologies • University Gabriele D'Annunzio, Chieti, Pescara
- **Scassellati, Brian** • Computer Science, Cognitive Science, and Mechanical Engineering NSF Expedition on Socially Assistive Robotics • Yale University
- **Shapiro, Ari** • USC Institute for Creative Technologies, Playa Vista, CA
- **Stone, Adam** • Educational Neuroscience-PEN

- **Traum, David** • USC Institute for Creative Technologies, Playa Vista, CA
- **Tsui, Katherine** • Social Robotics Lab • Yale University

### Funding Sources

- Gallaudet funding
- W.M. Keck Foundation

### The temporal and spatial dynamics of visual language perception and its relation to visual sign phonology: Eye-tracking in infants and children in a perceptual discrimination experiment of signs versus gestures

**Status:** Ongoing

**Start date:** September 2013

**End Date:** September 2015

This study investigates selective visual perception and attention for linguistic and nonlinguistic stimuli in younger and older infants, to investigate the basis by which infants differentiate what is language and what is not. This is important for discerning the levels of language organization, and their relative contributions to the language acquisition process, which are key for learning language including the universal level of language organization, “phonology,” as well as grammatical patterns important for latter successful language and reading acquisition. A central hypothesis to be tested is whether infants possess a developmental sensitivity to the patterns of visual sign phonology that make possible their ability to differentiate between “what’s in my language” and “what is not in my language (gesture)?”

### Principal Investigators

- **Bosworth, Rain** • University of California, San Diego
- **Langdon, Clifton** • Educational Neuroscience-PEN

### Additional Investigators

- **Corina, David** • University of California, Davis
- **Hwang, So-One** • University of California, San Diego • Student
- **Petitto, Laura-Ann** • Psychology

### Visuospatial phonological loop in working memory

**Status:** Ongoing

**Start date:** January 2015

**End Date:** May 2016

We examine visuospatial phonological loops by testing working memory among deaf ASL users. Within two experiments of phonological similarity and articulatory suppression, we seek to test whether previous findings of structural differences



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between the two loops of phonology and articulatory are correct. The results of lower performance in ASL serial recall from similarity and suppression tasks suggest that speech-based working memory have stronger effects on auditory loops, but not on visuospatial loops. However, in free recall, which is less cognitively taxing, both groups perform equally, indicating both auditory and visuospatial loops are similar in working memory for spoken and signed languages. This study allows us to explore the similarities and differences in structure between both the phonological loop and the visuospatial working memory.

### Principal Investigator

- **Hoglund, TraciAnn** (Student) • Psychology

### Additional Investigators

- **Kartheiser, George** (Student) • Linguistics
- **Langdon, Clifton** • Educational Neuroscience-PEN
- **Petitto, Laura-Ann** • Psychology

### Funding Source

- Gallaudet Small Research Grant

*On February 9-11, the Office of Research Support and International Affairs (RSIA) hosted a group of staff, faculty, and administrators from the University of Warmia and Mazury in Olsztyn (Poland). The group learned how to enhance support for the approximately 50 deaf students attending their university, as well as methods to recruit more deaf students.*

Photo by Zhee Chatmon



### V. Research and Scholarly Activities by Academic Unit

The research and scholarly activities section reports the FY 2015 H3 Research Projects and achievements of individuals within Gallaudet's academic units including departmental research laboratories. The list of academic units is organized alphabetically and reflects the organizational structure that was adopted in late 2012. For research-related work by units such as the Center for Bilingual Teaching and Learning and the the Office of Research Support and International Affairs, see Office of the Provost.

When a project has two H5 Principal Investigators from different units, a cross-reference note guides the reader to the placement of the full project profile. For each research project, the following fields are shown: the project's title, status and timing, abstract, investigator(s) and their affiliation, funding sources, and products derived from that project. At the end of each unit's part there is also a list of citations of scholarly and creative products that are not associated with a research project.

#### Art, Communication and Theatre

This body of work is reflective of the mission of the Department of Art, Communication and Theatre. The Department strives to provide a quality, bilingual, interdisciplinary, liberal arts focus in its teaching, service, and research.

##### Research Projects

**Collaborative research CI-ADDO-EN: Development of publicly available, easily searchable, linguistically analyzed, video corpora for sign language and gesture research**  
*See in ASL and Deaf Studies*

**Instructional videos on telecommunications access**  
*See in Technology Access Program (TAP)*

**Interactive learning environment for optimizing technology use**  
*See in Hearing, Speech, and Language Sciences*

**Project D1: Development of a model for a consumer-centric, technology-focused train-the-trainer program**  
*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

**Project D3: Interactive learning environment for optimizing technology use**

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

**Quantifying the needs of people with hearing loss in using technology for daily and emergency voice telecommunication (R1)**

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

**Receptive listening — narrowband vs. wideband with network impairments for the iPhone**

*See in Technology Access Program (TAP)*

**Resource and tool development to facilitate incorporation of accessibility in mainstream telecommunication**

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

##### Scholarly and Creative Activity

Kazemzadeh, M. (July, 2015). *Micro-computer vision workshop*. Presented at UCLA Nanolab Summer Institute, Los Angeles, CA.

Kazemzadeh, M., & Ramakrishnan, S. (2015, July). *Watodesk-zoom*. Exhibition at the UCLA Nanolab Summer Institute, Los Angeles, CA. Retrieved from <http://www.maxkazemzadeh.com/watodesk/index.html>

Kazemzadeh, M., & Safavi, R. (2014, October). *Dabarithmetic: Palm wish*. Presented at the meeting of the International Symposium of Electronic Art, Dubai, United Arab Emirates.

Kazemzadeh, M., & Safavi, R. (2014, October). *Developing physical algorithms workshop*. Workshop conducted at the International Symposium of Electronic Art, Dubai, United Arab Emirates.

Kazemzadeh, M., Vesna, V., Brumley, J., Ong, J., & Taylor, C. (July, 2015). *Bird song diamond*. Interactive exhibition and performance at the New York Electronic Arts Festival, New York, NY.

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### ASL and Deaf Studies

ASL and Deaf Studies faculty engage graduate and undergraduate students in interdisciplinary H3 Research Projects dedicated to producing new knowledge about Deaf communities and their signed languages. Central areas of inquiry include sensory orientation, DeafSpace, bioethics, identity formation, human rights, language teaching, transnationalism, and the contributions of Deaf individuals to human diversity.

#### Research Projects

##### Beyond the ABCs: Multimodal texting by deaf youth

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

Today's mobile technology offers users a variety of multimodal communication tools from texting, to FaceTime, video messages, picture, and GIF (animated picture) messages. Among these options, texting is the least visual-spatial and the most dependent on written literacy. It affords users convenient, private, and rapid communication unlike its multimodal counterparts. Now, we have pictorial graphics systems, emoticons and emojis, which allow users to integrate visual-spatial elements in written messages. Due to their visual sensory orientation, deaf people may be drawn to emojis as a tool for communication, and possibly use them in unique and syntactically complex ways. Preliminary findings with deaf signing undergraduates show over 60 percent are regular emoji texters, with 18 percent identifying as avid users. Moreover, these signing students use emoji symbols in novel ways, such as using sequences of handshapes that correspond to ASL. This study will conduct an in depth analysis of peer-to-peer text conversations to examine the ways deaf youth are exploiting the affordances of these multimodal tools to communicate. This research could lead to new understandings in the ways that deaf signers use orthographic systems to communicate with potential broader impacts on literacy and education research.

##### Principal Investigator

- **Plancon, Ezra** (Student) • ASL and Deaf Studies

##### Funding Source

- Gallaudet Small Research Grant

### Cancer genetic education for the Deaf community

**Status:** Ongoing

**Start date:** August 2011

**End Date:** June 2016

Although much effort has been made to educate consumers about cancer genetics information, Deaf individuals whose linguistic preference is American Sign Language (ASL) are at a disadvantage to learning this information because it is predominantly available in spoken or print English. This that Deaf individuals are at risk for cancer genetics-related health disparities, and will have poorer outcomes compared to hearing individuals, even though the expected prevalence of cancer, including cancer conditions with a strong genetic component, does not differ between Deaf and hearing populations. For this project, an evidence-based English language National Cancer Institute-funded cancer genetics educational intervention shown to improve knowledge outcomes in English-language populations will be culturally and linguistically tailored for use in a population whose language preference is ASL. The education intervention will present information in a bilingual format (ASL videos with English captioning or text: ASL+English) and will be evaluated using a randomized, controlled experiment with 100 Deaf individuals whose linguistic preference is ASL to (a) compare the effect of a bilingual (ASL+English) education intervention on comprehension and attitudes toward genetics services, compared to a monolingual format (English text only); and (b) identify subgroups who may particularly benefit from receiving cancer genetic information in a bilingual format.

##### Principal Investigators

- **Boudreault, Patrick** • ASL and Deaf Studies
- **Palmer, Christina Germaine** • University of California, Los Angeles

##### Funding Source

- National Institutes of Health (NIH)

##### Product

Palmer, C. G. S., Boudreault, P., Baldwin, E., Grody, W., & Sinsheimer, M., (2014). Impact of genetic counseling and connexin-26 and connexin-30 testing on deaf identity and comprehension of genetic test results in a sample of deaf adults: A prospective, longitudinal study. *PLoS ONE*, 9(11).

## Goal E: Research and Outreach

### **Collaborative research CI-ADDO-EN: Development of publicly available, easily searchable, linguistically analyzed, video corpora for sign language and gesture research**

**Status:** Ongoing

**Start date:** August 2011

**End Date:** July 2015

The goal of this project is to create a linguistically annotated, publicly available, and easily searchable corpus of video from American Sign Language (ASL), which is being made available on the web. This will constitute an important piece of infrastructure, enabling new kinds of research in both linguistics and vision-based recognition of ASL. In addition, a key goal is to make this corpus easily accessible to the broader ASL community, including users and learners of ASL. This project draws on data and annotations collected in previous projects during the past decade, and will make them available on the web for the first time. In addition, a pilot study will incorporate a very rich set of ASL data contained in the Gallaudet University *Deaf Studies Digital Journal* into the searchable interface. The annotations of the journal will be carried out at the ASL and Deaf Studies Department. The current state of the project can be viewed at <http://secrets.rutgers.edu/dai/queryPages/>

#### **Principal Investigators**

- **Bahan, Ben** • ASL and Deaf Studies
- **Athitsos, Vassilis** • Computer Science • University of Texas, Arlington
- **Metaxas, Dimitris** • Computer Science • Rutgers University
- **Neidle, Carol** • Linguistics • Boston University
- **Sclaroff, Stan** • Computer Science • Boston University
- **Vogler, Christian** • Art, Communication and Theatre - *Technology Access Program (TAP)*

#### **Funding Source**

- National Science Foundation (NSF)-Computer and Network Systems (CNS)

### **Deaf stories corpus**

**Status:** Ongoing

**Start date:** February 2014

**End Date:** December 2020

The Deaf Stories Corpus (DSC) mission is to build a collection of stories in sign language as told by members of the Deaf community. The project began during Gallaudet University's 150th anniversary celebration in the summer of 2014. This project has expanded to a broader theme of Deaf experience, and is ongoing. The objective of DSC is to create an epicenter

of sign language corpus allowing preservation and documentation of Deaf people's stories for future generations. This project will provide an opportunity for scholars and communities alike to enrich their research endeavors. The aims of the project are: (1) To document Deaf stories covering different aspects of Deaf life; (2) To build a corpus for cross-institutional and interdisciplinary academic research; (3) To train graduate students on how to collect stories, interview storytellers, and fill niches of life.

#### **Principal Investigators**

- **Boudreault, Patrick** • ASL and Deaf Studies
- **Kelly, Arlene Blumenthal** • ASL and Deaf Studies

#### **Product**

Boudreault, P., & Kelly, A. B. (2015, June). *Showcasing community based projects: Deaf stories corpus*. Presented at the Conference on the Stewardship of Sign Heritage, Georgetown University, Washington, DC.

### **Deaf Studies Digital Journal**

**Status:** Ongoing

**Start date:** September 2008

The *Deaf Studies Digital Journal* ([dsdj.gallaudet.edu](http://dsdj.gallaudet.edu)) is the world's first peer-reviewed academic and creative arts journal dedicated to the creative and scholarly output of individuals within the signing communities. Hosted by the Department of American Sign Language and Deaf Studies, Issue #3 was published in the spring of 2012 and included over 60 contributors from across the globe. The theme of the third issue is linguistic human rights, bilingualism, and Sign Language planning. This issue as with past issues features academic articles in International Sign Language, ASL, English, commentaries, visual arts, signed literature, and historic, archival texts.

#### **Principal Investigators**

- **Bauman, Dirksen** • ASL and Deaf Studies
- **Bahan, Ben** • ASL and Deaf Studies
- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

#### **Funding Sources**

- Sorenson Legacy Foundation
- Office of the Provost



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### Enhancing cancer genetic education bilingual materials and broadening outreach efforts in the United States Deaf community

**Status:** Completed

**Start date:** May 2014

**End Date:** July 2015

The goal of this project is to increase accessibility to family health history and genetics education for the Deaf community, a cultural and linguistic minority group that is geographically scattered nationwide. Their Impact Award will allow them to extend their current project efforts to increase support and accessibility for the target population, expanding upon already developed materials and incorporating active outreach to Deaf individuals and high school educators who work with this particular underserved population. Project efforts will focus on increasing awareness of the importance of family health history with the goal of more effective health intervention and efficient healthcare.

#### Principal Investigators

- **Boudreault, Patrick** • ASL and Deaf Studies
- **Palmer, Christina Germaine** • University of California, Los Angeles

#### Products

Boudreault, P., & Palmer, C. G. (2015). *A guide to learn about cancer in family: Deaf genetics projects*. [Booklet]. Washington, DC: Gallaudet University and University of California Los Angeles.

Boudreault, P., & Palmer, C. G. (2015, July). *Accessing bilingual cancer genetics materials: Redefining 'accessibility'*. Presented at the meeting of the World Federation of the Deaf, Istanbul, Turkey.

Boudreault, P., Palmer, C. G., & Pumphrey, K. (2015). *ASL cancer genetics*. [Website]. Retrieved from [www.aslcancergenetics.org](http://www.aslcancergenetics.org)

#### Tegnspråk bok på iPad

**Status:** Completed

**Start date:** January 2014

**End Date:** December 2014

A Norwegian Sign Language translation of *The Baobab Tree*, VL2's award winning video book application for children.

#### Principal Investigator

- **Murray, Joseph J.** • ASL and Deaf Studies

#### Additional Investigator

- **Malzkuhn, Melissa** • Science of Learning Center on Visual Language & Visual Learning (VL2)

#### Scholarly and Creative Activity

Bauman, H-D. L., & Murray, J. J. (2014). *Deaf gain: Raising the stakes for human diversity*. Minneapolis, MN: University of Minnesota Press.

Boudreault, P. (2014, October). *Linguistic rights to professional interpreters and the preservation of signed languages in Canada*. Presented at the Phil Parker Lecture Series of Sign Language Interpreters, Ontario, Canada.

Boudreault, P. (2015, April). *The linguistic decimation of the Deaf community*. Presented at the common hour of Franklin & Marshall College, Lancaster, PA.

Boudreault, P. (2015, May). *L'analyse critique de la convention relative aux droits des personnes handicapées: la question canadienne et québécoise* [The criticism of the convention on the rights of persons with disabilities analysis: Canadian and Quebec question]. Presented at the meeting of the Association Francophone pour le Savoir, Quebec, Canada.

Boudreault, P. (2015, May). *Les expériences vécues d'un cochercheur principal Sourd avec Deaf Genetics project*. [The experiences of a Deaf co H5 Principal Investigator with the Deaf Genetics project]. Poster presented at the meeting of the Association Francophone pour le Savoir, Quebec, Canada.

Boudreault, P., & Beldon, J., Jr. (2015). «Deaf Interpreter» as career choice within the realm of the Deaf studies curriculum. In B. Eldredge, D. Stringham, F. Fleischer, & K. Morton (Eds.), *Deaf Studies Today! (Conference proceedings)*. Orem, UT: Montage.

Boudreault, P., & Palmer, C. G. (2015). Deaf studies and the medical field of genetic research: A collaboration model for linguistic and cultural minority populations. In B. Eldredge, D. Stringham, F. Fleischer, & K. Morton (Eds.), *Deaf Studies Today! (Conference proceedings)*. Orem, UT: Montage.

Boudreault, P., & Palmer, C. G. S. (2015, July). *Accessing bilingual cancer genetics materials: Redefining 'accessibility'*. Presented at the meeting of the World Federation of the Deaf, Istanbul, Turkey.

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Boudreault, P., Zimmer, K., & Enns, C. (2015, July). *Creating videos to assess children's signed language narrative skills*. Presented at the International Congress on the Education of the Deaf, Athens, Greece.

Fleischer, L. R., Gertz, G., Boudreault, P., & Eickman, J. (2015). CSUN Deaf studies program from 1983 to present: Struggles & challenges. In B. Eldredge, D. Stringham, F. Fleischer, & K. Morton (Eds.), *Deaf Studies Today! (Conference proceedings)*. Orem, UT: Montage.

Gray, L., & Williams, F. (2014, November). *Diversity tru-biz include*. Presented at the Maryland American Sign Language Conference, McDaniel College, Westminster, MD.

Gray, L., & Williams, F. (2015, June). *Diversity tru-biz include*. Presented at the American Sign Language Conference, Bloomington, MN.

Williams, F. (2015, September). *Diversity tru-biz include*. Presented at the Florida American Sign Language Conference, Daytona Beach, FL.

Harris, R. L. (2015). An introduction to research. In R. Harris & F. Williams (Eds.), *Research and evaluation in education and psychology, ASL Version* [Video]. Austin, TX: ASLChoice.

Harris, R. L. (2015). What is research? In R. Harris & F. Williams (Eds.), *Research and evaluation in education and psychology, ASL Version* [Video]. Austin, TX: ASLChoice.

Harris, R. L. (2015, July). *The future of ASL: Reflect, celebrate & dream*. Presented at the meeting of the ASL Teachers Association, Minneapolis, MN.

Harris, R. L., & Hottle, K. (2015). Single-case research. In R. Harris & F. Williams (Eds.), *Research and evaluation in education and psychology, ASL Version* [Video]. Austin, TX: ASLChoice.

Harris, R. L., & Loeffler, S. C. (2015). Seizing academic power: Creating Deaf counter narratives. *Journal of ASL and Literature*, 5.

Moore, J., & Harris, R. (2015). Historical and narrative study of lives. In R. Harris & F. Williams (Eds.), *Research and evaluation in education and psychology, ASL Version* [Video]. Austin, TX: ASLChoice.

Oates, J. A., & Harris, R. L. (2015). Literature review and focusing the research. In R. Harris & F. Williams (Eds.), *Research and evaluation in education and psychology, ASL Version* [Video]. Austin, TX: ASLChoice.

Mirus, G. (2015, July). Daf children and their hearing peers: The examination of communication barriers. Presented at the International Congress on the Education of the Deaf, Athens, Greece.

Mirus, G., & Napoli, D. J. (2015, June). *Bilingual-Bimodal ebooks: Best practices*. Presented at the University of Siena, Siena, Italy.

Mirus, G., Napoli, D. J. (2015, July). *Bilingual-Bimodal ebooks*. Presented at the International Congress on the Education of the Deaf, Athens, Greece.

Napoli, D. J., & Mirus, G. (2015, July). *Fun and language interaction: Bilingual-Bimodal ebooks*. Presented at the International Congress on the Education of the Deaf, Athens, Greece.

Pudans-Smith, K. (2015, June). *When GPS won't do: Meaningful ASL curriculum mapping*. Presented at the meeting of the American Sign Language Teachers Association, Minneapolis, MN.

### ASL Diagnostic and Evaluation Services

ASL Diagnostic and Evaluation Services (ASL-DES) provides training, consultation and comprehensive measures of American Sign Language (ASL) proficiency and communicative competence. The data and information generated by ASL Diagnostic and Evaluation Services benefits not only individual language learning but is also essential to Gallaudet University, institutions, and governing bodies nationwide. Information pertaining to ASL proficiency is provided to ensure individuals have requisite language skills for (but not limited to):

- Admission into academic programs
- Core curriculum, practicum, internship, and graduation
- Professional opportunities and advancements

### Research Projects

#### Classroom discourse observation

**Status:** Ongoing

**Start date:** September 2010

**End Date:** September 2016

In 2008, the Gallaudet University Faculty Senate passed a measure requiring the development of multiple measures to evaluate faculty proficiency in American Sign Language (ASL). One key aspect is the evaluation of language and discourse

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within the classroom. After an ad-hoc committee developed the classroom discourse checklist, the Office of Bilingual Teaching and Learning and the ASL-Diagnostic and Evaluation Services (DES) conducted a pilot study to determine appropriate procedures, protocols, and measures involved in classroom discourse observations (CDOs). A final report was submitted to the Faculty Welfare Committee in May 2011. The ASL-DES unit continues to conduct CDOs, and has created a resource guide online for CDOs that can be found on the ASL-DES website.

### Principal Investigators

- **Roult, Loretta** • ASL Diagnostic and Evaluation Services
- **Arellano, Leticia** • ASL Diagnostic and Evaluation Services
- **Gordon, Jean M.** • ASL Diagnostic and Evaluation Services

## Business

The Business department has a strong commitment to teaching students by giving them opportunities to learn outside of the classroom lecture. Students are encouraged to get involved in research as a way to promote an interactive and self-driven learning environment that promotes critical thinking and analysis.

### Scholarly and Creative Activity

Alkoby, K., Burdge, D., Ellis, H., & Ordóñez, P. (2015, February). *Using Humanitarian Free and Open Source Software (HFOSS) to attract the underrepresented to computer science*. Presented at the Association of Computing Machinery Richard Tapia Celebration of Diversity in Computing Conference, Boston, MA.

Alkoby, K., Fernandez, M., Balaes, A., & Garreton, G. (2014, October). UWiC Panel: Mentors, champions, and personal board of directors: How to effectively craft your network to leverage your career. Presented at the Anita Borg Institute GraceHopper Conference, Phoenix, AZ.

Brusentsev V., & Miller, J. (2015) The educational value of the college fed challenge competition. *Eastern Economic Journal*, 41, 513-526.

Cojocar, L., Falaris, E., Hoffman, S., & Miller, J. (2015, July). Financial system development and economic growth in transition economies: New empirical evidence from the CEE and CIS countries. *Emerging Markets Finance and Trade*,

2015, 1.

Miller, J. (2015, April). *The wealth of nations and global instability*. Keynote address presented at The Wealth of Nations and Global Instability Conference, Odessa, Ukraine.

Miller, J. (2015, June). Cut spousal benefits to stop social security 'gaming'. *Retire Mentors*. Retrieved from <http://www.marketwatch.com/story/cut-spousal-benefits-to-stop-social-security-gaming-2015-06-19>

Cooper, A. C., & Rashid, K. K. (Eds.). (2015). *Citizenship, politics, difference: Perspectives from Sub-Saharan Signed Language communities*. Washington, DC: Gallaudet University Press.

Rashid, K. (2014, October). *Sub-Saharan deaf communities: Linguistic violence and creative resistance*. Moderated panel at the Public Anthropology Conference, American University, Washington, DC.

## Education

The Department of Education engages in research and innovation in teaching and learning contexts with an eye to the kind of intellectual, linguistic, and social development that is optimal and which is congruent with the strengths inherent in Deaf and hard of hearing learners as human beings and who are by nature visually-inclined.

### Research Projects

#### **An analysis of AEBPD teachers' beliefs about bilingual Deaf education and bilingual practices**

**Status:** Ongoing

**End Date:** May 2016

The purpose of the study is to investigate the beliefs regarding the principles of ASL/English Bilingual education and the current bilingual practices of the teachers who continue to be employed at the 35 schools that participated in the American Sign Language (ASL)/English Bilingual Staff Development model (AEBPD). To that end, an exploratory survey study design will be used to answer the following questions: (1) What beliefs do teachers hold about the role of ASL and English in a bilingual deaf classroom? (2) What beliefs do teachers hold about the principles of bilingual education? (3) To what extent do teachers' beliefs correspond to their reported bilingual practices? The information gathered has the potential to establish the lasting impact, or lack thereof, that AEBPD has had on the beliefs that teachers have about bilingual deaf education as well



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as provide information on the practices they continue to use in their instruction.

### Principal Investigator

- Garate, Maribel • Education

### Funding Source

- Gallaudet Small Research Grant

### ASL assessment toolkit

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Attention and retention of educators of the Deaf

**Status:** Ongoing

**Start date:** January 2014

**End Date:** September 2016

The purpose of this study is to examine the reasons why graduates teaching in the field of Deaf education move to general education or choose to leave the field of education to pursue other career options. The researchers hope to gather information about the needs of teachers of the Deaf that will promote and encourage retention in the field. Data will be collected from surveys sent to alumni who graduated from the Department of Education's Teacher Preparation Program at Gallaudet University from 2003 to the present.

### Principal Investigator

- Appanah, Thangi • Education

### Additional Investigator

- Theoharis, Raschelle • Education

### Product

Appanah, T., & Theoharris, R. (2014, November). *Attrition and retention of educators of the deaf*. Presented at the meeting of the Council for Exceptional Children: Teacher Education Division, Indianapolis, IN.

### The development of visual processing in Deaf infants

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Effectiveness of mentoring in science research

*See in Science, Technology, and Mathematics*

### Ethical practices website

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Family engagement among immigrant families with young deaf children

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2015

This study will investigate the experiences of immigrant parents with young deaf children enrolled in bilingual early childhood education programs for the deaf. Focus will be given to the parenting experiences of this population as they navigate, negotiate, and participate in different cultures, including those of their new host country and its schools, deaf community, etc. In this study, the intersection of Deaf culture, school culture, and families' cultures rooted in immigrant families' cultures of origin coupled with their new host culture will be examined to understand how this impacts the family's engagement with their young deaf child's education. It will address these questions: (1) What are the experiences of immigrant parents with young children who are deaf as they navigate parenthood across various cultural systems? (2) How do these experiences inform our understanding of family engagement among immigrant families?

### Principal Investigator

- Batamula, Christi • Education

### Funding Source

- Gallaudet Small Research Grant

### Fingerspelling development as alternative gateway to phonological representations in Deaf children

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Home, school, and early language factors impacting the acquisition of reading skills among Deaf children with and without cochlear implants, and with and without early exposure to sign language

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Individual differences in deaf readers

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

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### Language acquisition and literate thinking in young d/Deaf children with Deaf caregivers

**Status:** Completed

**Start date:** January 2014

**End Date:** December 2015

There is a need to continue to investigate language acquisition, emergent literacy, and discourse patterns in young deaf children to gain insights in promising practices for mediating their linguistic and literacy development. Deaf caregivers typically use their knowledge and experience as deaf individuals to interact with their deaf children in the visual mode. Many of the studies with deaf families have been useful in gaining insights into early interactions with deaf infants and young children in the homes and early childhood programs. This study focuses on Deaf families and their interactions on facilitating language acquisition and literate thinking in young Deaf children, framed through Deaf Cultural lenses, exploring how the children converse with their caregivers in natural environments with a natural, visual language. In light of the growing research into the importance of the early years, the outcomes of the study call into question ramifications for d/Deaf children in general, through the lenses of critical pedagogy, toward eradicating language and literacy deprivation for all d/Deaf children.

#### Principal Investigators

- **Hile, Amy E.** • Education
- **Bailes, Cynthia** • Education
- **Mitchiner, Julie** • Education

#### Additional Investigators

- **Keith, Cara** (Student) • Education
- **Santini, Joseph** (Student) • Education

### Language acquisition, literacy learning, and literate thinking in young d/Deaf children

**Status:** Ongoing

**End Date:** September 2015

The proposed inquiry focuses on Deaf caregivers mediation of their Deaf child(ren)'s language acquisition, literacy development, and literate discourse from birth to approximately five years of age with existing «Signs of literacy» data consisting of six families and 15 children. This inquiry is the first phase of a planned larger study of a more diverse group of Deaf infants and toddlers and their signing caregivers. To prepare for the larger study, we will use and evaluate several qualitative software programs in the current analysis to identify appropriate software for a larger study. The inquiry will extend initial findings in the case of Ann with previously collected data from

six white Deaf families (12 caregivers) and 15 children. In preparation for the larger-scale research project with diverse participants, the challenge is to determine the appropriate software program for extensive coding and analysis of video data. It is crucial that the selected software program is powerful and effective in managing a large collection of video data that will be analyzed by numerous members of the research team within and across the diverse family-participants.

#### Principal Investigators

- **Bailes, Cynthia Neese** • Education

#### Additional Investigators

- **Batamula, Christi** • Education
- **Cue, Katrina** (Student) • Education
- **Hile, Amy E.** • Education
- **Kite, Bobby Jo** • Education
- **Marchut, Amber** (Student) • Education
- **Mitchiner, Julie** • Education
- **Santini, Joseph** (Student) • Education
- **Thumann-Prezioso, Carlene** • Research Support and International Affairs (RSIA)
- **Wang, Wei** • Science of Learning Center on Visual Language & Visual Learning (VL2)
- **Wright, Steve** (Student) • Education

#### Funding Source

- Gallaudet Small Research Grant

### Leaders who are DeafBlind: A phenomenological study of educational experiences

**Status:** Completed

**Start date:** February 2014

**End Date:** February 2015

Leaders who are DeafBlind advocate for quality of life for their constituents in DeafBlind organizations. To prepare for their leadership roles, these leaders undergo preparation of both a formal and informal nature. The purpose of this qualitative study will be to determine how five leaders who are DeafBlind perceived their educational experiences. Only two empirical studies on advocacy training for individuals who are DeafBlind have been published, but no studies to date have examined either the perspectives of experienced leaders of DeafBlind organizations or how the leaders viewed their educational experiences. The proposed inquiry will address the following research questions: (1) What were the educational experiences of the leaders who are DeafBlind? (2) How did these educational experiences prepare the leaders for their leadership roles? (3) How did these educational experiences create challenges for their leadership roles? and (4) How did the leaders overcome

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challenges to fulfill their leadership roles? Data collection will consist of two or three in-depth face-to-face phenomenological interviews and two participant journals.

### Principal Investigators

- **Shariff, Risa** (Student) • Education

### Funding Sources

- Gallaudet Small Research Grant

### Perceptions and attitudes of pre-service teachers about inclusion: A close look at introduction to special education courses

**Status:** Completed

**Start date:** January 2012

**End Date:** January 2015

The success of inclusive education is largely dependent on teachers' perceptions, attitudes, and beliefs about students with disabilities and where students with disabilities should be educated. These opinions reflect onto the teachers' willingness to make appropriate adaptations and modifications to accommodate for individual differences. Teacher preparation programs must be observant and mindful of the requirements and experiences provided to future teachers in regards to concepts related to inclusion in learning environments. This study is linked to the course that essentially establishes the foundation for those perspectives, *EDU 670: Introduction to Special Education*. This study uses a survey and case studies created by two other research teams. Both previous research studies looked at teachers' attitudes, the current study will be focused on pre-service teachers. The survey and case studies have been modified to match this population. Wording has also been changed to reflect the language of the current policy initiatives.

### Principal Investigators

- **Yuknis, Christina** • Education
- **Theoharis, Raschelle** • Education

### Product

Yuknis, C. (2015). Attitudes of pre-service teachers toward inclusion for students who are deaf. *Deafness and Educational International*, 2015, 1-11

### Persistence of Deaf students in undergraduate science, technology, engineering and mathematics programs

**Status:** Ongoing

**Start date:** July 2014

**End Date:** December 2015

The minimal information regarding Deaf students in science, technology, engineering, and mathematics (STEM) suggests a need to conduct further studies to expand the relevant literature. Additionally, research regarding Deaf students tend to problematize them or position them in comparison to their hearing peers using a deficit lens; thus, there is a need to approach research to focus more on the successes of Deaf students using a different lens. This qualitative study will address both issues through Critical Race Theory and Critical Deaf Theory lenses using narrative inquiry methodology and grounded theory method. This includes interviewing and observing six deaf undergraduate STEM students: two at Gallaudet University, two at Rochester Institute of Technology, and two at a university where there is a small number of Deaf students. The goals include: (1) a better understanding of Deaf students' experiences and their strategies of navigating an undergraduate STEM program; (2) providing counter-narratives to challenge the persistent negative perspective of Deaf students; and (3) recommending strategies or tools for advocates, mentors, educators, universities, policymakers, parents, and students themselves.

### Principal Investigator

- **Marchut, Amber** (Student) • Education

### Funding Source

- Gallaudet Small Research Grant

### Perspectives and experiences in the lives of deaf-blind college students

**Status:** Completed

**Start date:** February 2015

**End Date:** April 2015

Children and adults who are deaf-blind are resilient individuals who face significant, unique and complex challenges in all aspects of life. Challenges include access to information, communication with others, moving around in the world. This qualitative research study is to discover perspectives and experiences of deaf-blind college students who attend a bilingual university for Deaf students. Personal interviews are to explore how deaf-blind college adults navigate their way to academic achievement and social inclusion, what strategies they employ, how they cope with challenges of college life, and if their educational experiences meet their academic, social and emotional

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needs at a college that is primarily accessible for deaf students. A grounded theory-based approach is to be used as an analysis, as there is limited information available about deaf-blind individuals who attend post-secondary education. This project is to provide insights, resources, strategies, and support for new deaf-blind students who plan to attend post-secondary education or are already attending college.

### Principal Investigator

- **Wolsey, Ju-Lee** (Student) • Education

### Funding Source

- Gallaudet Small Research Grant

### School personnel's perceptions of ASL instruction in preK-12 deaf education settings

**Status:** Ongoing

**Start date:** May 2015

**End Date:** December 2015

This study focuses on the perceptions that school personnel have about American Sign Language (ASL) instruction in pre-K-12 deaf education settings. The roles and expectations of ASL teachers vary in these schools and the components of ASL instruction for the deaf and hard of hearing students also vary among the ASL teachers and school personnel. For this study, 100 participants will be recruited for an online survey. Using Likert scale questions, they will be asked to share their perceptions of ASL instruction and the roles and expectations of ASL teachers. Data analysis will be used to identify professional development needs, future research directions, and the writing of grant proposals for research and professional development activities.

### Principal Investigator

- **Hile, Amy E.** • Education

### Additional Investigator

- **Marchut, Amber** (Student) • Education

### Funding Source

- Gallaudet Small Research Grant

### SFA1: Visual and cognitive plasticity

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### SFA5: Integration of research and education

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Shared book reading using ASL and English for young signing deaf and hard of hearing children

**Status:** Completed

**Start date:** September 2014

**End Date:** October 2015

Using a quasi-experimental design, this study aims to investigate bilingual language growth in both English literacy and American Sign Language (ASL) in deaf and hard of hearing children using an ASL/English shared book reading approach. Two schools for deaf children with comparable students will function as the experimental (treatment) ( $n = 15$ ) and control group ( $n = 15$ ). A set of standardized and non-standardized measures of ASL and early literacy including motivation will be used to document growth over a 10-week intervention. The study will investigate the effects of a systematized shared reading program for young children who are deaf or hard of hearing who attend residential schools for the deaf. The program will use DVD and literacy materials developed at Lamar University based on reading research from the University of Illinois that use whole stories as a basis for early literacy instruction.

### Principal Investigator

- **Clark, Diane** • Education

### Additional Investigators

- **Andrews, Jean** • Lamar University
- **Baker, Sharon** • University of Tulsa
- **Musyoka, Millicent** • Lamar University

### Survey of Deaf professionals and early intervention

**Status:** Ongoing

**Start date:** June 2014

**End Date:** September 2015

Two recently published documents on best practice guidelines on early intervention for Deaf and hard-of-hearing infants and their families include recommendations for involving Deaf professionals in all aspects of early intervention programming. The extent to which Deaf professionals are included in early intervention around the world is unknown. A survey was designed as a first step to identify individuals and programs that might be willing to be an initial contact for us as we collect data about the presence, roles and responsibilities of Deaf professionals in early intervention in the U.S., Europe, and beyond.

### Principal Investigator

- **Sass-Lehrer, Marilyn** • Education

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### Additional Investigators

- **Benedict, Beth** • Art, Communication and Theatre
- **Young, Alys** • University of Manchester, UK

### Transition of deaf students from secondary to post-secondary settings

**Status:** Completed

**Start date:** April 2013

**End Date:** June 2015

This study examines the practices of high schools and universities in transitioning deaf students to postsecondary education. Transition is an issue that is gaining attention as an important step in ensuring that students with disabilities receive the support they need to be successful in their post-high school lives. Despite the importance of the outcome, little is known about how deaf students prepare to make the transition into a postsecondary environment. Since there is little research in the transition preparation for students who are deaf, this study seeks to begin by gathering information on the current practices of schools and high schools by first asking the students about their own experiences.

### Principal Investigators

- **Yuknis, Christina** • Education
- **Wright, Steve** (Student) • Education

### Product

Yuknis, C., & Wright, S. J. (2015, April). *Transition experiences of college students who are deaf and hard of hearing*. Poster presented at the meeting of the Council for Exceptional Children, San Diego, CA.

### Transitioning from high school to college: Student perceptions of preparation

**Status:** Ongoing

**Start date:** August 2015

**End Date:** May 2016

There is a disconnect between the number of students who enter college and the number who graduate. Research demonstrates a high percentage of deaf students enter postsecondary education; however few persist to graduation. The question we are left with is how to identify the barriers preventing deaf students from graduating at the same rate as their hearing counterparts. The study will interview first-year deaf college students in order to understand their perspectives regarding their transition to college. Moreover, the study will examine how they describe preparedness and resolve perceived challenges.

### Principal Investigators

- **Yuknis, Christina** • Education
- **Keith, Cara** (Student) • Education
- **Tibbitt, Julie** (Student) • Education
- **Zimmerman, Heather** (Student) • Education

### VL2 national research volunteer program

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### VL2 shared data resource

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### Scholarly and Creative Activity

Garage, M. (2015, June). *Literacy and signacy development for bilingual deaf children*. Workshop conducted at the Associação dos Surdos de Goiânia, Goiânia, Brazil.

Garate, M. (2015, June). *Educação bilíngue para crianças surdas: Mitos e fatos* [Myths and facts about bilingual education for deaf children]. Presented at the meeting of the Nacional Surdos e Surdas em Goiás, Goiânia, Brazil.

Gárate, M. (2015, January). *Language allocation in bilingual classrooms*. Workshop conducted at the West Virginia School for the Deaf and Blind, Romney, WV.

Gárate, M. (2015, January). *Signacy framework: Developing ASL skills in K-12 classrooms*. Workshop conducted at the West Virginia School for the Deaf and Blind, Romney, WV.

Gárate, M. (2015, June). *Educating children with cochlear implants in bilingual environments*. Keynote address presented at the Midwest Conference on Deaf Education, Sioux Falls, SD.

Gárate, M., & Lenihan, S. (2015). Collaboration for communication, language and cognitive development. In M. Sass-Lehrer (Ed.), *Deaf and hard of hearing infants, toddlers and their families: Interdisciplinary perspectives* (pp.233-273). New York, NY: Oxford Press.

Gerner de García, B. A. (2014, November). *It's not about shamrocks: Teaching the diversity of 20th century Irish culture*. Presented at the meeting of the National Association of Multicultural Education, Tucson, AZ.

Hile, A. E. (2015, August). *ASL as a heritage language in ASL/English bilingual schools*. Workshop conducted at Indiana School for the Deaf, Indianapolis, IN.



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Hile, A. E., & Marchut, A. (2015, June). *ASL professionals in K-12 deaf education settings: What do we know about them?* Presented at the meeting of the American Sign Language Teachers Association, Minneapolis, MN.

Hile, A. E., (2015, June). *The «hats» of ASL professionals in K-12 deaf education settings.* Presented at the Midwest Conference on Deaf Education, Sioux Falls, SD.

Batamula, C., & Kite, B. J. (2015). Less play = Less language? *NADmag*, 15(1), 16-17.

Kite, B. J. (2014). Family stress and resiliency framework. In R. Theoharis & M. Fitzpatrick (Eds.), *Trains, video games, and super heroes: Max's journey*. Dubuque, IA: Kendall Hunt Publishing Co.

Kite, B. J., & Burns, H. (2014, December). *An overview of ASL/spoken English bilingual development in deaf and hard of hearing children.* Workshop conducted at the Maryland School for the Deaf, Columbia, MD.

Hintz, E. G., Mangrubang, F., Jones, M. D., Lawler, M. J., & Bench, N. (2015). Adoption of ASL classifiers as delivered by head-mounted displays in a planetarium show. *Journal of Astronomy & Earth Science Education*, 2(1), 1-16.

Batamula, C., Keith, C., Kite, B. J., & Mitchiner, J. (2015, March). *Family language policy & planning: How does it all fit in your family?* Presented at the meeting of Hearing Detection & Intervention, Louisville, KY.

Mitchiner, J. (2015). Making the classroom environment accessible to ALL. In R. Theoharis & M. Fitzpatrick (Eds.), *Trains, video games & superheroes: Autism in context*. Dubuque, IA: Kendall Hunt Press.

Mitchiner, J. C. (2014). Deaf parents of cochlear implanted children: Beliefs on bimodal bilingualism. *Journal of Deaf Studies and Deaf Education*, 20(1), 51-56.

Gentzke, S., Kartheiser, G., Keith, C., Riddle, W., Sonnier, W., Stone, A., ..., Yuknis, C. (2014, October). Rewriting teacher credentials [Web log post]. Retrieved from <http://ecologyofeducation.net/wsite/rewriting-teacher-credentials/>

Taylor, S., & Yuknis, C. (2015, May). *Tech-supported access to language learning: Making language accessible for deaf and ELL students in mainstream classrooms.* Poster presented at the Common Ground Conference, Ocean City, MD.

Yuknis, C. (2015, March). *Breaking tradition in 21st century teacher education.* Presented at the meeting of the Association for Supervision and Curriculum Development, Houston, TX.

### English

The English department provides a high quality academic environment that involves students in critical thinking, discussing and writing about literature and writing.

### Scholarly and Creative Activity

Bradbury, J. M. (2014). [Review of the book *True relations: Reading, literature, and evidence in seventeenth-century England* by F. Dolan]. *History: Reviews of New Books*, 43(1).

Bradbury, J. M. (2015, March). [Review of the book *Enlightenment in ruins: The geographies of Oliver Goldsmith* by M. Griffin]. *The Eighteenth-Century Intelligencer*, 29(1).

Harmon, K. (2014). Small machinery. In J. L. Clark (Ed.), *Deaf literature extravaganza*. Minneapolis, MN: Hand-type Press

Mounty, J., Pucci, C., & Harmon, K. (2014). Emic perspectives on reading development in American Sign Language/English bilingual deaf children. *Journal of Deaf Studies and Deaf Education*, 19(3), 333-346.

Myers, S. S. (2014). *Discover the Gallaudet Honors advantage* [Video Webinar]. Retrieved from <https://www.youtube.com/watch?v=M0X6bgegF8Y>

Franklin, P., Nickerson, J., & Stremlau, T. (2015, May). *Emphasizing higher-order cognitive skills for «academically adrift» students.* Presented at the Lilly International Conference, Bethesda, MD.

Pajka, S. (2014). Defining «place» in a visually oriented and linguistically diverse first-year course. In K. Mulrooney (Ed.), *Teaching and learning in bilingual classrooms: New scholarship* (pp. 11-40). Washington, DC: Gallaudet University Press.

Pajka, S. (2015, April). *Vampire as the cultural other: Understanding Deafula.* Presented at the meeting of the Popular Culture Association and American Culture Association, New Orleans, LA.

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### Gallaudet University Press

Gallaudet University Press is a vital, self-supporting member of the Gallaudet educational and scholarly community. The mission of the Press is to disseminate knowledge about Deaf and hard of hearing people, their languages, their communities, their history, and their education through print and electronic media.

#### Research Projects

##### 'American Annals of the Deaf': Reference issue

**Status:** Ongoing

**Start date:** January 1990

For more than 20 years, the RSIA compiled information for the «Schools and Programs for the Deaf in the United States» and «Schools and Programs for the Deaf in Canada» listings in the Reference issue of the *American Annals of the Deaf*. In 2012, Gallaudet University Press took over that responsibility. The 2014 Reference issue includes 872 schools and program in the United States and 22 in Canada. The listings have been used for a variety of purposes by educators and researchers, but they serve chiefly as a directory of programs and schools and the services they provide to Deaf children and youth in support of their education.

##### Principal Investigator

- Mullervy, Deirdre • Gallaudet University Press

### General Studies Program

The General Studies Program is a rigorous, integrated, and intentional program designed to guide and assess students' progress toward achieving the five Gallaudet Student Learning Outcomes, which include Language and Communication, Critical thinking, Identity and Culture, Knowledge and inquiry, Ethics and Social Responsibility. The General Studies Curriculum challenges students and faculty members to grapple with the complexities of an interdisciplinary academic setting that mirrors and prepares graduates for the complex world we live in—a world where technology provides instant access to an ever-growing body of information that weaves together the arts, sciences, and humanities.

#### Scholarly and Creative Activity

Kennedy, R. (2015, August). DC's rising food stars predict the next big thing. *Elevation DC*. Retrieved from [http://elevation-dcmedia.com/features/chefs\\_090115.aspx](http://elevation-dcmedia.com/features/chefs_090115.aspx)

Kennedy, R. (2015, June). An urban farming renaissance in our nation's capital. *Civil Eats*. Retrieved from <http://civileats.com/2015/06/29/an-urban-farming-renaissance-in-our-nations-capital/>

Kennedy, R. (2015, September). How researchers are trying to grow an unusual urban crop: Rice. *The Washington Post*. Retrieved from: [https://www.washingtonpost.com/lifestyle/food/how-researchers-are-trying-to-grow-an-unusual-urban-crop-rice/2015/09/10/0b59553a-4a94-11e5-8ab4-c73967a143d3\\_story.html](https://www.washingtonpost.com/lifestyle/food/how-researchers-are-trying-to-grow-an-unusual-urban-crop-rice/2015/09/10/0b59553a-4a94-11e5-8ab4-c73967a143d3_story.html)

### Government and Public Affairs

The Government program emphasizes the links between research, learning and activism. Much of the research effort by both faculty and students focuses on issues such as international and domestic human rights and influencing political processes, often integrating the areas of law, politics and organizational behavior.

#### Research Projects

##### Empowering rural Deaf citizens in Africa through social movements

**Status:** Completed

**Start date:** April 2012

**End Date:** September 2015

Empowering Deaf citizens in Africa is a daunting task. Africa has become more democratic in some sense over the last two decades but Deaf citizens do not have access to the resources they require to participate in this emerging democratic culture. This chapter suggests some general strategies that address key but often overlooked issues vital to deaf empowerment. Most disabled peoples' organizations seek to influence policy to bring symbolic and material benefits to their members. Organizational development requires the mixing of symbolic and material benefits. While most often material benefits are limited to specific groups of an organization's potential members, symbolic benefits are distributed to a much broader set of people. Urban dwellers are most likely to access most material benefits, while those in rural areas typically need to be satisfied with symbolic benefits. This chapter identifies both organizational strategies and new ways of thinking about rural Deaf people that may assist in assuring that their needs are prioritized by organizational leaders. Among these strategies is attempting to empower rural Deaf people by improving their access to material benefits such as educational support,



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employment, and social security that allow them to articulate their interests and propose solutions to remaining barriers.

### Principal Investigator

- **Penna, David** • Government and Public Affairs

### Product

Penna, D. (2015). Empowering rural deaf citizens through organizations and social movements. In A. Cooper & K. Rashid (Eds.), *Citizenship, politics, difference* (pp. 185-197). Washington, DC: Gallaudet University Press.

### English acquisition through reading: Translation as a strategy

**Status:** Ongoing

**Start date:** September 2010

English acquisition for Deaf students is commonly through exposure to written English. Studies have shown that even for hearing children as they are acquiring English through speaking, exposure to an abundance of books showed advanced reading and listening comprehension skills later on when compared with children who have limited exposure to reading. This underscores the importance of exposure to a written form of language as a part of the acquisition process. Students were able to master a second language more quickly when they were immersed in reading in that language. For Deaf children learning English as a second language through reading, it is hypothesized that they use translation as a strategy. Translation in this study is operationalized as a process that occurs on one of 7 different levels. Those levels fall into one of three general categories: lexical, multi-lexical, and sentence. The more skilled the student is, the more different levels of translation the student is able to use. The more advanced readers than those in the study (1<sup>st</sup> and 2<sup>nd</sup> grade) could operate on even higher levels, such as the multi-sentence or paragraph level. Translation during reading activities is no simple feat; as one moves from the language of the text to the language of translation, it is not simply a matter of matching equivalent words in the two languages. Grammatical constructions as well as idiomatic language must also be taken into account.

### Principal Investigator

- **Kuntze, Marlon** • Government and Public Affairs

### Additional Investigator

- **Scott, Jessica** • Tulsa University •

### Fingerspelling development that is independent of English

**Status:** Ongoing

**Start date:** October 2011

Fingerspelling is often lauded as the link between ASL and written English. Studies have shown that children begin to produce fingerspelling in ASL before they are facile with English orthography. Children also incorporate fingerspelling naturally as part of the American Sign Language (ASL) acquisition process. Fingerspelling in natural ASL discourse is often shaped by the phonological processes to help make it flow with ASL. In the Kuntze longitudinal study (5-year), an explosion in the use of fingerspelling is observed during the Kindergarten class even though the students have not been formally introduced to reading, the investigation focuses on what the development is like. The hypothesis for this study is that the process may parallel in some interesting ways with the «invented spelling» observed in children writing. For example, a child might «invent» by filling in what they think a finger-spelled word they have been exposed to consists of.

### Principal Investigator

- **Kuntze, Marlon** • Government and Public Affairs

### Additional Investigator

- **Kim, Kelly** • Boston University

### Insight from child ASL on the distinction between gesture and lexical sign

**Status:** Ongoing

**Start date:** October 2013

**End Date:** September 2015

The focus of the study is to analyze the items in child ASL that are gestural, analogous, or iconic. They include items that look like gestures that non-signers use, the gestural components of morphologically complex signs (i.e., the manner of movement, location, or affect), and items that convey action. The goal is to analyze the componentiality of those items and see the extent to which the same components may appear across different types of items under study. The dataset is composed of videotaped naturalistic conversations involving five children (ages around 3;10) within the classroom. Sign language research has been largely guided by the assumptions about language based on what is known about spoken languages. Currently, the line between gesture and language in general is being seen as less clear than before and it helps open the horizon for asking questions not asked in the past about ASL. The evolutionary trajectory of signed languages on the basis of the constraints and the possibilities of its modality has to be different from spoken languages. The gesture-language distinction

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short-circuits a more comprehensive approach to understanding ASL. It results in a less accurate repertoire of ASL lexicon; in an undercount of child vocabulary; in limited investigation on the nature of morphological structure of ASL.

### Principal Investigator

- **Kuntze, Marlon** • Government and Public Affairs

### Additional Investigators

- **Keith, Cara** (Student) • Education
- **Muncie, Nathaniel** (Student) • Linguistics

### Funding Source

- Gallaudet Priority Research Fund

### Insight from child ASL on the questionable distinction between gesture and lexical sign

**Status:** Ongoing

**Start date:** October 2013

**End Date:** September 2015

In this study, video data will be used to formulate a more complete understanding of linguistic development in young deaf children. Specifically, certain items and components will be extracted from the data and subjected to various linguistic analyses. These items and components will be chosen based on being commonly considered gesture or gestural in the field of ASL linguistics. Categories of these items/components are the following: emblems, classifiers, surrogates, and non-manual components. Each of the categories will be assessed on how they behave linguistically in terms of phonology, morphology, semantics, stability of form, and iconicity. The transcription of the data will be done using the Berkeley Transcription System as it has the power to codify each morpheme in a sign. The BTS uses the CHAT format, which will make it possible to use the CLAN software program to quantify the findings. The BTS will help show the different ways the items in question may be made more morphologically complex; what components are incorporated making the lexical item morphologically complex; and how items are capitalized upon to produce classifiers and surrogates. Historically, the separation of gesture and language was conveniently based on the modality distinction between spoken language as aurally based and gesture as visually based. The dawn of sign language research as a study of visually-based languages paradoxically perpetuated the distinction between language and gesture. An important objective in early ASL research was to make a case that ASL is indeed a bona fide language, thus inadvertently maintaining the distinction. Currently, some researchers are arguing that gesture and language are a product of the same cognitive structure. In fact, when used in conjunction with speech, the potential

of gesture to function as a linguistic unit is limited. Only by using gesture as the sole mode of communication, will its use become free and allowed to evolve and become more language-like. This phenomenon may account for the historical roots of many of the world's signed languages.

### Principal Investigator

- **Kuntze, Marlon** • Government and Public Affairs

### Funding Source

- Gallaudet Priority Research Fund

### Motivation to learn and apply new knowledge and skills from training to the workplace

**Status:** Ongoing

**Start date:** October 2014

**End Date:** August 2016

The proposed inquiry focuses on how faculty transfer what they are motivated to learn in their educational training back to their workplace. Knowledge, skills, and abilities learned from educational training and applied in the workplace have become a concern for any organizations including Universities due to the lack of evaluation instruments to examine the transfer of learning motivation. Universities invest considerable money and employee time in professional development with the intention of gaining in intellectual capabilities, and effective work performance. The study examined how faculty transfer what motivates them to learn in training and how the newly learned content is applied to their work; and how relationships in motivation and work environment apply learning transfer in the workplace. The study will analyze the state of learning transfer research for motivation and work environment that may require clarification or further research study. The outcomes of the study may provide strategies that can be used to design and evaluate transfer of learning and motivation to improve work performance in the workplace.

### Principal Investigator

- **Myers, Mark** • Government and Public Affairs

### Scholarly and Creative Activity

O'Brien, C. Kroner, C., & Placier, P. (2015). Deaf culture and academic culture: Cultivating dialogue across cultural boundaries. *Journal of Diversity in Higher Education*, 8(2), 104-119.

O'Brien, C., & Brooks, J. (2015). Deaf culture and education: Toward a culturally relevant leadership. In A. Normore & K. Esposito (Eds.), *Inclusive practices for special populations*

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*in urban settings: The moral imperative for social justice leadership.* Charlotte, NC: Information Age Publishing.

O'Brien, C., & Placier, P. (2015). Deaf culture and school culture in a residential school for the Deaf: "Can do" versus "can't do". *Journal of Equity and Excellence*, 48(2), 320-338.

### Hearing, Speech, and Language Sciences

The department conducts extensive research on communication access technology and rehabilitation for Deaf and hard of hearing people through its Rehabilitation Engineering Research Center on Hearing Enhancement. Faculty, staff and students conduct research on hearing, speech, spoken and visual language, and balance assessment and intervention across the human lifespan.

#### Research Projects

##### **Acquiring an effective training method for at-home use for the made for mobile phone otoscope.**

**Status:** Ongoing

**Start date:** April 2015

**End Date:** May 2016

The aim of this study is to evaluate the effectiveness of training materials on producing accurate and efficient otoscopic images and its applicability for at-home care. The current study will use two groups of novice users/non-professionals, for example, parents. Group A (n=25) will serve as the control group and will receive the written instruction manual along with visual instructions from me, a second year audiology graduate student. Group B (n=25) will serve as the experimental group and receive both the written instruction manual and CellScope's training video addressing the proper use of the device. Both groups will use the Oto by Cellscope to capture images of a number of ears. Group effectiveness will be measured by anecdotal depiction of ease of manipulation of the device, the number of tries, and the length of time required to take an accurate picture of the tympanic membrane. Accuracy of the picture will be determined by following a certain criteria determined at a later time. A pre- and post-survey will be administered assessing the subject's comfort level, the ease of use, the potential for future use, attitudes, and the opinion of the instructional materials. Group comparisons will be made to determine the effectiveness of the training materials as well as assessing the functional use of the Oto for novice users

#### Principal Investigators

- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

- **Pomocala, Rachel** (Student) • Hearing, Speech, and Language Sciences
- **Roush, Kristin** • University of Virginia

#### Additional Investigator

- **Meehan, Rachel** (Student) • Hearing, Speech, and Language Sciences

##### **Assessing audiologists' exposure knowledge, and attitudes with deaf individuals**

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

Historically, the Deaf community and audiologists have had differing views on hearing loss intervention. Even so, members of the Deaf community may see an audiologist for a variety of reasons and it is important that audiologists understand how to best work with these individuals. Professional audiological organizations encourage cultural competence, which includes working with the Deaf community. Previous research has investigated other healthcare fields and cultural competence with Deaf individuals, but no research exists regarding audiologists' cultural competency with this group. Thus, the purpose of this study is to investigate audiologists' exposure to, knowledge of, and attitudes towards Deaf individuals. In order to determine how to best serve the culturally Deaf population, it is necessary first to investigate audiologists' current cultural competency. The results be used to better serve this population in audiological settings.

#### Principal Investigator

- **Matesi, Chelsea** (Student) • Hearing, Speech, and Language Sciences

#### Funding Source

- Gallaudet Small Research Grant

##### **Auditory self-monitoring**

**Status:** Ongoing

**Start date:** October 2003

**End Date:** October 2016

A novel approach to investigating self-hearing has been developed. It is based on traditional psychophysical techniques, and focuses on the individual's sensitivity to variations in different acoustic properties of his/her speech feedback (e.g., timing, intensity). To date, tests of feedback delay detection and relative loudness of the self-generated speech have been fully automated and applied to investigate the effect of different listening conditions on self-hearing by individuals with

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different hearing abilities. In addition, a new line of research has been developed that focuses on the acoustic characteristics of the speech signal recorded both in the person's ear canal and at different points on his/her head, for live versus recorded speech, in either open or occluded ear. It is expected that the outcomes of this research program will include both increased understanding of the role that speech feedback plays in speech production, and the guidelines for the design of hearing assistive technology that can better serve self-hearing needs of hard of hearing individuals.

### Principal Investigator

- **Barac-Cikoja, Dragana** • Hearing, Speech, and Language Sciences

### Funding Source

- U.S. Dept. of Education-National Institute on Disability & Rehabilitation Research (NIDRR)

### Product

Barac-Cikoja, D., Schultz, K., Barney, J., & Kingman, R. (2015, March). *Perception of own voice relative loudness at different speaking levels*. Poster presented at the meeting of the American Auditory Society, Scottsdale, AZ.

### Cognitive and electrophysiological correlates of phonological processes in Deaf undergraduate readers *See in Psychology*

### The effect of caffeine withdrawal on VNG oculomotor assessment

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2017

Many audiologists recommend that patients abstain from caffeine before vestibular testing. The necessity of this requirement, however, has not been substantiated in the literature. Abrupt caffeine abstinence is known to cause caffeine withdrawal symptoms, which can include drowsiness, fatigue, and inattention. These particular symptoms are also known to negatively affect oculomotor performance. This study investigated the impact of caffeine withdrawal symptoms on Videonystagmography (VNG) oculomotor assessment. Fifteen caffeine users who consumed, on average, between 200 and 900 mg of caffeine daily were recruited. Participants were subject to the oculomotor portion of the VNG test battery, in addition to spontaneous nystagmus measures, with caffeine in their systems and again after abrupt abstinence. Participants also completed a caffeine withdrawal symptom assessment at the end of testing. The results showed 86 percent of participants reporting drowsiness/fatigue and 80 percent reporting de-

creased alertness/concentration. Paired sample t-tests revealed statistically significant differences in caffeinated versus abstinence performance for 40 deg/sec OKN velocity for clockwise and counterclockwise stimuli ( $p = .009$ ,  $p = .013$ ) and for gain for clockwise stimuli ( $p = .041$ ). No other parameters measured revealed significant differences in performance. Results from this study reveal that regular caffeine users who abruptly abstain from caffeine for vestibular testing may exhibit poorer oculomotor responses as opposed to their performance with caffeine in their system. Caffeine consumption does not appear to negatively impact oculomotor test performance; however, caffeine abstinence does appear to cause negative withdrawal symptoms for many patients. These findings provide evidence that supports reconsideration of caffeine abstinence requirements prior to vestibular assessment.

### Principal Investigators

- **Graham, Krystyna** (Student) • Hearing, Speech, and Language Sciences
- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

### Additional Investigator

- **Smith, Sean** (Student) • Hearing, Speech, and Language Sciences

### Effect of eye gaze on amplitude of the ocular vestibular evoke myogenic potential (oVEMP)

**Status:** Completed

**Start date:** September 2014

**End Date:** October 2015

The purpose of this study is to evaluate which eye-gaze direction will produce the greatest amplitude when recording the response of the ocular vestibular evoked myogenic potential (oVEMP). Six muscles aid the movements of the eye. Vertical eye movements (up and down) use four of the six muscles: superior rectus, inferior oblique (up), and superior oblique and inferior rectus (down). The oVEMP is derived solely from contractions of the inferior oblique. Previously studied eye gaze positions (i.e. upward maximal gaze and upward gaze of 30-35 degree) have been used in recording the oVEMP response. These upward eye gazes contract the inferior oblique muscle while eliciting the use of the superior rectus to accomplish the upward direction of gaze. This study will solely elicit the contraction of the inferior oblique muscle, and will compare two eye-gaze positions: side and upward left (side gaze left) and side and upward right (side gaze right) with the previously studied upward eye-gaze (up gaze) direction. The oVEMP will be measured using each of the eye gaze directions and comparisons between previously used up gaze and this study's side



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gaze will be analyzed. Measuring only the contraction of the inferior oblique, may reveal a more sensitive response that can be obtained for the oVEMP.

### Principal Investigators

- **Espinosa, Ashley** (Student) • Hearing, Speech, and Language Sciences
- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

### **The effect of varied insertion depth on peripheral vestibular responses: An investigation of caloric irrigation clinical technique**

**Status:** Ongoing

**Start date:** November 2014

**End Date:** December 2015

The purpose of this study is to investigate whether varied insertion depths of caloric irrigator tips used in vestibular audiology diagnostic assessments elicit a statistically significant difference in the measured magnitude of vestibular responses. Searches of relative keywords through electronic peer-reviewed journal article databases currently yield no published evidence-based conclusion to this clinical inquiry. Caloric irrigation protocol involves delivering warm (44°C) water into an ear canal, which stimulates the vestibular sensors within the inner ear causing nystagmus (i.e., eye movements). Degrees and patterns of nystagmus are measured using infrared camera goggles. For this study, participants will be screened for confounding variables, and undergo standard caloric irrigation procedure administered using caloric irrigator tips placed at two distinct, individually pre-measured depths. It is hypothesized that the depth of tip insertions should not produce significant differences across measured responses. Nevertheless, supportive evidence is needed for reliability of technical guideline for this clinical tool. The inter-trial data across all participants will be analyzed for statistical significance to determine whether more standardized clinical protocols regarding depths of insertion should be upheld for clinical validity. The results of this study have implications for producing concrete conclusions currently unspecified within a commonly utilized procedure in vestibular assessments.

### Principal Investigators

- **Suen, Jonathan** (Student) • Hearing, Speech, and Language Sciences
- **Roush, Kristin** • University of Virginia
- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

### Funding Source

- Gallaudet Small Research Grant

### **Interactive learning environment for optimizing technology use**

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

Current clinical and home training programs for auditory rehabilitation use an *intensive* learning paradigm, a supervised training regime focusing on the use of important acoustic and contextual cues. This contrasts with principles of *implicit* learning that model perceptual learning in real-life, natural circumstances, and emphasize spontaneous exploration of the environment. The goal of this project is to develop a prototype training/counseling program to simulate different real-life listening conditions so that a person can experience both the benefits and limitations of their hearing devices, and develop realistic auditory rehabilitation goals and expectations. To accomplish this, the training program utilizes an individualized and interactive learning environment, consisting of soundscapes that represent a variety of listening situations with varying degrees of difficulty, and which change in response to user input. The program is based on self-directed exploration of the relationship between (i) *acoustic factors* that affect hearing/sound processing, and (ii) *technological solutions and communication strategies* that are aimed at improving sound detection, speech comprehension and the overall listening experience. Simulations of real-life listening conditions allow a self-structured direct experience that neither traditional auditory training nor informational counseling provide.

### Principal Investigators

- **Barac-Cikoja, Dragana** • Hearing, Speech, and Language Sciences
- **Kozma-Spytek, Linda** • Art, Communication and Theatre - *Technology Access Program (TAP)*

### **Investigating infant sign perception**

**Status:** Completed

**Start date:** November 2013

**End Date:** October 2014

Although considerable attention has been given to the development and production of signs in infants acquiring sign languages from their Deaf parents, companion research in infant perception of signs is lacking. This perception-production gap should be improved with experiments using a Visual Head-turn Preference Paradigm (VHPP) for signs that parallel the Auditory Head-turn Preference Paradigm (AHPP) for words.

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Specific aims are to determine if: (1) hearing infants whose Deaf parents use American Sign Language (ASL) show an earlier preference for familiar to unfamiliar signs than hearing infants whose hearing parents use only spoken English; (2) hearing infants whose hearing parents use Baby Signing (BS) show an earlier perceptual preference for familiar to unfamiliar signs than hearing infants with no exposure to BS or hearing infants with ASL exposure to familiar to unfamiliar signs; and (3) hearing infants acquiring bimodal-bilingual ASL and spoken English show an age difference between their sign and their word perception preferences. Another goal of the study was to engage undergraduate students who are Deaf or hard of hearing with Deaf, hard of hearing, and hearing graduate students in VHPP and AHPP research and in the development of a new combined Auditory-Visual Head-turn Preference Paradigm for future investigations of bimodal-bilingual spoken and sign language learning.

### Principal Investigator

- **Seal, Brenda** • Hearing, Speech, and Language Sciences

### Pediatric normative data on postural sway: CDP versus mCTSIB

**Status:** Completed

**Start date:** April 2014

**End Date:** August 2015

The purpose of this study is to determine the average postural sway of typically developing children. Postural sway was assessed in two age groups of children using the computerized dynamic posturography (CDP) and the modified clinical test of sensory integration of balance (mCTSIB). The children studied all have no known history of balance difficulties, and normal hearing sensitivity and middle ear status. Participants underwent 10 conditions to assess the extent of how the three sensory systems contribute to postural stability. The results of this study will contribute to the understanding of postural development in children and assist with early and accurate detection of vestibular deficits in children.

### Principal Investigators

- **Frey, Cynthia** (Student) • Hearing, Speech, and Language Sciences
- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

### Funding Source

- Gallaudet Small Research Grant

### Prevalence of dizziness and balance problems in deaf adults

**Status:** Ongoing

**Start date:** August 2015

**End Date:** August 2016

The current project aims to document the prevalence of dizziness and balance problems in adulthood, and to some extent, describe the types of problems that deaf adults report. Because of the anatomical proximity of the vestibular organs to the hearing organs, it is feasible to predict that deaf individuals experience more dizziness and balance difficulties than hearing individuals. Literature suggests greater balance difficulties in deaf children; however, prolonged effects into adulthood have not been reported. Due to recent evidence suggesting that lifelong vestibular deficits affect spatial memory and cognitive capacities in advanced adulthood, it is imperative to identify the risk population and implement preventative strategies.

### Principal Investigator

- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences

### Project D3: Interactive learning environment for optimizing technology use

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

### Project R1: Enhanced aural rehabilitation for cochlear implant users via telerehab technology

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

### Project R2: User-driven customization of cochlear implant programming

*See in Rehabilitation Engineering Research Center on Technology for the Deaf and Hard of Hearing (DHH-RERC)*

### A quantifiable posturography screening measure using the Wii Fit Plus

**Status:** Ongoing

**Start date:** May 2014

**End Date:** December 2016

This study will describe normative values for the Nintendo Wii balance board as a quantifiable screening measure for balance disorders for individuals with and without sensorineural hearing loss. 12 healthy young adults (10 with no hearing loss; 2 with severe to profound sensorineural hearing loss) completed the modified Clinical Test of Sensory Integration and Balance (mCTSIB) on the Wii Fit balance board. Normative values for each condition of mCTSIB were based on standard deviation from the mean score in three sets: "Center of Balance" (COB),

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Balance Maintenance Duration, and Stability Score. Furthermore, the correlation between Body Mass Index (BMI) and results on the FT tests were analyzed. A statistically significant negative correlation was found with BMI in relation to Condition 4 FT time. Within the population of participants, there was a large percentage of participants presenting with vestibular (33.3 percent) or somatosensory (50 percent) patterns. The Wii fit Balance board has been previously shown to be comparable to Computerized Dynamic Posturography (CSP) with good reliability and validity. Using it as a portable tool for quantifying mCTSIB has potential for clinical use. However, due to the high percentage of abnormal mCTSIB results in the sample and a strong negative correlation between BMI and FT time in Condition 4, further study is necessary before adopting the Wii Fit as a clinical tool.

### Principal Investigators

- **Tamaki, Chizuko** • Hearing, Speech, and Language Sciences
- **Vilendrer, Jessica** • Hearing, Speech, and Language Sciences

### The speed and accuracy of Washington, DC emergency vehicle siren localization in drivers with hearing loss

**Status:** Completed

**Start date:** November 2014

**End Date:** December 2014

The ability to identify where an emergency vehicle is approaching has an important effect on the safety of the driver and the response speed of the emergency vehicle. A previous study has shown that improved localization of sirens has decreased the response time toward emergency vehicles and decreased the number of emergency vehicle related accidents at intersections. The purpose of this research is to investigate how quickly and accurately individuals with hearing loss can identify sirens used in the Washington, DC area. Their results will be compared to individuals with normal hearing. Criteria for inclusion will include more than two years driving experience and the use of acoustic amplification, if needed. Participants will be asked to play a driving simulation game while road noise is played to simulate real life driving. Emergency sirens will be randomly played from eight speakers around the participant. Participants will be judged on speed and accuracy of siren localization. Three different sirens currently in use in the DC area will be used. Participants will be judged on both speed and accuracy of localization. Results from all participants will be compared across siren locations, between a normal hearing group and a hearing loss group.

### Principal Investigator

- **Morgan, Claire** (Student)

### Funding Source

- Gallaudet Small Research Grant

### Scholarly and Creative Activity

Garrido-Nag, K. (2015, July). *The effects of attention on speech perception in infants*. Presented at the Frontiers in Hearing: Beyond Newborn Hearing Screening Symposium, Denver, CO.

Garrido-Nag, K., Strasser, A., Koo, D., & Pick, L. (2014, November). *Phonological access in deaf undergraduate native American sign language users*. Presented at the meeting of the American Academy of Physical Medicine and Rehabilitation, San Diego, CA.

Guardino, D., Koo, D., Garrido-Nag, K., & Koo, L. (2015, February). *Verbal fluency performance among deaf readers*. Presented at the meeting of the International Neuropsychological Society, Denver, CO.

Hisagi, M., Garrido-Nag, K., Datta, H., & Shafer, V. (2015). ERP indices of speech processing in bilinguals, bilingualism. *Language and Cognition*, 18(2).

Jaiswal, S., (2014). *The role of vocal fold longitudinal tension in voicing transitions during speech*. Presented at the International Conference on Voice Physiology and Biomechanics, Salt Lake City, UT.

Kochis-Jennings, K. A., Finnegan, E. M., Hoffman, H. T., Jaiswal, S., & Hull, D. (2014). Cricothyroid muscle and thyroarytenoid muscle dominance in vocal register control: Preliminary results. *Journal of Voice*, 28(5), 652-e21.

Kwon, B. J. (2014, October). *Sound effects with auditory syntax (AUX)*. Presented at the meeting of Acoustical Society of America, Indianapolis, IN.

Kwon, B. J. (2015, February). *Fundamentals of AUX (auditory syntax) and its use in research and education*. Presented at the meeting of Association for Research in Otolaryngology, Baltimore, MD.

Kwon, B. J., & Perry, T. T. (2014). Identification and multiplicity of double vowels in cochlear implant users. *Journal of Speech, Language, and Hearing Research*, 57, 1983-1996.

Perry, T. T., & Kwon, B. J. (2015). Amplitude fluctuations in a masker influence lexical segmentation in cochlear implant users. *Journal of the Acoustical Society of America*, 137, 2070-2079.



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Maul, K. K., Goral, M., & Tchernichovski, O. (2014). *Low-level acoustic speech features correlate with language measures in aphasia therapy*. Presented at the meeting of the Society for Neuroscience, Washington, DC.

Oh-Park, M., Maul, K. K., Kong, Y., Chen, P., Sandefur, K., & Barrett, A. M. (2014, November). *Spatial neglect predicts swallowing problems following stroke*. Presented at the meeting of the American Academy of Physical Medicine and Rehabilitation, San Diego, CA.

### History, Philosophy, Religion, and Sociology

The History program incorporates traditional and innovative historical methods and approaches in its teaching and research, and maintains a strong tradition of high quality research. Research interests include Deaf history, the history of disability, Latin American history, French history, and urban history.

#### Research Projects

##### Conceptualizing Disability

**Status:** Ongoing

**Start date:** January 2001

In this ongoing project, the researcher is exploring ways that sociological and anthropological concepts and theories can illuminate how the concept of disability is enacted in society.

##### Principal Investigator

- **Barnartt, Sharon** • History, Philosophy, Religion, and Sociology

##### Deaf NYC

*See in Center for Deaf Documentary Studies (CDDS)*

##### US Navy/NASA Experiments on Deaf Men

*See in Center for Deaf Documentary Studies (CDDS)*

#### Scholarly and Creative Activity

Greenwald, B. H. & Van Cleve, J. V. (2015). A deaf variety of the human race: Historical memory, Alexander Graham Bell, and eugenics. *The Journal of the Gilded Age and Progressive Era*, 14, 28-48.

Greenwald, B. H. (2014). Presidents' panel: A conversation with I. King Jordan, Robert Davila, and T. Alan Hurwitz. *Sign Language Studies*, 15(1), 21-41.

Greenwald, B. H. (2014). Special issue: The twenty-fifth anniversary of the Deaf President Now movement. *Sign Language Studies*, 15(1), 5-9.

Greenwald, B. H. (2015, July). *Creating autonomy: The role of sports in U.S. social and political organizations*. Presented at the meeting of Deaf History International, University of Edinburgh, Edinburgh, Scotland.

Greenwald, B. H. (2015, July). *DPN and the ADA*. Panel Presentation at Festival ADA: 25 Years of Disability Rights, Smithsonian Institution, Washington, DC.

Greenwald, B. H. (2015, July). *Section 504, eugenics, and institutionalization*. Panel presentation at the Festival ADA: 25 Years of Disability Rights, Smithsonian Institution, Washington, DC.

### Honors Program

The Honors program provides a comprehensive undergraduate program from recruitment to Honors graduation. It features in depth critical thinking, research opportunities, and personal and professional skill development needed for achievement in both the arts and the sciences as well as in technical fields and a variety of professions.

#### Research Projects

##### Capstone Honors

**Status:** Ongoing

The Honors Capstone is the pinnacle of an undergraduate student's experience. During their Capstone experience, Honors graduates produce their first original scholarly or creative work. Motivated and capable students from all disciplines are invited to embark on this year-and-a-half journey. During this process, students select their committee, find a topic, propose their work, and then create their Capstone. Each student invests a huge portion of time and energy in completing the project. The Capstone Presentation is the final requirement for graduation with University Honors.

##### Principal Investigators

- **Shultz Myers, Shirley** • Honors Program
- **Whitebread, Geoffrey** • Honors Program

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### Additional Investigators

- **Head, Kayla** (Student) • English
- **Leung, Naomi S.** (Student) • Science, Technology, and Mathematics
- **Nelson, Jennifer** • English
- **Nickerson, Jane** • English
- **Ogunjirin, Adebawale** • Science, Technology, and Mathematics
- **Pajka, Sharon** • English
- **Parks, Earl** • Gallaudet Technology Services (GTS)
- **Shitama, August E.** (Student) • English
- **Solomon, Caroline** • Science, Technology, and Mathematics
- **Stevens, Amy** • General Studies Program
- **Stremlau, Tonya** • English
- **Un, Peter** • Gallaudet Technology Services (GTS)
- **Wang, Qi** • Business
- **Yu, Timothy** (Student) • Science, Technology, and Mathematics

### Products

Head, K. (2015). *Radiate: A Faith-Based Magazine for College-Age Christian Women (Honors capstone project)*. Gallaudet University, Washington, D.C.

Leung, N.S. (2015). *A Critical Review of the Postoperative Use of Metacam® in Cats (Honors capstone project)*. Gallaudet University, Washington, D.C.

Shitama, A. E. (2015). *Tips Book of Tips: Dating in DC (Honors capstone project)*. Gallaudet University, Washington, D.C.

Yu, T. (2015). *Software Application and Mobile Optimization (Honors capstone project)*. Gallaudet University, Washington, D.C.

### Interpretation

The Interpretation Program offers a multidisciplinary approach, with a special focus placed on theory and research. Course research as well as encouraged research are done as ways for students to exercise theories and explore new strategies in problem-solving. The results of research done by students, faculty, and staff continually provide new insight to the interpretation field. Through its recently established Center for the Advancement of Interpreting and Translation Research (CAITR), the Interpretation Program also offers opportunities for scholars and students to collaborate on projects and pro-

mote initiatives that advance interpreting/translating research nationally and internationally.

### Research Projects

#### **“The committee in my head”: Examining self-talk of American Sign Language-English interpreters**

**Status:** Ongoing

**Start date:** January 2015

**End Date:** November 2015

Anecdotally, interpreters report experiencing self-talk before, during, and after their work assignments; however, this inner dialogue has neither been empirically confirmed nor described in the literature. Prior studies suggest that guided self-talk can boost performance in various learning endeavors and human performance activities. It follows then that self-talk may also affect interpreting performance, either positively or negatively. Here reports of self-talk of American Sign Language-English interpreters were examined for the following characteristics: frequency, valence, overtness, self-determination, motivation, and function. Participants who reported experiencing self-talk (N=445) responded to online survey questions about their self-talk related to interpreting work. The main findings included the following: For frequency, more than half of the respondents reported experiencing self-talk between 1-5 times during their work. Regarding valence, 62 percent of respondents reported a mix of positive and negative self-talk about their performances. For overtness, 62 percent reported talking (or signing) aloud, while in an isolated setting, about their work experiences. Regarding self-determination, nearly half of the respondents (48 percent) reported self-talk as a mix of conscious and unconscious thoughts. Eighty-nine percent of the respondents reported using self-talk for motivation, but 65 percent reported their self-talk was actually de-motivational at times. The top reported function of self-talk was to improve their interpreting. The findings offer a rich description of self-talk by American Sign Language-English interpreters. We suggest that better awareness of self-talk may lead to self-awareness in professional interpreters, as well as result in instructional techniques for student interpreters.

#### **Principal Investigators**

- **Nicodemus, Brenda** • Interpretation
- **Maddux, Laura** (Student) • Interpretation

#### **Product**

Maddux, L., & Nicodemus, B. (2016). “The committee in my head”: Examining self-talk of American Sign Language-English interpreters. *Translation and Interpreting Studies*, 11(2).

## Goal E: Research and Outreach

### African-American Deaf community

**Status:** Completed

**Start date:** September 2014

**End Date:** May 2015

African-American Deaf people have their own behaviors, language variations, values, rules of behavior, and traditions, emphasizing Black first, Deaf second. While it is noted that there are certain identifiable variations in African-American signing, there is little documented research in the literature suggesting any significant cultural considerations with regard to interpretation. The goal of this research project is to focus on the question: What do Black Deaf leaders want from the interpreting community? In this qualitative study, I propose to conduct interviews with five (5) African-American Deaf leaders. The purpose is: 1) to identify the interpretive needs of the African-American Deaf community; and 2) to ascertain if those identified needs are being met by members of the interpreting profession. A possible outcome of this collaborative effort may be a proposed course on African-American Deaf culture to submit to the Department of Interpretation for inclusion in the interpreter training curriculum. The benefit of this course would be heightened cultural awareness and increased preparation of sign language interpreters to better facilitate signed communication to the Deaf community.

#### Principal Investigator

- **Wharton, Brenda** (Student) • Interpretation

#### Funding Source

- Gallaudet Small Research Grant

### Artifacts of Cognition in ASL-to-English Interpretation

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

Co-speech gesture in monolinguals has been linked to several cognitive processes – prompting memory stores, conveying spatial concepts, lexical search, and supporting rhythm/cohesion. Studies have demonstrated that bilinguals fluent in ASL and English produce gestures at similar rates during conversation as English monolinguals, but that bimodal bilinguals use different gesture types. This research extends these findings, examining co-speech gesture of ASL-English interpreters as they interpret into spoken English to determine whether bimodal bilinguals in this condition gesture similarly to bimodal bilinguals in conversation. Based on a previous pilot study I predict that bimodal bilinguals will gesture less while interpreting than they will during conversation. Comparing gesture rates and types will provide insight into how interpretation differs cogni-

tively from conversation. Interpreters will be filmed under two conditions: conversation, and while interpreting. Gesture rates and types under these conditions will be coded and compared to a monolingual English control group. A link between inhibition of co-speech gesture and disfluencies produced during ASL-to-English interpretation will be examined, too. The pilot study indicates a correlation between inhibition of gesture and disfluencies in the production of the English interpretation. If this link is established it could lead to improved techniques in teaching interpreting.

#### Principal Investigator

- **Santiago, Roberto** • Interpretation

#### Funding Source

- Gallaudet Small Research Grant

### Competencies of healthcare interpreters: Narratives from American Sign Language-English interpreters

**Status:** Ongoing

**Start date:** May 2014

**End Date:** May 2015

In this study, a collection of narratives from American Sign Language-English interpreters who work in healthcare interpreting is examined. The aim is to provide real-world examples of identified competencies for healthcare interpreters. Students in a graduate interpreting program interviewed 17 experienced ASL-English healthcare interpreters regarding stories that illustrate competencies needed in their work. The interviews were based on a document outlining specific skills for interpreting within healthcare settings.

#### Principal Investigators

- **Nicodemus, Brenda** • Interpretation
- **Emmorey, Karen** • San Diego State University
- **Swabey, Laurie** • ASL/Interpreting • St. Catherine University

#### Funding Source

- National Institutes of Health (NIH)

### Creating a space of our own: A phenomenological study of the lived reality of African American ASL-English Interpreters

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2015

In this study, the experiences of African American ASL/English signed language interpreters is examined through the lens

## Goal E: Research and Outreach

of critical race theory, intersectionality, and Black feminist thought. Employing hermeneutic phenomenology, the researcher seeks to explore how participants understand and make sense of their profession and their place in their profession. As this topic has not received much attention in signed language interpreting studies, it is hoped that this study will contribute to highlighting the experiences of interpreters who are sometimes overlooked within the literature. Using a three-interview protocol, the experiences of the participants will be explored during one-on-one sessions with the researcher. Once completed, all interviews will be transcribed and analyzed using in-vivo coding. At the conclusion of the study, it is hoped that the participants, the researcher, and the reader will have gained insights into the significance, if any, that race holds for African American ASL/English signed language interpreters.

### Principal Investigator

- **Ford, Folami M.** (Student) • Interpretation

### Funding Source

- Gallaudet Small Research Grant

### Deaf consumers' perceptions of signed-to-spoken language interpretation in eight signed languages

**Status:** Ongoing

**Start date:** September 2014

**End Date:** May 2015

In various countries, signed language interpreters and Deaf individuals anecdotally report that interpretations are weaker when rendered from signed language into spoken language. This paper will present preliminary findings from a cross-linguistic international study that investigated the perceptions of Deaf consumers and their strategies for working with signed language interpreters. Eight countries participated in this study: Australia, Belgium, England, Ireland, the Netherlands, Scotland, Switzerland, and the United States. From each country, two Deaf participants with a high degree of experience in working with signed language interpreters participated in a semi-structured interview using an established interview protocol. The video-recorded interviews were transcribed and analyzed for key themes, including gauging interpreter attitude, assessing skill, building trust, and critical criteria for selecting interpreters. A comparison of the responses was made across the participating countries. Overall, the results indicate a uniformity of experience by Deaf consumers with signed-to-spoken language interpreting being perceived as the weaker interpreting direction. Deaf individuals reported a number of strategies for working with interpreters, which was dependent on the importance and nature of the assignment. The findings provide insight into the shared experience of Deaf people

when working with interpreters and can be applied to education programs to better prepare future interpreters.

### Principal Investigators

- **Nicodemus, Brenda** • Interpretation
- **Bontempo, Karen** • Macquarie University
- **Haug, Tobias** • University of Applied Sciences for Special Needs Education Zurich
- **Napier, Jemina** • Macquarie University

### Additional Investigators

- **Leeson, Lorraine** • Centre for Deaf Studies
- **van den Bogaerde, Beppie** • Utrecht University of Applied Sciences
- **Vermeerbergen, Myriam** • University of Leuven

### Deaf perspectives on translating President Obama's 2009 inaugural speech

**Status:** Ongoing

**Start date:** September 2014

**End Date:** March 2015

In an earlier study, Swabey and Nicodemus examined interpretations of Obama's 2009 inaugural address across four languages: American Sign Language (ASL), French, German, and Japanese. In that work, we found that the ASL-English interpreters rendered the opening line in the address – «my fellow citizens» – with a high degree of variation in comparison to the spoken language interpretations. The data from the six ASL-English interpretations of the address revealed variation in the lexicon, the phonological production of the signs, and the phrasal structure. «My fellow citizens» is a highly formal and frozen English phrase used in specific pragmatic contexts, and ASL-English interpreters do not have a single standard equivalent to use in their work. To explore this issue further, we are seeking perspectives from highly experienced Deaf interpreters and ASL teachers regarding the semantic/pragmatic issues involved with translating a phrase of this nature in a highly structured, formal English speech.

### Principal Investigators

- **Nicodemus, Brenda** • Interpretation
- **Beldon, Jimmy** • ASL/Interpretation • St. Catherine University
- **Cagle, Keith** • Interpretation
- **Swabey, Laurie** • ASL/Interpreting • St. Catherine University

## Goal E: Research and Outreach

### Directionality in ASL-English interpreting: Quality and accuracy in L1 and L2

**Status:** Ongoing

**End Date:** May 2015

Among spoken language interpreters, a long-standing bias exists for working into their native language (L1). In contrast, signed language interpreters report a preference for working into their non-native, second language (L2). We investigated whether American Sign Language-English interpreters actually perform better when interpreting into their L2 (ASL) or into their L1 (English). Interpretations rendered by 30 ASL-English interpreters (15 novice, 15 expert) were assessed on accuracy (semantic content) and quality (articulation flow, speed, and prosody). For accuracy, novices were significantly more accurate when interpreting into English; experts were equally accurate in both directions. For quality, novices performed significantly better when interpreting into English; experts performed nearly equally in ASL and English. These results indicate that novices working in their L1 yield better interpretations, which supports the hypothesis that the difficulty of L2 production drives interpreting direction performance. Findings also indicate a disconnect between direction preference and interpreting performance. Novices may hold (mis)perceptions of ASL proficiency because they can default to fingerspelling and transcoding. Weakness in self-monitoring of signed language production may also lead novices to overrate their ASL skills. Interpreter educators should stress misperceptions of proficiency that arise from available, but inappropriate, strategies when interpreting into a signed language.

#### Principal Investigator

- **Nicodemus, Brenda** • Interpretation

#### Additional Investigator

- **Emmorey, Karen** • San Diego State University

#### Funding Source

- National Institutes of Health (NIH)

### Exploring the hegemonic whiteness in sign language interpreter education. Program curricula: A discussion with students, faculty and administrators

**Status:** Ongoing

**Start date:** January 2015

**End Date:** January 2016

Prior to the establishment of formal training for sign language interpreters, Deaf community members selected and trained individuals to provide these services. After the implementation of laws calling for the provision of sign language interpreting

services, formal sign language Interpreter Education Programs (IEPs) were established to provide skilled practitioners in the field. According to professional membership numbers and other data associated with racial diversity in the field of sign language interpretation, the number of African Americans/Blacks in the field has not grown at a steady pace; particularly within sign language IEPs. This research study will examine how IEPs are addressing the call for diversity in their programs specifically related to African American/Black students.

#### Principal Investigator

- **Williams, Leandra** (Student) • Interpretation

#### Funding Source

- Gallaudet Small Research Grant

### Interactive interpreting: teaching and learning strategies 2

**Status:** Completed

**Start date:** September 2014

**End Date:** October 2015

American Sign Language (ASL)/English interpreters often interpret in interactive situations where there are multiple speakers. When this occurs, the participants often learn who is speaking when the interpreter indicates who is initiating each utterance, a practice known as source attribution (SA). When interpreting from English into ASL, SA may be indicated via body shifting, changing eye gaze, index-to-source (pointing at who is speaking), or naming/describing the speaker. Although attributing interpreted utterances is a critical skill for interpreters, there is no known quantitative, experimental data verifying the use of teaching methods on this skill within the Interpreter Education Programs (IEP) curricula. This study aims to examine the effects of SA instruction on interpreting students by using a pre-test/instruction/post-test design. It is hypothesized that the results will indicate an increased ability of the interpreting students to incorporate SA into their interactive interpreting work. This study will provide an initial basis for the use of this type of research within interpreter education.

#### Principal Investigator

- **Maddux, Laura** (Student) • Interpretation

### Interactive interpreting: teaching and learning strategies 3

**Status:** Ongoing

**Start date:** August 2014

**End Date:** August 2015

American Sign Language (ASL)/English interpreters often interpret in interactive situations where there are multiple speakers. When this occurs, the conversation participants often



## Goal E: Research and Outreach

learn who is speaking when the interpreter indicates who is initiating each utterance, a practice known as source attribution (SA). When interpreting from English into ASL, SA may be indicated via body shifting, changing eye gaze, index-to-source (pointing at who is speaking), or naming/describing the speaker. Although attributing interpreted utterances is a critical skill for interpreters, there is no indication that this skill is taught in interpreter training curricula, nor is there known quantitative, experimental data verifying the use of teaching methods on this skill within these curricula. This study aims to examine the effects of SA instruction on interpreting students by using a pretest/instruction/posttest design. It is hypothesized that the results will indicate an increased ability of the interpreting students to incorporate SA into their interactive interpreting work. This study will provide an initial basis for the use of this type of research within interpreter education.

### Principal Investigator

- **Maddux, Laura** (Student) • Interpretation

### Funding Source

- Gallaudet Small Research Grant

### Interpreting decisions and power: Interpreters working in legal settings

**Status:** Ongoing

**Start date:** April 2012

**End Date:** December 2015

The primary aim of this applied research project is to investigate the decisions made by interpreters in legal settings that address the power relationship differential frequently found among participants in these settings. The project will expand knowledge about the various ways in which interpreters adopt practices designed to recognize, use, and potentially limit the impact of their power as the interpreter in a legal interaction. The objectives are to: (1) Assess awareness of interpreters in legal settings about the ways in which their decisions can positively or negatively affect the balance of power within an interpreted interaction; (2) Explore strategies used by interpreters when selecting the mode of interpretation in order to address power differentials in interactions; (3) Examine ways in which active preparation for legal assignments can contribute to producing a more effective interpretation, thus bringing closer alignment between parties in the legal interaction; (4) Investigate how Deaf/non-deaf interpreter teams affect an interpreted interaction and how the team is perceived by others in the legal interaction; (5) Identify working conditions that contribute to the shared responsibility in addressing the power relations among all participants in a legal interaction.

### Principal Investigators

- **Shaw, Risa** • Linguistics
- **Clark, LeWana** (Student) • Interpretation
- **Cranston, Jennifer** (Student) • Interpretation
- **Russell, Debra** • University of Alberta

### Lexical decisions and related cognitive issues in spoken and signed language interpreting: A case study of Obama's inaugural address

**Status:** Ongoing

**End Date:** May 2015

This study examined omissions, errors, and variability in lexical selection across four interpretations of President Obama's 2009 inaugural address in three spoken languages (French, German, and Japanese) and one signed language (American Sign Language). Microanalysis of 39 lexical items assessed the impact of lexical structure on cognitive load during interpreting, considering vocabulary size, number of lexical correspondents, and degree of shared cognates between the source and target languages. Results indicate that the language with the smallest documented vocabulary, the fewest lexical correspondents, and no shared cognates with English – American Sign Language – had the highest number of lexical omissions and errors in the interpretations. If omission/error rates in interpretation of lexical units are to be taken as a rough indicator of interpreting difficulty, it is more difficult to interpret the speech into Japanese than into French or German, and it is more difficult to interpret the speech into ASL than into the three spoken languages. These findings are in line with the idea that language structures impact cognitive load during interpreting and that interpreting effort is taxed to a higher degree when there is a greater difference between the source and target languages.

### Principal Investigators

- **Nicodemus, Brenda** • Interpretation
- **Gile, Daniel** • Université Paris, Sorbonne • ESIT
- **Swabey, Laurie** • ASL/Interpreting • St. Catherine University
- **Taylor, Marty** • Interpreting consolidated • Canada

### Metalinguistic references in signed language interpreting: Discourse strategies used by ASL-English interpreters

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2015

Among the linguistics challenges faced by signed language interpreters is how to manage the frequent metalinguistic references that occur in discourse. Metalinguistic references



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occur when a speaker uses language to talk about language. For example, in a lecture about phonetics, a hearing professor might say, “Cat is an English word consisting of three phonemes.” Similarly, when introducing a Deaf friend, a person may say, “His name sign is (C handshape on forehead).” In these examples, the content of the source message depends on retention of its original linguistic form to convey its intended meaning. Spoken language interpreters can readily convey metalinguistic references by simply repeating the word in its original form; however, signed language interpreters are unable to retain the original word or sign because their working languages are produced in two different modalities (sign-speech), a significant difference in the work between unimodal and bimodal interpreters. This study will examine ASL-English interpreters’ management and coordination of metalinguistic references in interactive discourse. Participants will interpret two dialogues in ASL and English that contain pre-scripted metalinguistic references. The researchers will create a typology of interpreters’ strategies for conveying metalinguistic references and report on interpreters’ perception about the cognitive effort needed in bimodal interpreting.

### Principal Investigator

- **Nicodemus, Brenda** • Interpretation

### Funding Source

- Gallaudet Small Research Grant

### Preparation by American Sign Language-English interpreters: Methods, effectiveness, and perceptions

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

American Sign Language (ASL)-English interpreters often prepare for interpreting assignments with the goal of rendering more accurate interpretations; however, little data conclusively supports or contradicts the efficacy of preparation. Further, there is limited examination of interpreters’ perception of the efficacy of their preparation methods. This study investigates the following: 1) What is the difference (if any) in the propositional content of English to ASL interpretations when interpreters have a 20-minute period versus when they have no preparation time; 2) What methods are used by ASL-English interpreters when preparing (cramming); and 3) How do ASL-English interpreters perceive the effectiveness of their preparation methods under these conditions? Twenty participants will interpret four 8-minute formal lectures from English into ASL. The participants will interpret the presentations: 1) with no preparation time, and 2) with 20 minutes of preparation time. Propositions in the source language texts will be compared for

number and accuracy with propositions produced in the target language under both conditions. Finally, participants will be interviewed regarding the preparation methods they employed and the methods they perceived to be effective in rendering the interpretation in this setting.

### Principal Investigator

- **Nelson, Tamar** (Student) • Interpretation

### Funding Source

- Gallaudet Small Research Grant

### Professional autonomy in video relay service interpreting: Perceptions of American Sign Language-English interpreters

**Status:** Completed

**End Date:** September 2015

American Sign Language (ASL)-English interpreters who work in the video relay service (VRS) industry are governed by rules and regulations established by the Federal Communications Commission and corporate VRS providers. The rules and regulations may restrict the autonomous decision-making of interpreters in this setting, thereby leading to a variety of outcomes in the work. This study investigates how interpreters exercise professional autonomy when working in the VRS setting. Using in-depth interviews following a grounded theory approach, the daily work of VRS interpreters will be investigated in relation to the various constraints that govern their actions. The plan is to interview approximately 30 ASL-English interpreters who are experienced in a VRS setting. The interview data will be analyzed for patterns (e.g. topic, vocabulary, interpreters’ actions, and similar feelings) that lead toward an understanding of interpreters’ potential use of professional autonomy in their daily work in VRS. Through investigating interpreters’ daily decision-making in VRS settings, along with their reasoning for exercising their autonomy, the aim is to evaluate the efficacy of the rules under which VRS interpreters work and to better understand the daily experience of VRS interpreters.

### Principal Investigator

- **Alley, Erica** (Student) • Interpretation

### Funding Source

- Gallaudet Small Research Grant

## Goal E: Research and Outreach

### Professional identity development of ASL-English interpreters

**Status:** Completed

**Start date:** April 2014

**End Date:** July 2015

Previous studies on language and identity, language-induced identity shifts in second language learners, the experiences of Korean-English interpreters/translators, and the experiences of hearing, regular education students who have taken American Sign Language (ASL) courses have yet to be applied to ASL-English interpreters. Interpreting Studies (IS) is regarded as interdisciplinary by nature, and thus draws upon frameworks from a variety of fields, including linguistics, translation studies, psychology, cognitive science, discourse analysis, and sociolinguistics. Among topics of investigation, IS researchers have examined errors, equivalency, cognitive processes, discourse markers, and roles and boundaries of interpreters. Signed language interpreting research has traditionally favored more quantitative design methods; only recently have more studies emerged that use qualitative or mixed methods. This study will examine the experiences of ASL-English interpreters using a questionnaire, auto-photography, and photo-elicitation interviews with sampling methods followed by semi-structured interviews for further data collection. Grounded in a hermeneutic phenomenological methodology, the study will address two primary research questions: How does a group of ASL-English interpreters experience the development of a sense of self and professional identity? and, What are a group of ASL-English interpreters' perceptions of how others react to their presentation of self and professional identity?

#### Principal Investigator

- **Hunt, Danielle** • Interpretation

### Signed language interpreter responses to interpreters in the media

**Status:** Ongoing

**Start date:** October 2014

**End Date:** September 2019

Social media has become a pervasive part of American culture with a number of professionals using it in different ways - including the spreading of wide reaching viral videos. With an increase in American Sign Language-English interpreters in the popular media, reactions to viral videos from professional interpreters need to be recorded. This study will look at how interpreters make use of social media, what sort of items they post, and how they react to posts from others. In addition to collecting basic information on how interpreters use social media, the study will explore reactions from interpreters to posts of viral videos portraying interpreters in the media. Reactions

often border on that of horizontal violence as interpreters can begin to «cyber-bully» each other. Interpreters may also react negatively to posts about incidents occurring in and around the work-place which may be perceived violations of the NAD-RID Code of Professional Conduct. Focus groups made up of self-identified working interpreters who use social media will be used to collect data about these topics. This project hopes to have a lasting impact on knowledge about interpreter social media trends along with impacts that this has on the profession.

#### Principal Investigator

- **Hunt, Danielle** • Interpretation

### Social justice education in sign language interpreting

**Status:** Ongoing

**Start date:** September 2014

**End Date:** October 2015

In their work, ASL-English interpreters must analyze, comprehend, and meet the needs of diverse colleagues and consumers. Anecdotally, consumers and colleagues have reported experiences of discrimination and disempowerment, rather than connection and goal attainment. Recently, Deaf and hearing leaders have proposed that interpreters need explicit instruction about systemic social inequalities, how these inequities impact various cultural groups, and how this knowledge should shape the interpreter's role. Thus, a new training approach for interpreters has emerged over the past four years, referred to as social justice education (SJE). Simultaneously, Deaf and hearing leaders have begun calling for more research and evidence-based interpreting pedagogy. Research from other «helping professions» offers evidence for SJE's positive impact and best practices; however, to date, no research has been conducted on the impact of SJE on interpreters. This exploratory study takes a crucial first step, using data from focus groups and a survey to establish a baseline of interpreter attitudes, knowledge, and access to resources. The study will further develop suggestions for best practices in SJE pedagogy in interpreter education, with the ultimate goal of better serving the needs of complex and diverse communities.

#### Principal Investigator

- **Mayhew, Hilary** • Interpretation

#### Funding Source

- Gallaudet Small Research Grant

## Goal E: Research and Outreach

### Storied classrooms: Narrative pedagogy in American Sign Language-English interpreter education

**Status:** Completed

**Start date:** January 2014

**End Date:** May 2015

Narrative pedagogy is an educational method that draws on the power of stories to cultivate learning. It has been described as the fundamental way that individuals «make sense» of events by connecting new information to their own experiences. In this paper, we argue that narratives are underutilized in American Sign Language-English interpreter education, perhaps due to concerns about confidentiality. This paper describes an educational project that incorporated narratives from experienced medical interpreters into an interpreting course. The primary learning objective for students was to become familiar with specific competencies necessary for successful practice in medical settings. Drawing on the document *ASL-English Medical Interpreter Domains and Competencies*, students individually interviewed 17 experienced medical interpreters to gain perspectives on competencies needed to interpret in medical settings. The interviews and resulting narrative data were used in the classroom to develop content knowledge about the competencies and to cultivate critical thinking regarding issues that arise in medical interpreting. We provide two samples of narratives collected by students and discuss our instructional methods with the students. We suggest that narrative pedagogy can serve as an effective instructional method in ASL-English interpreter education.

#### Principal Investigator

- **Nicodemus, Brenda** • Interpretation

#### Additional Investigators

- **Cole, Janis** (Student) • Interpretation
- **Swabey, Laurie** • Interpretation • St. Catherine University

#### Product

Nicodemus, B., Cole, J., & Swabey, L. (2015). Storied classrooms: Narrative pedagogy in American Sign Language-English interpreter education. *International Journal of Interpreter Education*, 17(2).

### Synchronization to auditory and visual rhythms in hearing and Deaf individuals

**Status:** Ongoing

**End Date:** May 2015

A striking asymmetry in human sensorimotor processing is that humans synchronize movements to rhythmic sound

with far greater precision than to temporally equivalent visual stimuli (e.g., to an auditory vs. a flashing visual metronome). Traditionally, this finding is thought to reflect a fundamental difference in auditory vs. visual processing, i.e., superior temporal processing by the auditory system and/or privileged coupling between auditory and motor systems. It is unclear whether this asymmetry is an inevitable consequence of brain organization or whether it can be modified (or even eliminated) by stimulus characteristics or by experience. With respect to stimulus characteristics, we found that a moving, colliding visual stimulus (a silent image of a bouncing ball with a distinct collision point on the floor) was able to drive synchronization nearly as accurately as sound in hearing participants. To study the role of experience, we compared synchronization to flashing metronomes in hearing and profoundly Deaf individuals. Deaf individuals performed better than hearing individuals when synchronizing with visual flashes, suggesting that cross-modal plasticity enhances the ability to synchronize with temporally discrete visual stimuli. Furthermore, when Deaf (but not hearing) individuals synchronized with the bouncing ball, their tapping patterns suggest that visual timing may access higher-order beat perception mechanisms for Deaf individuals. These results indicate that the auditory advantage in rhythmic synchronization is more experience- and stimulus-dependent than has been previously reported.

#### Principal Investigators

- **Nicodemus, Brenda** • Interpretation
- **Emmorey, Karen** • San Diego State University
- **Iverson, John** • University of California, San Diego
- **Patel, Aniruddh** • Tufts University

#### Scholarly and Creative Activity

Nicodemus, B., & Metzger, M. (2014). *Investigations in health-care interpreting*. Washington, DC: Gallaudet University Press.

Nicodemus, B., & Dicus-Egbert, D. (2015). ASL-English interpreters and -self/SELF forms: A description of source and target language production. *Rivista di Psicolinguistica Applicata*, 15(1), 9-24.

Nicodemus, B., & Swabey, L. (2015). Action research. In C. V. Angelelli & B. J. Baer (Eds.), *Researching translation and interpreting*. New York, NY: Routledge.

## Goal E: Research and Outreach

### Linguistics

The department of Linguistics is heavily dependent on research for both learning and teaching because sign language linguistics is a field that has so much more to discover. The ongoing, innovative research carried out by the linguistics faculty and graduate students is contributing substantially to what is known about the structure and use of sign languages.

### Research Projects

#### Affective constructions in American Sign Language

**Status:** Ongoing

**Start date:** September 2013

**End Date:** May 2015

This project investigates how American Sign Language (ASL) users describe situations in which someone experiences an emotional reaction to a stimulus. Previous research on such events has focused on spoken languages. This is the first in-depth study of affective constructions in a signed language. Native Deaf users of ASL will view a film in which characters undergo emotional reactions. The participants will retell the story to an ASL native Deaf interviewer. Then participants will be asked to describe individual clips from the film in as many ways as possible. Finally, they will watch a video of a Deaf model describing the clips and judge the grammaticality of each sentence. The elicited data will be analyzed for patterns of construction types that provide insight to the language's approach to describing affective events. The findings from this project will shed light on how ASL construes focus in nonphysical relationships, such as emotional interactions. The results will speak to grammaticality with respect to word order, use of space, eye gaze, and other features of signed languages that are unique from spoken languages. The outcomes have implications for language course curriculum, literacy curriculum, interpreter education, and mental health settings.

#### Principal Investigator

- **Healy, Christina** (Student) • Linguistics

#### Funding Source

- Gallaudet Small Research Grant

#### Development of bimodal bilingualism

**Status:** Ongoing

**Start date:** May 2009

**End Date:** May 2015

Five-year project (now with an additional one year no-cost extension) in collaboration with Drs. Diane Lillo-Martin

(University of Connecticut) and Ronice de Quadros (Universidade Federal de Santa Catarina, Florianópolis, Brazil) for comparison of early language development in hearing bilingual (ASL/English) and cochlear implanted bilingual (ASL/English) children in the U.S. and Brazil. Includes both longitudinal and experimental components.

#### Principal Investigators

- **Chen Pichler, Deborah** • Linguistics
- **de Quadros, Ronice** • Universidade Federal de Santa Catarina, Brazil
- **Lillo-Martin, Diane** • Linguistics • University of Connecticut

#### Funding Source

- National Institutes of Health (NIH)

#### Examining the correlations between social network ties and linguistic production

**Status:** Ongoing

**Start date:** October 2013

**End Date:** March 2016

This linguistic project examines how the social network tie between two Deaf individuals affects their production of ASL and how production differs when conversing with others. Research finds that tie causes intra-speaker variation on multiple linguistic levels. While previous sign language studies describe linguistic variation, this project examines social network's influence on such variations. This project has three research questions: (1) Are there patterns of departure from handedness and hand dominance citation forms? (2) Do these patterns correlate with the type of social network tie? (3) Do these patterns correlate with the strength of the tie? For data collection, participants were video-recorded responding to questionnaires and engaging in free conversation with different partners. Linguistic behaviors of each participant are transcribed from their respective videos. Data analysis examines participants' use of citation and non-citation sign forms, and identifies patterns. Statistical tests will compare participants' ties and their strengths with those patterns. The hypothesis is that forms will exhibit unique patterns, and there will be positive correlations between the patterns and types as well as the strengths of social ties. This project's findings will expand our understanding of social networks' influence, and its quantitative evidence may rectify long-held beliefs in sign language linguistics that heretofore have been based upon subjective observations.

#### Principal Investigator

- **Morris, Carla** (Student) • Linguistics



## Goal E: Research and Outreach

### Funding Source

- Gallaudet Small Research Grant

### Examining the use of depiction across American Sign Language Proficiency Interview assessment levels

**Status:** Ongoing

**Start date:** September 2014

**End Date:** December 2016

The linguistic feature to be investigated is depiction, «the ability to visually represent semantic components». The aim of this research is to determine how depiction usage compares among signers of different ASLPI levels in order to gain a better understanding of types of depiction evidenced at various levels of proficiency and identify problem areas related to depiction usage of less skilled signers. Throughout this project, designed to bridge the gap of information between assessment of language proficiency and features of depiction that need to be taught, the research team will analyze language samples from individuals assessed at each level of proficiency on the ASLPI. Using ELAN to compare depiction usage between signers, the research team will identify patterns and gain insight into the type and occurrence of depiction usage at various levels of fluency from newer signers to proficient signers. This information can later be applied to a larger project to include development of curriculum and teaching materials for ASL, development of strategies to enhance assessment of ASL, and ultimately lead to improving language proficiency.

### Principal Investigator

- Thumann, Mary • Linguistics

### Additional Investigators

- Dudley, Sadi (Student) • Linguistics
- Kish, Megan (Student) • Linguistics
- Medugno, Miranda (Student)

### Funding Source

- Gallaudet Priority Research Fund

### Product

Thumann, M. (2015, June). *Depiction at various proficiency levels in ASL*. Presented at the meeting of the American Sign Language Teachers' Association, Minneapolis, MN.

### Interpreting decisions and power: Interpreters working in legal settings

*See in Interpretation*

### Signing with an accent: ASL L2 phonology and Chinese signers

**Status:** Ongoing

**Start date:** July 2010

This project investigates the phenomenon of «sign accent,» or systematic phonological errors made by signers acquiring ASL as a second language (L2). This topic has been virtually ignored in the sign language literature, despite extensive discussion of accent in spoken L2s and a common assumption that some counterpart exists for signed L2. The investigations will focus on handshape, approaching the phenomenon of L2 signing accent. Native Chinese Sign Language Users in Beijing, China will be recorded signing ASL and data collected will be analyzed for an accent.

### Principal Investigator

- Palmer, Jeffrey L. (Student) • Linguistics

### The status of orientation in phonological representation

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

The aim of this dissertation study is to examine the parametrical status of palm orientation in the phonological system, more specifically determining whether this parameter is independently represented. One of the important aspects in representing the phonological system in any language is to include features that are crucial for minimal contrasts in the language and eliminate redundant features. Historically, palm orientation has been ignored in many psycholinguistic studies. This study looks at the impact of palm orientation on the production and perception of American Sign Language. The production study looks at how individuals compensate when their joint movements are limited. Participants have their joints restricted with apparatuses that will limit their ability to (1) extend/flex the wrist joint and/or (2) rotate the radial and ulnar bones that create a twisting movement. The second study delves into how native signers can comprehend a set of signs that have been modified with the same joint rotation limitations. These two studies taken together will help inform the linguistics field about the status of orientation. The implications of these two studies are not only theoretical but can have applications in sign language teaching pedagogy and general linguistic knowledge.

### Principal Investigator

- Cochran, Casey (Student) • Linguistics

## Goal E: Research and Outreach

### Funding Source

- Gallaudet Small Research Grant

### Visual span in Deaf readers

*See in World Languages and Cultures*

### Scholarly and Creative Activity

Edwards, T. (2014). From compensation to integration: Effects of the pro-tactile movement on the sub-lexical structure of Tactile American Sign Language. *Journal of Pragmatics*, 69, 22-41.

Edwards, T. (2014, December). *Fitting word to world: The role of deictic reference in a grammatical divergence between visual and tactile American Sign Language*. Presented at the meeting of the American Anthropological Association, Washington, DC.

Edwards, T. (2015, January). *Language and orientation in the Seattle DeafBlind community: The transmutation of interactional geometries*. Presented at the HAU-Fyssen Seminar on Translation Theory and Practice, Berkeley, CA.

Edwards, T. (2015, January). *Tracking a grammatical divergence between visual and tactile American Sign Language: Movement, orientation, and geometries of reference in the Seattle DeafBlind community*. Presented at the Department of Linguistics, Georgetown University, Washington, DC.

Hochgesang, J. A. (2015). Ethics of researching signed languages: The case of Kenyan Sign Language (KSL). In A. C. Cooper & K. K. Rashid (Eds.), *Signed languages in Sub-Saharan Africa: Politics, citizenship and shared experiences of difference* (pp. 11-30). Washington, DC: Gallaudet University Press.

Hochgesang, J. A., & Rankin, M. (2014, October). *Essentials of using ELAN for video analysis*. Presented at the Conference of Interpreter Trainers, Portland, OR.

McDonald, J., Wolfe, R., Schnepf, J., Hochgesang, J., Gorman Jamrozik D., Stumbo, M., ..., Thomas, F. (2015). An automated technique for real-time production of life like animations of American Sign Language. *Universal Access in the Information Society*, 15(4), 1-16.

Torres Méndez, C. (2015, July). *Let the deaf be heard in the English class*. Presented at the Studies in Applied English Linguistics Conference, Seville, Spain.

### Provost

The Provost leads the Division of Academic Affairs and effectively manages its resources to achieve the strategic goals and objectives of the University. These include overseeing the University's efforts in reaffirming its goal to be the epicenter of research, development, and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity. The Office of the Provost includes several units that support the research mission of the University. These units include the Office of Research Support and International Affairs, the Center for Bilingual Teaching and Learning, the Office of Sponsored Programs (further details are provided later in this chapter), and the following research centers: the National Science Foundation/Gallaudet Science of Learning Center on Visual Language and Visual Learning (VL2), the Rehabilitation Engineering Research Center on Improving the Accessibility, Usability, and Performance of Technology for Individuals who are Deaf or Hard of Hearing (DHH-RERC), the Technology Access Program (TAP), and the Center for Deaf Documentary Studies (CDDS). (Details on the research and scholarly activity of these units during FY 2015 may be seen under the research center or academic unit sections of this chapter.)

### Provost: Center for Bilingual Teaching and Learning

The mission of the Center for Bilingual Teaching and Learning (CBTL) is to promote and support the ongoing development and enhancement of ASL-English bilingual teaching and learning at Gallaudet University. CBTL team collaborates with professors, professional staff, departments, faculties, and fellow teaching support to create adaptable and innovative ASL-English bilingual and multicultural learning environment in which outstanding bilingual and multicultural teaching are recognized and rewarded.

The Center for Bilingual Teaching and Learning (CBTL) coordinates activities in support of the University's bilingual mission. CBTL activities are intended to promote evidence-based innovation and effectiveness in bilingual teaching and learning; foster cross-disciplinary collaboration; and facilitate the sharing of resources, skills, and knowledge across programs. Key areas of focus:

1. Implementation, support, and assessment of University Language and Communication Student Learning Outcomes.



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2. Development of ASL materials and bilingual resources.
3. Faculty and staff professional development.
4. Linguistic and Communication Competence for Faculty and Staff.
5. Institutional climate.
6. Research on teaching and learning.

### Research Projects

#### Gallaudet Scholarship of Teaching and Learning Initiative — Cohort 1

**Status:** Completed

**Start date:** July 2011

**End Date:** September 2014

This project was designed to create a learning community of teacher-scholars who, over a period of two years per cohort, to investigate, reflect upon, document, and enhance teaching practices designed to meet the needs of visually oriented and linguistically diverse learners in Gallaudet classrooms.

##### Principal Investigator

- **Mulrooney, Kristin** • Linguistics

##### Additional Investigators

- **Horejes, Thomas** • History, Philosophy, Religion, and Sociology
- **Pajka, Sharon** • English
- **Rankin, Miako** • Linguistics
- **Wood, Kathy** • English

##### Funding Sources

- Booth Ferris Foundation
- Office of the Provost

##### Product

Mulrooney, K. (2014). *Teaching and Learning in Bilingual Classrooms: New Scholarship*. Washington, DC: Gallaudet University Press.

#### Gallaudet Scholarship of Teaching and Learning Initiative — Cohort 2

**Status:** Ongoing

**Start date:** January 2015

This project was designed to create a learning community of teachers-scholars who, over a period of two years per cohort, investigate, reflect upon, document, and enhance teaching practices in Gallaudet classrooms to meet the needs of visually oriented and linguistically diverse learners. Each faculty member focuses on a research topic: Multicultural Competence in a Deaf Environment - Barbara Gerner de Garcia; An Assessment of Different Approaches in Teaching Mathematics to Deaf Students, with Special Reference to Educational Technology - Susanna Henderson; Benefit of Video Lectures - Raylene Paludneviene; Analysis of Quantitative Reasoning Skills and Representations in Senior Writing Assignments – Leslie Rach; and Language Dynamics and the Impact on a Students Critical Thinking Skills – Laurene Simms.

##### Principal Investigator

- **Mulrooney, Kristin** • Linguistics

##### Additional Investigators

- **Gerner de García, Barbara** • Education
- **Henderson, Susanna** • Science, Technology, and Mathematics
- **Palmer, Jeffrey L.** (Student) • Linguistics
- **Paludneviene, Raylene** • Psychology
- **Rach, Leslie** • General Studies Program
- **Simms, Laurene E.** • Education

### Provost: Research Support and International Affairs

The Research Support component of Gallaudet University's Office of Research Support and International Affairs (RSIA) strives to support the University's legislated obligation to conduct research and disseminate findings on topics of concern to Deaf people and those who live, work with, and educate them. To this end, RSIA aspires to stimulate students, faculty, and staff in pursuit of new knowledge of value to their scholarly growth and to their discipline, and by providing editing assistance with grant proposals.

In FY 2014, 24 campus researchers, both students and faculty members, were awarded grants by virtue of RSIA's administration of the Priority Research Fund and Small Research Grants programs. RSIA expanded its technical support to campus researchers by making available a robust research survey soft-

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were called RedCap. Further, the unit promoted achievements of this nature by reporting on the University's contributions to research and scholarship when requested by the National Science Foundation and other agencies. In addition, RSIA continued the long tradition of its predecessor, the Gallaudet Research Institute, as a leading source of demographic and educational data about Deaf youth throughout the United States by carrying out the 2013-14 *Annual Survey of Deaf and Hard of Hearing Youth*. Finally, RSIA continued its ongoing research and activity on bilingual language planning.

### Staff

- **Benaissa, Senda** • Senior Research Associate/International Academic Coordinator
- **Blanchette McCubbin, Mona** • Immigration Compliance Officer/International Student Advisor
- **Byrd, Todd** • Senior Scientific Writer/Editor
- **Fakunle, Oluyinka** • Executive Secretary
- **Musa, Lawrence** • Coordinator of Immigration Compliance and International Procedures
- **Nover, Stephen** • Research Scientist: Language Planning
- **Showalter, Brian** • Database Administrator
- **Reilly, Charles** • Executive Director
- **Torres, Danilo Enrique Vargas** • International Liaison Specialist
- **Winiarczyk, Rowena** • Coordinator of Research and Global Projects

### Priorities addressed

- Development of Signed Language Fluency
- Development of English Literacy
- Studies that Inform Public Policies and Programs
- Assessment

Additional information regarding the Office of Research Support and International Affairs can be found at [research.gallaudet.edu](http://research.gallaudet.edu).

### Research Projects

#### Annual Survey of Deaf and Hard of Hearing Children and Youth

**Status:** Ongoing

**Start date:** May 1968

The Annual Survey of Deaf and Hard of Hearing Children and Youth (AS) is a national survey conducted through private and

public school systems. This survey collects demographic data on Deaf and hard of hearing children's location, characteristics, educational settings, and trends in their education, age, sex, ethnicity, etiology, audiological status, cochlear implant/hearing aid use, instructional setting/services, communication modes in classroom and home, and educationally relevant conditions. The AS is the only national database on Deaf and hard of hearing children and youth in the U.S. The information collected for AS is utilized by individuals and organizations within and beyond Gallaudet, as it provides a core set of population-level data in researching issues related to Deaf and hard of hearing children. Regional, national, and state summaries can be found at: [www.gallaudet.edu/Gallaudet\\_Research\\_Institute/Demographics.html](http://www.gallaudet.edu/Gallaudet_Research_Institute/Demographics.html).

### Principal Investigators

- **Winiarczyk, Rowena** • Research Support and International Affairs (RSIA)
- **Woo, John** (Retired) • Research Support and International Affairs (RSIA)

### Additional Investigators

- **Cole, Kevin** • NOVA Web Development
- **Goodman, Evan** (Student) • Psychology
- **Reilly, Charles** • Research Support and International Affairs (RSIA)

### Funding Source

- Gallaudet funding

### Deaf Weight Wise 2.0

**Status:** Ongoing

**Start date:** September 2014

**End Date:** September 2017

Deaf Weight Wise (DWW) research study is to establish the effectiveness of an intervention to reduce weight gain and obesity in Deaf people who use American Sign Language (ASL) as their primary language. Participants in the DWW research study are randomly assigned 1 of 2 intervention groups. The first group will receive the intervention in winter 2015, and the second group will receive the intervention in fall 2016. The intervention is a 16-week healthy lifestyle program. Each week for 16 weeks, participants will communicate with Gallaudet counselors through VP calls. They will learn about healthy living, healthy food choices and cooking, and fun ways to be physically active. All groups will be led by deaf counselors. Counselors emphasize daily self-monitoring of food intake, number of fruit and vegetable servings, calorie intake, and minutes of physical activity. Participants will be asked to visit RPRC:NCDHR 5 times to take ASL health surveys and have

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physical measurements taken (height, weight, blood pressure, blood sample, etc.).

### Principal Investigator

- **Benaissa, Senda** • Research Support and International Affairs (RSIA)

### Additional Investigator

- **Goodman, Evan** (Student) • Psychology

### Funding Source

- National Institutes of Health (NIH)

### Priority Research Fund

**Status:** Ongoing

**Start date:** October 2007

Gallaudet's Priority Research Fund supports campus research studies on thirteen problem areas that have been determined to be of high importance to the university. Studies are supported for up to three years; the review and administration processes are aligned with standard and federal grant application processes in order to help prepare campus researcher to effectively apply for external funding. Applicants are expected to first seek external funding; if funded by PRF, by study's end they should be actively applying externally for continuance. More information is available under the Office of Research Support and International Affairs's page on Research Funding at [research.gallaudet.edu](http://research.gallaudet.edu).

### Principal Investigators

- **Reilly, Charles** • Research Support and International Affairs (RSIA)
- **Benaissa, Senda** • Research Support and International Affairs (RSIA)

### Funding Source

- Gallaudet funding

### Small Research Grants

**Status:** Ongoing

**Start date:** October 2007

Gallaudet's Small Research Grants Program (SRG) fosters research activity by Gallaudet and Clerc Center faculty and professional staff, as well as by university students, by funding of small studies and durations of a year or less. We accept proposals for studies on any topic of academic significance using any accepted research method. The Office of Research Support and International Affairs reviews, awards and administers the grants in collaboration with faculty members and academic

departments. Details on all of the funded studies can be seen under the various academic departments part in this chapter and by searching the "research & scholarship at Gallaudet" database at <http://research.gallaudet.edu/ara>. More information is available under the Office of Research Support and International Affairs's page on Research Funding at [research.gallaudet.edu](http://research.gallaudet.edu).

### Principal Investigators

- **Reilly, Charles** • Research Support and International Affairs (RSIA)
- **Benaissa, Senda** • Research Support and International Affairs (RSIA)

### Funding Source

- Gallaudet funding

## Psychology

The Psychology Department provides a rigorous academic and applied curriculum that addresses important core areas of psychology; encourages students to explore the implications of psychological research, theory, and practice; and includes the application of psychology in internship settings. The department also commit itself to producing scholarly work in scientific and applied areas.

### Research Projects

#### **Acceptance of disability, coping strategies, and perception of social support among veterans with acquired physical disability**

**Status:** Ongoing

**Start date:** April 2015

**End Date:** December 2015

Contrary to popular belief that the majority of disabled veterans suffer from post-traumatic stress disorder (PTSD), current data shows that the most frequent disabilities are the result of hearing loss, traumatic brain injury (TBI), and bodily injuries, such as amputations, burns, and spinal cord injuries. Research also shows that the physical and emotional consequences of wounds sustained during military service significantly impact veterans' lives long after they stop active duty. When compared with non-disabled veterans, disabled veterans report more difficulties in psychological and social functioning. Still, the number of studies that investigate psychological functioning of physically disabled veterans is shockingly small. This research attempts to fill the gap. However, due to the fact that there are no available studies on psychological adaptation to

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physical disability in veterans, this study has an exploratory character and attempts to investigate the psychological impact of acquired physical disability on military veterans, specifically adjustment to the disability, employed coping strategies, and general quality of life.

### Principal Investigators

- **Dziura, Joanna** (Student) • Psychology
- **Brice, Patrick** • Psychology

### Funding Source

- Gallaudet Small Research Grant

### Alternative approaches: Exploring yoga as a treatment for PTSD

**Status:** Ongoing

**Start date:** June 2014

**End Date:** December 2015

Emerging research suggests that yoga may be effective in the treatment of Posttraumatic Stress Disorder (PTSD) and other mental illnesses. However, the research conducted thus far has been conducted on small sample sizes and focused on traditional yoga classes that involve movements that are sometimes impossible for military veterans who frequently suffer from chronic pain and limited mobility. The current research examined the impact of drop-in gentle yoga classes on the mental health of military veterans after 2 months, with a focus on PTSD symptoms. Using a naturally created control group, exploratory and descriptive statistics were utilized to examine the differences between those that attended gentle yoga and those that had not. Results were consistent with previous literature and the gentle yoga group experienced a greater decrease in various domains compared to the control group. The differences and implications are discussed. However, a limited sample size did not allow for the original hypotheses and proposed analyses to be conducted. Nevertheless, the results from this study warrant for future research to be conducted using a larger sample size.

### Principal Investigator

- **Courtney, Rena** (Student) • Psychology

### Additional Investigator

- **Brice, Patrick** • Psychology

### An analysis of Miranda warnings knowledge in Deaf community

**Status:** Completed

**Start date:** March 2015

**End Date:** July 2015

In today's society there remains confusion regarding the public's comprehension of the Miranda warnings. Research has found that not all people understand their legal rights at the time of arrest and/or during an interrogation, but many individuals will say they are aware of their Miranda warnings due to exposure through law enforcement movies and television shows. Administrations of the Miranda warnings vary greatly across each state. The way the warnings are presented, as well as the defendant's education and language backgrounds may influence the alleged perpetrator's comprehension. Administering the Miranda warnings to Deaf individuals also can be problematic because, similar to the hearing population, the approach to administration and the individual's characteristics can affect their comprehension of the warnings. There are three common approaches used by the police force when presenting the Miranda warnings to a Deaf person: (1) written English, (2) spoken English/speech reading, or (3) sign language via an interpreter. Each of these options has specific issues related to ensuring that the Deaf individual comprehends what is being conveyed. The current study seeks to explore the Deaf university ability to comprehend the legal terminology of the Miranda warnings. This study will examine their performance on formal written measures developed to assess comprehension of the Miranda warnings (i.e., Miranda Vocabulary Scale and Miranda Quiz) in the Deaf population. The study also will explore the relationship of these measures with intellectual functioning and reading ability.

### Principal Investigator

- **Romero, Elizabeth** (Student) • Psychology

### Additional Investigator

- **Pick, Lawrence H.** • Psychology

### Funding Source

- Gallaudet Small Research Grant

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### **The biological basis of language and reading in monolingual and bilingual children and adults (discoveries of the reading brain, the bilingual brain, and the bilingual reading brain)**

*See in Brain and Language Laboratory (BL2)*

#### **Body image, cultural, and media**

**Status:** Ongoing

**End Date:** December 2018

This project combines multiple studies using experimental design and survey methods to examine associations between media use and body image. In one study, data was collected from Latina adolescents who viewed media images of white women and provided qualitative and quantitative responses. A second study surveyed Gallaudet undergraduates about their media use, body image, and acculturation experiences.

#### **Principal Investigator**

- **Schooler, Deborah** • Psychology

#### **Additional Investigator**

- **Aldular, Aileen** (Student) • Psychology

#### **Products**

Schooler, D. (2015). The woman next to me: Pairing powerful and objectifying representations of women. *Analyses of Social Issues and Public Policy*, 2015, 1-15.

Schooler, D., & Daniels, E. (2014). "I am not a skinny toothpick and proud of it." Latina adolescents' ethnic identity and responses to mainstream media images. *Body Image*, 11, 11-18.

### **Cochlear implants and related neurotechnologies: Addressing Japanese perspectives in deaf neuroethics**

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

The intents of the study are geared to give insight towards the direction of Japanese culture relative to a Deaf-centric paradigm versus an audist, oralist vision, empirically address knowledge, attitudes and values of/toward neuroethical issues relevant to neuroS/T in general, and CI and related approaches more specifically, in Japanese Deaf and audist communities (of students, professionals, and lay public). The explorations of Japanese philosophy related to Eastern biomedical and neuroethical paradigms of Deafhood would afford information from which to engage the second goal of developing a translatable Delphi instrument for the measuring perspectives

across Eastern countries. Towards this latter goal, a survey will be developed aimed at collecting subjective data by utilizing ethical metrics assessing three inventories: (1) attitudes towards exposure and knowledge of auditory technologies, (2) attitudes towards signed languages and the Deaf community, and (3) attitudes of utility and access provided by advanced auditory technologies that can be quantified for statistical analysis. This instrument would serve as a sustainable comparative assessment tool and a vector to approach a consensus perspective related to these issues in the Deaf community (i.e. cochlear implantation, middle ear implantation, cilia rehabilitation, spiral ganglia implants).

#### **Principal Investigator**

- **Abbott, Zachary** (Student) • Psychology

#### **Funding Source**

- Gallaudet Small Research Grant

### **Cochlear implants and the brain: The biological basis for language and cognition in infants, children, and adults with cochlear implants**

*See in Brain and Language Laboratory (BL2)*

### **Cognitive and electrophysiological correlates of phonological processes in Deaf undergraduate readers**

**Status:** Completed

**Start date:** October 2013

**End Date:** September 2015

Although much is known about the reading achievement levels of Deaf individuals, less is known about how certain Deaf undergraduate students become strong readers. One prevailing assumption is that phonological awareness and processes, as well as working memory and executive functions, play a critical role in reading achievement. Thus far, there is a paucity of neuropsychological data and neurophysiological evidence to support this claim in Deaf individuals. This study examines the cognitive and electrophysiological profiles of Deaf undergraduate readers using American Sign Language as their primary mode of communication. A comprehensive battery of neuropsychological measures was administered to gain a better understanding of the cognitive, linguistic, and reading profiles of strong versus weak readers. Furthermore, Event Related Potential recordings were to determine whether strong and weak readers show amplitude and temporal differences in cortical regions known for phonological processing. A rhyme judgment paradigm will be employed to examine differential cortical responses at P200 and N400 indices for matched versus mismatched word pairs.



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### Principal Investigators

- **Pick, Lawrence H.** • Psychology
- **Garrido-Nag, Karen** • Hearing, Speech, and Language Sciences
- **Koo, Daniel** • Psychology

### Additional Investigators

- **Aldular, Aileen** (Student) • Psychology
- **Guardino, Donna** (Student) • Psychology
- **Opsahl, Laura** (Student) • Psychology

### Funding Source

- Gallaudet Priority Research Fund

### Products

Garrido-Nag, K., Strasser, A., Koo, D., & Pick, L. (2014, November). *Phonological access in Deaf undergraduate native American Sign Language users*. Presented at the convention for the American Speech-Language-Hearing Association, Orlando, FL.

Guardino, D., Koo, D., Garrido-Nag, & Pick, L. (2015, February). *Verbal fluency performance among Deaf readers*. Presented at the meeting of the International Neuropsychological Society, Denver, CO.

Strasser, A., Koo, D., Garrido-Nag, K., & Pick, L. H. (2015, February). *Paired-associate learning in deaf readers*. Presented at the meeting of the International Neuropsychological Society, Denver, CO.

### **Comparison of face-to-face and videoconferencing communication modalities for delivering anxiety and stress psychoeducation to Deaf individuals**

**Status:** Completed

**Start date:** May 2014

**End Date:** October 2014

The rapid growth and adoption of new technologies is impacting a number of fields, including psychology. Providing psychological services at a distance (teletherapy) has been made possible by increasing bandwidth and the development of videoteleconferencing systems. Psychoeducation is an important part of many therapeutic interventions and has likewise been adapted to digital delivery. Some populations stand to benefit from distance delivery when professionals with cultural and/or linguistic experience are not readily available. One is the Deaf population, for reasons both cultural and linguistic. The study compares the provision of psychoeducation about anxiety and stress with 10 Deaf students from Gallaudet

University, utilizing a face-to-face condition and a videoteleconferencing condition. A pre-test/post-test questionnaire for knowledge of material from the psychoeducation seminar compares the effectiveness of the seminar between conditions. A Technology Comfort and Familiarity Questionnaire and Satisfaction Questionnaire examines what factors might influence success and satisfaction when delivering psychoeducation via a digital modality.

### Principal Investigator

- **Pietz, Tyler** (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### **The development of a web-based computer program to support early literacy skills for Deaf children**

**Status:** Ongoing

**Start date:** July 2013

**End Date:** June 2015

The development of the web application reading program *Sign 'n' Read* will contribute to the knowledge of intervention methods available to improve literacy in the Deaf and hard of hearing population. Its web-based format, using American Sign Language video feedback, will allow educators and parents to easily access customized features to promote reading skills based on sight-word recognition, fluency training, and increased vocabulary rather than on word decoding using phonetics.

### Principal Investigators

- **Day, Lori** • Psychology
- **Beetar, John** • Neuropsychology • Kennedy Krieger Institute

### Additional Investigators

- **Brice, Patrick** • Psychology
- **Turner, Angela** (Student) • Psychology

### **The diagnosis of Attention Deficit Hyperactivity Disorder in college-aged Deaf individuals: Exploring the accuracy of the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version**

**Status:** Ongoing

**Start date:** October 2013

**End Date:** December 2016

Attention Deficit Hyperactivity Disorder (ADHD), which has been found to impair one's social, familial, scholastic, and occupational adjustment, is one of the most comprehensively



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examined neurodevelopmental disorders. For deaf individuals, language and executive functioning have important implications for cognitive and academic functioning, but it is not clear to what extent cognitive and academic functioning are impacted in Deaf individuals with ADHD as the amount of research conducted with deaf individuals with ADHD has been limited, especially within the realm of deaf adults. There are many areas that need to be explored in relation to ADHD, executive dysfunction, deaf individuals, and language acquisition/secondary language delay. Within those areas, some questions that warrant further investigation are: (1) Whether or not deaf students of hearing parents who have ADHD will exhibit/endorse more executive function impairments than those of deaf parents; (2) whether or not deaf students with ADHD will exhibit/endorse more inattention symptoms than those deaf students who do not have ADHD; (3) which factor will have a stronger correlation with executive dysfunctions in Deaf individuals with ADHD- language or cognitive functioning. Before these areas can be formally studied, however, the ADHD diagnostic process in deaf individuals needs to be investigated. A clear diagnostic classification of deaf individuals with ADHD must be demonstrated to ensure a distinction between deaf individuals with ADHD and those without ADHD. This study will examine the ADHD diagnostic evaluation process with college-aged deaf individuals. Specifically, this study will explore whether or not the Barkley Adult ADHD rating scale-IV and the Attention Deficit Scales for Adults, Sign Language Version can clearly distinguish those who identify having a prior diagnosis of ADHD compared to those who do not self-identify or have a previous diagnosis of ADHD. In addition, the study will explore the potential influences of executive dysfunction and language acquisition/secondary language delay in deaf individuals on the ADHD diagnostic process.

### Principal Investigators

- **Farber, Gregory** (Student) • Psychology
- **Day, Lori** • Psychology

### Display Rules of the Deaf culture: An evaluation of emotional expression

**Status:** Completed

**Start date:** October 2014

**End Date:** September 2015

Display rules refer to the culturally prescribed rules of how, to whom, when, and which type of emotion is expressed. These rules depend on cultural norms and related characteristics such as individualism and collectivism. With research suggesting that the American Deaf community can be defined as having their own culture, and that this culture is collectivistic

in nature, the presented study seeks to identify the Display Rules used by the American Deaf culture. The current study will use the Display Rule Assessment Inventory (DRAI) and the Deaf Acculturation Scale as primary measures. Given the novelty of using the written DRAI with unique sample, the need for advanced statistics, and the paucity of research related to display rules in Deaf culture, the current study seeks to pilot the proposed methodology. The study explores four separate questions: 1) does emotional expression in American Deaf culture akin to that of a collectivistic culture, 2) will participants report displaying their true emotions differently to family, friends, and acquaintances, 3) will participants report displaying their true emotion differently when they are alone, in a public place, or in a private conversation, and 4) will the level of acculturation into the Deaf culture influence the expressivity of emotions?

### Principal Investigator

- **Gala, Nicolas** (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### The effects of early visual language exposure on deaf children's linguistic and non linguistic visual processing: An Eye-Tracking and fNIRS brain imaging investigation of emergent readers

*See in Brain and Language Laboratory (BL2)*

### Emotion recognition: Encoding of facial expression

**Status:** Completed

**Start date:** December 2013

**End Date:** December 2014

This project studies the degree of function that universal emotional recognition has in the Deaf community. Deaf individuals in the Deaf community rely on facial expressions as a means of communication. As a result, Deaf native signers may have increased recognition of these emotions when compared to hearing non-signers. This study will attempt to examine the differences in recognition with these two groups when presented with static representations of seven basic universal emotions: happiness, sadness, fear, anger, disgust, surprise, and contempt. Accuracy scores for Deaf and hearing participants will be analyzed in a 2 x 6 mixed two-way analysis of variance. The finding that Deaf individual whose primary language is American Sign Language (ASL) may be more successful at decoding emotions will support the idea that Deaf individuals may have increased perceptual abilities and can recognize facial expressions more readily than those with no signing ability. Exposure to ASL has already suggested increased abilities to

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encode and decode emotion. Additionally, it will suggest that emotion recognition abilities may be more complex than simply having the knowledge of sign language.

### Principal Investigator

- **Holmes, Keli** (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### **Emotion regulation and effortful control in deaf children as a function of parenting behavior and communication quality**

**Status:** Ongoing

**Start date:** February 2014

**End Date:** September 2016

In hearing children, intra-individual emotion regulation skills such as effortful control are heavily influenced by the manner and style with which parents engage children in extra-individual emotion regulation. By means of parent modeling of intra-individual regulation and positive parenting, children learn to engage in increasingly complex forms of emotion regulation. Research on emotion regulation with hearing parent-child dyads assumes there is fluent communication. However, research with language-impaired hearing children and with typically developing deaf children suggests that the efficacy with which the parent is able to communicate with the child plays a major role in the efficacy of the child's intra-individual emotion regulation and effortful control skills. It is widely acknowledged that deaf children of hearing parents encounter communication barriers that most hearing children do not. What is not known is the effect of parent-child communication on parenting behavior and on the child's emotion regulation as well as their effortful control skills in families where fluent communication may not be present. Parent perception of communication, their own emotion regulation, the child's emotion regulation, and effortful control skills will be collected to explore these relationships. Measures include The Emotion Regulation Checklist, The Coping with Children's Negative Emotions Scale, The Child Behavior Questionnaire, and The Communication Quality Questionnaire for Deaf Children.

### Principal Investigators

- **Letteri, Amy** (Student) • Psychology
- **Pick, Lawrence H.** • Psychology

### **Examining the effects of visual language experience on visual attention in young Deaf emergent readers with eye-tracking: A pilot study for innovation in e-literacy and signing creatures avatar design**

*See in Brain and Language Laboratory (BL2)*

### **The experience of running: A mixed methods approach**

**Status:** Completed

**Start date:** January 2015

**End Date:** May 2015

Exercise has been demonstrated to be effective in the use of treating various mental and physical illnesses. However, experts still do not fully understand how the mind and body connect and why exercise has such an impact on the brain. Therefore, the following study used a mixed methods approach to understand how a deaf female college student experienced a short, intense run in order to generate hypotheses for future research on how exercise impacts the mind. Though the quantitative use of the Beck Anxiety Inventory (BAI) was found to be invalid due to the participants' low blood sugar after the run, the following themes were found to be significant using a qualitative analysis of the participants' responses: social experience, distraction from running, running as distraction, mind wandering, energy release and motivation. Implications for our theoretical understanding and for future research are discussed.

### Principal Investigator

- **Courtney, Rena** (Student) • Psychology

### Additional Investigator

- **Mertens, Donna** • Education

### **Exploring the foundations of iconicity in language: Evidence from an fNIRS brain imaging study on the neural basis of ASL classifiers**

*See in Brain and Language Laboratory (BL2)*

### **Feasibility study on the use of head mounted displays in parent child interaction therapy**

**Status:** Ongoing

**Start date:** June 2015

**End Date:** June 2016

Parent Child Interaction Therapy (PCIT) is an evidence-based treatment for families with children ages 2 to 7 years with maladaptive behavior patterns. Since its inception, PCIT has been adapted to treat children with a range of mental health concerns as well as various cultural backgrounds. One of the unique features of PCIT is that therapists provide real-time coaching of parents during live play. Parents are taught new skills and given the opportunity to practice their acquired skills with their children during play. In families who communicate via spoken language, PCIT therapists provide real-time coaching to a parent while they are engaging with their child using a «bug-in-the-ear» approach: They communicate with parents through an ear piece while observing via a one-way mirror in

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a separate room. This allows for direct coaching without the physical presence of the therapist in the play situation. This set-up, however, is not accessible for families who communicate visually through American Sign Language. The present study aims to address the feasibility and effectiveness of utilizing Head Mounted Displays as a possible adaptation to the «bug-in-the-ear» approach in the course of conducting PCIT with a family with one or more deaf members.

### Principal Investigators

- **Day, Lori** • Psychology
- **Caverly, Colleen** (Student) • Psychology

**The impact of early visual language experience on visual attention and visual sign phonology processing in young Deaf emergent readers using early-reading apps: A combined eye tracking and fNIRS brain imaging investigation**

*See in Brain and Language Laboratory (BL2)*

### New signers: Acculturation and coping

**Status:** Ongoing

**Start date:** October 2014

**End Date:** June 2016

Previous research has examined the transition to college among ethnic minority youth and found that appropriately managing acculturative stress is a significant predictor of psychological adjustment and success during the college transition. For example, Mexican-American youth who report higher levels of acculturative stress during their college transition report more frequent symptoms of depression and anxiety. Active coping and parental support, however, can buffer the effects of acculturative stress. Deaf and hard of hearing youth grow up in culturally diverse settings and arrive at college with varying degrees of experience with Deaf and hearing cultures. Whereas some youth may have vast experiences with Deaf culture, and a high level of cultural practice including proficiency in ASL and Deaf cultural norms, other youth may have grown up immersed primarily in hearing culture, with little or no exposure to ASL or Deaf culture. Consequently, students matriculating at Gallaudet face a diverse set of challenges relating to acculturation. To date, the acculturative experiences of this population have been understudied. The proposed study examines acculturative stress, coping, and mental and physical health among new Gallaudet students, with specific emphasis on the experiences of new signers.

### Principal Investigators

- **Maxwell-McCaw, Deborah** • Psychology
- **Schooler, Deborah** • Psychology

### Additional Investigators

- **Harvey, Susie** (Student) • Psychology
- **Walker, James** (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### Parent-child interaction therapy among deaf persons

**Status:** Completed

**Start date:** September 2014

**End Date:** February 2015

Utilizing evidenced based mental health treatments with families is becoming the norm in this era of managed health care. Parent Child Interaction Therapy (PCIT), has proven to be an evidenced based treatment for children with disruptive behavior disorders. The costs of providing PCIT are minimal compared to the alternative of providing a lifetime of treatment and services for these children. PCIT has also been adapted for a variety of issues beyond disruptive behaviors, including attention deficit hyperactivity disorder and developmental disorders. PCIT has yet to be proven feasible for deaf people who use American Sign Language; therefore, the aim of this proposed study is to determine the feasibility of PCIT with the signing deaf population. This population is extremely diverse, with various communication modalities, so one challenge when establishing a series of case studies of PCIT with deaf people is specifically indicating the communication modalities being used. This study will pilot PCIT with one «deaf of deaf» (deaf child of deaf parents) family.

### Principal Investigator

- **Previ, Danielle** (Student) • Psychology

### Additional Investigator

- **Day, Lori** • Psychology

### Funding Source

- Gallaudet Small Research Grant

### A qualitative perspective on deaf women's experiences of sexual assault disclosure

**Status:** Ongoing

**Start date:** January 2015

**End Date:** January 2016

Deaf women experience sexual assault at an alarmingly higher rate than the general hearing population. There is a paucity of research regarding disclosure patterns, the act of telling someone about a personal experience of sexual assault, in this com-

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munity. Some research has indicated that most deaf survivors seek help from informal as opposed to formal support sources. Deaf women are more likely to seek support from deaf sources rather than hearing sources. Studies in the hearing population reveal that the healing process can be significantly damaged when women perceive reactions from other people as negative. On the other hand, when a woman discloses and receives a supportive or positive reaction, the healing process is significantly unaffected. The purpose of this qualitative study is to explore the disclosure experiences among deaf women through semistructured interviews.

### Principal Investigator

- Opsahl, Laura Noelle (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### **Resilience in Deaf children with additional disabilities: Factors that protect social and adaptive skills**

**Status:** Completed

**Start date:** May 2014

**End Date:** September 2015

Deaf children with additional disabilities face complex challenges in social and adaptive functioning. Despite the high proportion of children in this particular subgroup, little research has been done to investigate factors that contribute to the development of social and adaptive skills in the presence of both deafness and an additional disability. Several measures were administered to parents of deaf children with additional disabilities to examine the role of factors internal and external to the child upon the child's social and adaptive functioning. Results demonstrated that despite the significant challenges associated with having a child with complex special needs, family cohesion was in the normal range. Changes in parent-child attachment relative to child age were observed. Stronger parent-child attachment corresponded with better child psychosocial functioning, including self-esteem, and better parent-child communication. In turn, stronger parent-child communication was positively related to the child's individual communication skills. Directions for further research of the parent-child relationship are discussed.

### Principal Investigator

- Turner, Angela (Student) • Psychology

### **School experience of Deaf Malaysians who have achieved academic success**

**Status:** Ongoing

**Start date:** February 2015

**End Date:** September 2016

This study is aimed at exploring the school experience of deaf Malaysian adults who have achieved academic success. The development of special education schools in Malaysia has come a long way; however, reports through media suggest that deaf students continue to struggle through the system. Research that have been conducted on deaf education in Malaysia include parents' role in academic achievement of deaf students, methods of teaching reading and writing to deaf preschool students and teachers' perspective towards inclusive education. However no information is available on the implementation or effectiveness of deaf education in Malaysia. While the ultimate aim of initiating research work focusing on deaf education in Malaysia is to improve services and supports for deaf students, there is not sufficient research identifying areas of needs for deaf students in Malaysia. In order to provide services and supports that are responsive to the needs of deaf students in Malaysia, it is important that information is obtained from their perspectives. Therefore this research is designed to begin exploring the experience of deaf Malaysian students from their perspectives. Other than exploring and understanding school experience of deaf individuals from Malaysia, it is hoped that results of this research would contribute to literature on deaf education in Malaysia.

### Principal Investigator

- Farhana Aftar, Nur (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### **Seeing the Temporal Beats of Human Language**

*See in Brain and Language Laboratory (BL2)*

### **SFA1: Visual and cognitive plasticity**

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

### **Signs of aggression: Translating the peer conflict scales into American Sign Language**

**Status:** Ongoing

**Start date:** September 2013

**End Date:** May 2017

Bullying and aggression among children and adolescents are prominent issues in the United States. Deaf and hard of hear-



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ing children are no less likely to be bullied or to have high levels of aggression than their hearing counterparts. This study proposes to translate a measure of aggression, the Peer Conflict Scale – Youth (PCS-Y) version, into American Sign Language (ASL) and adapt it to an interactive assessment tool for signers. Therefore, this study will have two parts: (1) Translation, and (2) Running the validity and reliability of the PCS-ASL with bilingual Deaf and hard of hearing adolescents.

### Principal Investigators

- **Dowtin, Ryleigh La Trice** (Student) • Psychology
- **Day, Lori** • Psychology

### A study of excellent teaching at Gallaudet University

**Status:** Ongoing

**Start date:** January 2012

**End Date:** August 2016

This study identified five excellent teachers at Gallaudet University after chairpersons and faculty members were asked to nominate excellent teachers. Over 400 students responded to a survey rating their teachers this semester. The goal was not to find the best teachers on campus, but rather to identify a diverse sample of excellent teachers on campus. They have been interviewed and video recorded in a class by ASL Diagnostic and Evaluation Services office. American Sign Language and the visual nature of teaching and learning is what makes Gallaudet unique, so a classroom observation is essential. While there is research on what makes a good college teacher, there are no studies that look at the interplay of teaching strategies and techniques, ASL and visual learning. The interview transcripts and video recordings are being reviewed for evidence of excellent teaching. Preliminary results show all five teachers to have very good signing skills, and they also exhibit classic examples of excellent teaching, including creating safe learning environments and encouraging deep processing of information.

### Principal Investigator

- **Galvan, Dennis B.** • Psychology

### Product

Galvan, D. B. (2015, March). *What is excellent teaching at Gallaudet*. Presented at the Gallaudet University Faculty Development Forum, Washington, DC.

### A validation study of the signed paired associates test for children

**Status:** Completed

**Start date:** January 2013

**End Date:** July 2015

There are no published measures available that assess language related memory for children who communicate using American Sign Language (ASL). Most memory measures are created using spoken language, which creates methodological difficulties when translating those measures into ASL. A signed paired associates test was developed by researchers at the University of Rochester to assess verbal (sign-based) learning and memory for Deaf adults. The goal of the present study is to pilot a modified version of that measure to a sample of Deaf children, ranging in age from 6 to 17 years. Results will be used to determine if the modified children's version is feasible for use with Deaf children who are fluent in ASL. Convergent validity will be established by comparing the combined sample results to those obtained in previous research. Discriminant validity will be determined by comparing the results of the C-SPAT performance with measures found to be unrelated to verbal memory performance (i.e., motor speed as measured by the Purdue Pegboard, rapid naming, and visual-motor integration).

### Principal Investigators

- **Day, Lori** • Psychology
- **Reesman, Jennifer** • Neuropsychology • Kennedy Krieger Institute

### Additional Investigator

- **Dziura, Joanna** (Student) • Psychology

### Funding Source

- Gallaudet Small Research Grant

### Visuospatial phonological loop in working memory

*See in Brain and Language Laboratory (BL2)*

### WPPSI-IV & WISC-V special population study: Deaf and hard of hearing children

**Status:** Ongoing

**Start date:** December 2014

**End Date:** March 2016

Wechsler intelligence tests are commonly utilized measures for assessing the intellectual abilities of members of the deaf and hard of hearing population. Obtaining valid and useful assessment results from the administration of these tests to members of the deaf and hard of hearing population, however,

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is a complex issue that requires the consideration of numerous factors, including examiner qualifications, test administration, communication mode, interpreter use, normative data, and reliability and validity issues. Further studies are needed to explore issues of reliability and validity of the Wechsler Intelligence Scale for Children - Fifth Edition (WISC-V) and Wechsler Preschool and Primary Scale of Intelligence - Fourth Edition (WPPSI-IV) with the deaf and hard of hearing population. The present study begins to fill this gap in the literature by administering the WISC-V and WPPSI-IV via standardized American Sign Language (ASL) instructions to deaf and hard of hearing children in order to obtain special group norms for deaf children who communicate via ASL.

### Principal Investigators

- **Day, Lori** • Psychology
- **Bridgett, Tiffany** (Student) • Psychology

### Scholarly and Creative Activity

Miller, B. D. (2015, August). *Functional behavioral assessment and behavioral intervention plans*. Presented at the Lancaster-Lebanon Intermediate Unit 13 Early Intervention Program, Lancaster, PA.

Dziura, J., & Brice, P. J. (2015, January). *Social perception of body and beauty standards and its impact on the psychological well-being of people with late acquisition of a disability: A review*. Presented at the meeting of the National Multicultural Conference and Summit, Atlanta, GA.

Szarkowski, A. & Brice, P.J. (2015, March). *Hearing parents and their deaf children: Appraising the parenting experience and finding the positives*. Presented at the meeting of the Society for Research in Child Development, Philadelphia, PA.

Gibbons, E. (2015, February). *Fostering resilience among deaf and hard of hearing students*. Presented at the meeting of the National Association of School Psychologists, Orlando, FL.

Gibbons, E. M. (2015). Supporting deaf and hard of hearing students in the schools. *Contemporary School Psychology*, 19(1), 46 - 53.

Whyte, A., Gibbons, E., & McCollough, M. (2014, December). *Diversity, identity, and connection: How they make us powerful*. Presented at the meeting of TASH, Washington, DC.

Aldalur, A., Pick, L. H., Schooler, D., & McCaw, D. (2015, April). *Deaf acculturative stress: Meaning and measurement*. Presented at the Gallaudet University Psi Chi Research Conference, Washington, DC.

Letteri, A., & Pick, L. H. (2015, May). *Initial analysis of the psychometric properties of the communication quality questionnaire for deaf children*. Presented at the meeting of the Association for Psychological Science, New York, NY.

McCaw, D. M., & Pick, L. H. (2015, May). *Biopsychosocial perspectives on working with Deaf and hard of hearing clients*. Workshop conducted at Springfield Hospital Center, Springfield, MD.

Opsahl, L., & Pick, L. H. (2015, August). *Online disclosure resources for Deaf female survivors of sexual assault and their support providers*. Presented at the meeting of the American Psychological Association, Toronto, Canada.

Pick, L. H. (2015, April). *The provision of psychotherapy for deaf youth and adults*. Workshop conducted at the DC Superior Court, Washington, DC.

Plotkin, R. M., Reesman, J., & Brice, P. J. (2015, July). *Parent personality and stress as predictors of adjustment in deaf children with or without a cochlear implant*. Presented at the meeting of International Congress on Education of the Deaf, Athens, Greece.

Biesen, J. N., Schooler, D., & Smith, D. (2015). What a difference a pronoun makes: I/We versus you/me and worried couples' perceptions of their interaction quality. *Journal of Language and Social Psychology*. Advance online publication.

## Science, Technology, and Mathematics

Research challenges faculty and students to transform learning, observations, and ideas into new solutions and products. This unit has active research in nanotechnology, remote sensing, limnology, pharmacognosy, organic synthesis, and biomedical areas. Mentored research, university collaborations and internships provide students experience for work, advanced degrees, and medical/pharmaceutical professional careers.

### Research Projects

#### Advancing students' science literacy

**Status:** Ongoing

**Start date:** August 2013

**End Date:** August 2018

The goal of this study is to advance students' science literacy and improve biology laboratory courses. Becoming science literate involves developing skills related to accessing science information beyond the classroom. However, science literacy



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is more than science knowledge and skills. Science literacy also involves seeing oneself as capable of engaging with science -- or being a «science person» -- and seeing science in everyday life. With positive attitudinal growth, students are more likely to engage with science outside of class. Using a mixed methods approach, the project focuses on learning about how students' self-conception as a science person and attitudes about science influence science literacy development. The study focuses on learning how teaching practices can foster positive growth in students' attitudes toward science. The project will uncover student-informed strategies to cultivate students' affinities for science. Findings will be used to improve undergraduate science learning.

### Principal Investigator

- **Gormally, Cara** • Science, Technology, and Mathematics

### Funding Sources

- Gallaudet Priority Research Fund
- American Association for University Women Fellowship.

### Continuous monitoring of urea concentrations and harmful algal productivity and physiology in the Anacostia River

**Status:** Ongoing

**Start date:** May 2013

**End Date:** May 2015

Water quality monitoring in the Anacostia River is plagued by inconsistent and uncoordinated efforts by different municipalities and non-profit organizations throughout its watershed. Over the years, there have been studies that collect basic and important water quality parameters (e.g. temperature, salinity, dissolved oxygen, bacteria, and phytoplankton composition) that help determine the health of the river. However, one large component that is lacking from these monitoring studies or programs is assessing the concentration and impact of organic nitrogen (N), especially urea, that could compose more than 50 percent of the total nitrogen that comes from the 17 combined sewage outfalls along the DC portion of the Anacostia River. If present in high concentrations, urea as a liable part of the N pool could simulate harmful dinoflagellate and cyanobacterial blooms that could release toxins in the Anacostia River. This study involves collecting samples at 9 sites determined by the Anacostia Watershed Society for nutrient concentrations, bacteria and phytoplankton composition, nitrogen uptake and assimilation enzyme rates, and toxin production to better understand the impact of organic N in the Anacostia River. Deaf and hard of hearing undergraduate summer interns will be involved by doing sampling, analysis,

and interpretation of the data to help raise awareness regarding the health of the Anacostia River.

### Principal Investigator

- **Solomon, Caroline** • Science, Technology, and Mathematics

### Additional Investigator

- **Lundberg, Daniel J.** • Science, Technology, and Mathematics

### Creation of a DNA repository to identify deafness genes

**Status:** Ongoing

**Start date:** July 2001

**End Date:** September 2018

This project is a collaborative effort between Gallaudet (Department of Biology and the Office of Research Support and International Affairs) and the Department of Human Genetics at the Medical College of Virginia to establish a large repository of DNA samples from deaf individuals and their families. These DNA samples are screened for common forms of deafness and then made available to H5 Other Investigator for studies of hereditary deafness.

### Principal Investigators

- **Arnos, Kathleen S.** • Science, Technology, and Mathematics
- **Nance, Walter E.** • Virginia Commonwealth University

### Additional Investigator

- **Pandya, Arti** • Virginia Commonwealth University

### Developing opportunities for instructional feedback to improve student outcomes in STEM courses

**Status:** Ongoing

**Start date:** May 2013

**End Date:** December 2015

Improving student learning in STEM requires shifting toward teaching practices that emphasize developing scientific reasoning skills and acquiring a deeper understanding of subject matter. Despite extensive faculty development efforts to disseminate more effective teaching practices, most faculty nationwide have not adopted them. Faculty cite reasons such as student resistance, as well as lack of expertise and mentors to help them trouble-shoot these new practices. One solution to this problem is to provide faculty with instructional feedback that goes beyond student evaluations and peer support. However, there has been no systematic analysis of the current state

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of instructional evaluation to provide faculty with feedback on the efficacy of these practices. This project develops, administers, and analyzes a survey to characterize the current state of instructional feedback practices for STEM faculty nationwide. Survey findings include current methods that faculty use to seek additional formative feedback about their teaching. Survey findings also include novel strategies for instructional feedback.

### Principal Investigator

- **Gormally, Cara** • Science, Technology, and Mathematics

### Additional Investigator

- **Brickman, Peggy** • University of Georgia

### Product

Brickman, P., & Gormally, C. (2015, July). *Instructional feedback: Is it making the grade?* Presented at the meeting of the Society for the Advancement of Biology Education Research, Minneapolis, MN.

### Effectiveness of mentoring in science research

**Status:** Ongoing

**Start date:** October 2014

**End Date:** January 2018

Disabled individuals, women, and cultural and ethnic minorities continue to be underrepresented in STEM. Research has shown that mentoring increases success for underrepresented individuals. Available mentoring survey instruments have all been developed for the majority population and were not intended to capture factors for successful mentoring of underrepresented groups. In this project, we are developing and validating a next-generation mentoring survey drawing from prior mentoring instruments, but also incorporating capital theory and critical race theory. From critical race theory, this survey includes community cultural wealth, which is thought to be instrumental to the success of individuals from minority communities. Our survey focuses on mentoring relationships between Deaf and hard-of-hearing protégés and their research advisors. From the pilot survey results we have identified three segregating factors. The first two factors contain traditional capitals. The third factor, which is community cultural wealth, was well conferred when Deaf protégés were paired with mentors who were either Deaf or had knowledge of American Sign Language and Deaf culture. This next-generation survey is geared for improving the success of underrepresented groups in STEM and can be used for hypothesis testing or for generating constructive feedback for mentors. Our results so far suggest that cultural awareness training may be a strategy for improving mentoring effectiveness.

### Principal Investigators

- **Braun, Derek** • Science, Technology, and Mathematics
- **Clark, Diane** • Education

### Forward to professorship: “Pay it forward”

**Status:** Ongoing

**End Date:** December 2016

The goal of this grant is to encourage the advancement of women and minority faculty in Science, Technology, Engineering and Mathematics (STEM) fields. Several workshops have been offered with a cadre of trained leaders who are able to provide a structured workshop targeted at specific regions, disciplines, or societal groups across the United States and its territories. The teams selected drew participants from various demographics and geographic regions. A number of Gallaudet faculty participated in these workshops as participants, panelists, and presenters. *Forward* was designed to address the shortage of women and under-represented minorities in the full range of STEM fields. For example, by working with undergraduates, researchers envisioned the opportunity to encourage them to continue to graduate school. By working with pre-tenured faculty the researchers sought to enable them to move to the next level in their career. The goal of *Forward* was to enable the messages, information, and skills developed in the workshops to reach a wider audience, targeting specific underrepresented populations, specific disciplines, and specific geographic regions, all with their own unique challenges.

### Principal Investigator

- **Sabila, Paul S.** • Science, Technology, and Mathematics

### Products

Mavriplis, C., Heller, S. R., & Sabila, P. S. (2014). The FORWARD Program. In J. Koch, B. Polnick, & B. Irby (Eds.), *Girls and women in STEM: A never-ending story*. Charlotte, NC: Information Age Publishing.

Mavriplis, C., Heller, S. R., & Sabila, P. S. (Eds.). (2015). *FORWARD to professorship in STEM: Inclusive faculty development strategies that work*. San Diego, CA: Elsevier Science Publishing Co.

Sabila, P. S. (2015). Appendix. In C. Mavriplis, S. R. Heller, & P. S. Sabila (Eds.), *FORWARD to professorship in STEM: Inclusive faculty development strategies that work*. San Diego, CA: Elsevier Science Publishing Co.

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Sabila, P.S., Snyder, H. D., & Sorensen, C. C. (2015). FORWARD workshops: Strategies for inclusion of the deaf and hard of hearing. In C. Mavriplis, S. R. Heller, & P. S. Sabila (Eds.), *FORWARD to professorship in STEM: Inclusive faculty development strategies that work*. San Diego, CA: Elsevier Science Publishing Co.

### Genetic deafness in alumni of Gallaudet University

**Status:** Ongoing

**Start date:** April 2004

**End Date:** September 2018

This project, designed to extend the 1898 study of Deaf families by Gallaudet's President at the time, Professor E.A. Fay, is a collaborative effort between Gallaudet's Department of Biology and the Department of Human Genetics at the Medical College of Virginia. The goal is to identify and characterize rare genes that interact to cause deafness. A novel molecular genetic approach to identifying these genes will be used in the Deaf offspring of Deaf parents.

#### Principal Investigator

- **Arnos, Kathleen S.** • Science, Technology, and Mathematics

#### Additional Investigators

- **Blanton, Susan H.** • University of Miami
- **Nance, Walter E.** • Virginia Commonwealth University
- **Pandya, Arti** • Virginia Commonwealth University

### HCC small: DHH cyber-community - supporting Deaf and hard of hearing students in STEM

**Status:** Ongoing

**Start date:** June 2009

**End Date:** June 2015

The ASL-STEM Forum is part of a research venture at the University of Washington that seeks to remove a fundamental obstacle for Deaf scholars, both students and professionals. Due to its relative youth and widely dispersed user base, American Sign Language (ASL) has never developed a standardized vocabulary for the many terms that have arisen in advanced Science, Technology, Engineering, and Mathematics (STEM) fields. This makes it hard for Deaf students to learn in their native language, and it makes communication between both Deaf and hearing scientists and engineers far more difficult. The Forum is an attempt to connect people and introduce the necessary vocabulary in ASL, making it easier for those in the Deaf community to pursue careers in technical fields. Students at Gallaudet are involved in uploading STEM terms and signs to encourage the expanding library of signs that are available

on the Forum. This project is currently funded through two separate grants: one for the overall project and another one specifically to support undergraduates working on this project.

#### Principal Investigator

- **Solomon, Caroline** • Science, Technology, and Mathematics

#### Additional Investigators

- **Blumenfeld, Rebecca** (Student) • Science, Technology, and Mathematics
- **Bonheyo, Todd** (Student) • Science, Technology, and Mathematics
- **Burton, Lauren** (Student) • Science, Technology, and Mathematics
- **Hines, Amberlin** (Student) • Science, Technology, and Mathematics
- **McCall, Anna** (Student) • Science, Technology, and Mathematics
- **McMillian, Brandon** (Student) • Science, Technology, and Mathematics

#### Funding Source

- University of Washington (through National Science Foundation)

### Image processing for NASA applications

**Status:** Ongoing

**Start date:** May 2002

**End Date:** January 2020

Software is being developed to improve geolocating Corona spy satellite photos from the 1960s. This winter and spring (2014), studies were done of how the accuracy of mapping depended on the starting point for optimization software. Five hundred good starting points were identified for each frame of a Corona image, and automated searches were done to minimize mapping error. It was expected that these searches would identify a few local minima where the search software would get stuck and some of the searches would find a true minimum error state. It was discovered that the lowest minimum error corresponded to the 30m resolution of the images used for calibrating the mapping. Other minima were scattered over the parameter space instead of clustering at a few points. At the suggestion of a National Aeronautic Space Administration colleague, mapping points were recalibrated on higher resolution imagery over several months. The starting point studies need to be repeated. Work continues on providing and updating data resources for the [www.oceanmotion.org](http://www.oceanmotion.org) educational website. The updates are typically done twice a year.

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### Principal Investigator

- **Snyder, Henry David** • Science, Technology, and Mathematics

### Investigating the water quality of two freshwater ecosystems: The Anacostia River (DC) and the Brainerd Area Lakes (MN)

**Status:** Ongoing

**Start date:** January 2013

**End Date:** August 2016

This study examines and compares the water quality of two freshwater systems (Anacostia River, Washington, DC, and Brainerd Area Lakes, Minnesota). The Anacostia River, which recently received a grade of F by the Anacostia Watershed Society for ecosystem health, suffers from uncoordinated monitoring efforts. It currently receives run-off and direct input from DC's combined sewage outfall after periods of heavy rainfall because the system cannot handle the excess amount of water. This input may contain organic nitrogen, which historically has not been monitored closely, which may promote harmful algal blooms. In order to better understand the water quality of the Anacostia River, sampling was done over a year for both inorganic and organic nutrients as well as phytoplankton composition and responses (nutrient uptake and utilization rates). The second freshwater system focuses on six north central Minnesota lakes of different degrees of water quality, management, and history. One of the lakes is a Superfund site where a scrapyard was in operation nearby from 1952-1982. Investigation of each lake includes watershed analysis by geographic information system, nutrient analysis, zooplankton population studies, and well water chemical tests. The data provides information for how to change land use practices and how climate change impacts Minnesota lakes.

### Principal Investigators

- **Solomon, Caroline** • Science, Technology, and Mathematics
- **Lundberg, Daniel J.** • Science, Technology, and Mathematics

### Additional Investigators

- **Bergeron, Ashley** (Student) • Science, Technology, and Mathematics
- **Flores, Eliza** • ASU • Student Intern
- **Hines, Amberlin** (Student) • Science, Technology, and Mathematics
- **McCall, Anna** (Student) • Science, Technology, and Mathematics
- **Rubiyat, Muhammad** • Science, Technology, and Mathematics

- **Seguin, Zachary** (Student) • Science, Technology, and Mathematics
- **Van Wey, John** (Student) • Science, Technology, and Mathematics
- **Vazquez, Giovanna** (Student) • Science, Technology, and Mathematics

### Investigation of the molecular mechanisms of tumor promotion

**Status:** Completed

**Start date:** October 2001

**End Date:** September 2014

This is an ongoing collaboration with a laboratory at the National Cancer Institute. Primarily, this study focuses on the pharmacology of phorbol esters, a class of tumor promoters and suppressors, and on the molecular biology of the receptors that are activated by phorbol esters. In the cell, these receptors are naturally activated by diacylglycerol and include the protein kinase C (PKC) and RasGRPs, which are central players in various cellular processes including carcinogenesis. A better understanding of the underlying mechanisms is vital to the goal of expanding the use of phorbol esters as pharmaceuticals. Drugs targeting PKC have already been exploited as therapeutic agents; these include bryostatin for chronic myeloid leukemia, LY333531 for diabetic retinopathy, and 12-deoxyphorbol-13-phenylacetate and prostratin for HIV.

### Principal Investigators

- **Blumberg, Peter** • National Cancer Institute
- **Braun, Derek** • Science, Technology, and Mathematics

### Investigations of the effect of catalyst loading on cross-metathesis reaction

**Status:** Ongoing

**Start date:** October 2012

**End Date:** December 2020

Investigations were carried out using various cross-metathesis catalysts to determine effect of catalyst concentration on the reaction. This has a potential application in chemical, polymer, and pharmaceutical industries as it could potentially lead to reduced cost of production.

### Principal Investigator

- **Sabila, Paul S.** • Science, Technology, and Mathematics

### Funding Sources

- Gallaudet Small Research Grant
- National Science Foundation (NSF)



## Goal E: Research and Outreach

### Product

Sabila, P. S. (2015). Styrene cross-metathesis using low catalyst concentrations. *Universal Journal of Chemistry*, 3(3), 87-90.

### Learning to teach science as inquiry

**Status:** Completed

**Start date:** August 2012

**End Date:** October 2015

The goal of this study is to characterize and analyze the challenges that new instructors face as they learn to teach science using inquiry teaching practices. Inquiry-based teaching practices have been widely adopted in college biology courses, following calls to improve undergraduate science education. Inquiry-based learning is an evidence-based instructional approach, designed to mimic scientists' practices: students problem-solve by developing and testing hypotheses. However, most lab classes are taught by teaching assistants (TAs) and other instructors new to teaching. Our research design focused around the theoretical framework of inquiry learning, using multiple sources of data to characterize TAs' teaching practices and beliefs about teaching and learning before, during, and after their first year of teaching. This knowledge will inform the development of more effective pedagogical training programs for TAs and faculty.

#### Principal Investigator

- **Gormally, Cara** • Science, Technology, and Mathematics

#### Additional Investigators

- **Sullivan, Carol Subiño** • Georgia Institute of Technology
- **Szeinbaum, Nadia** • Georgia Institute of Technology

### A model of Deaf scientists mentoring Deaf students

**Status:** Completed

**Start date:** April 2011

**End Date:** June 2013

Deaf and hard of hearing individuals are under-represented in science, technology, engineering and mathematics (STEM) careers. Although deaf individuals represent 3.5 percent of the eligible USA workforce, almost no doctorates in STEM fields are awarded to deaf individuals. Clearly, significant barriers are preventing Deaf individuals from advancing in STEM education. Published testimonial evidence shows that some of these barriers may be due to linguistic and cultural factors that interfere with the formation of essential mentoring relationships with hearing research faculty. Ineffective mentoring results in a loss of academic capital, discipline capital, and community cultural wealth. In particular, the historical lack of deaf scientists acting as role models appears to have made

it difficult for deaf students to envision themselves advancing to such positions. This study consists of building and testing a unique educational model in which deaf undergraduates will be mentored by linguistically and culturally compatible deaf scientists within the context of a long-term undergraduate research experience (URE). This model will combine the various capitals obtained from effective mentoring, with the proven benefits of UREs. The central hypothesis is that this educational model will achieve short and long-term effectiveness, particularly success and persistence in STEM research careers.

#### Principal Investigators

- **Braun, Derek** • Science, Technology, and Mathematics
- **Hauser, Peter** • National Technical Institute for the Deaf • Rochester Institute of Technology

#### Additional Investigators

- **Clark, Diane** • Education
- **Dubler, Rupert** • Deaf Studies Laboratory • Rochester Institute of Technology
- **Listman, Jason** • Deaf Studies Laboratory • Rochester Institute of Technology
- **Mathur, Gaurav** • Linguistics
- **Mertens, Donna** • Education
- **Solomon, Caroline** • Science, Technology, and Mathematics

### Nanowire array production and characterization

**Status:** Completed

A nanowire array intended for thermoelectric applications was produced and it was characterized by Raman spectroscopy and a scanning electron microscope. The goal of this project is to design a method for producing bismuth telluride nanowires arrays using high pressure. The nanowire will be then be tested for various electrical and electronic properties including thermoelectric applications which have potential applications in the fabrication of devices that convert heat to electrical energy.

#### Principal Investigators

- **Huber, Tito** • Chemistry • Howard University
- **Sabila, Paul** • Science, Technology, and Mathematics

### National space grant college fellowship program at Gallaudet University

**Status:** Completed

**Start date:** August 2014

**End Date:** August 2015

Gallaudet University, along with other local universities and organizations comprising the District of Columbia Space

## Goal E: Research and Outreach

Grant Consortium, participates in supporting educational and student financial assistance programs that develop infrastructure related to the National Aeronautics and Space Administration and its strategic missions. This grant supported: (1) Stipends for summer research internships in labs at Gallaudet; (2) Participation of Model Secondary School for the Deaf students in the DC regional Botball competition and Deaf Space Camp; (3) Equipment for high school and undergraduate programs in robotics and electronics; and (4) Software for faculty research in remote sensing.

### Principal Investigator

- **Snyder, Henry David** • Science, Technology, and Mathematics

### Additional Investigator

- **Berendzen, Richard** • American University

### Funding Source

- NASA-Space Grant

### Overcoming barriers to STEM success for deaf undergraduates

**Status:** Ongoing

**Start date:** May 2013

**End Date:** April 2018

This project provides scholarships to deaf students majoring in biology, chemistry, or mathematics, thereby addressing the severe under-representation of deaf individuals in STEM fields by providing a specific plan to prepare them for STEM careers. The goals of this plan are realized through the following objectives: (1) Recruit Deaf students into STEM majors; (2) Provide scholarships to talented deaf STEM students with documented financial need (S-STEM Scholars Program, funded by the National Science Foundation); (3) Provide individual and group activities to support undergraduate S-STEM Scholars; (4) Assist Deaf S-STEM Scholars in overcoming cultural and linguistic barriers; and (5) Provide support services to deaf S-STEM Scholars to help them ultimately enter STEM careers. Broader impacts result from increasing the number of talented deaf students who choose a STEM major, and increasing the number of deaf STEM majors who are well prepared to enter STEM careers. Deaf S-STEM Scholars will interact with deaf mentors and deaf scientists to understand that they truly can make significant contributions to STEM fields. There is a need for replicable best practices in educating deaf undergraduates in STEM disciplines, and this project can help develop such practices. Plans are in place to disseminate these best practices through a variety of venues.

### Principal Investigators

- **Arnos, Kathleen S.** • Science, Technology, and Mathematics
- **Nuzzo, Regina** • Science, Technology, and Mathematics
- **Sabila, Paul** • Science, Technology, and Mathematics

### Additional Investigators

- **Mertens, Donna** • Education
- **Zimmerman, Heather** (Student) • Education

### Funding Source

- National Science Foundation (NSF)

### Partnership in reduced dimensional materials (PRDM): Preparation of molybdenum disulfide nanomaterials

**Status:** Ongoing

**Start date:** October 2012

**End Date:** December 2020

The project worked on developing strategies for the preparation of molybdenum disulfide nanomaterials, which have potential applications in fabrication of electronic devices and semi-conductors. Two approaches for synthesis of nanomaterials were explored. The first strategy was successful in depositing molybdenum disulfide films on silicon wafers. The resulting products were analyzed using a Scanning Electron Microscope, which produces images of a sample by scanning it with a focused beam of electrons and contains information about the sample's surface composition and features. Further analyses are done using Energy Dispersive X-Ray Spectroscopy and Profilometer.

### Principal Investigator

- **Sabila, Paul** • Science, Technology, and Mathematics

### Additional Investigators

- **Cha, John** (Student) • Science, Technology, and Mathematics
- **Garcia, Nicolas** (Student) • Science, Technology, and Mathematics
- **Habtemichael, Amelework** (Student) • Science, Technology, and Mathematics
- **Herlod, Brienna** (Student) • Science, Technology, and Mathematics
- **Houghton, Mandy** (Student) • Science, Technology, and Mathematics

### Funding Source

- National Science Foundation (NSF)



## Goal E: Research and Outreach

### Product

Houghton, M., Snyder, H. D., & Sabila, P. S. (2015, August). *Growth, characterization and exfoliation of molybdenum sulfide (MoS<sub>2</sub>) nanomaterials*. Presented at the Cornell Center for Materials Research Symposium, Cornell University, Ithaca, NY.

### Partnerships for material research (PREM)

**Status:** Ongoing

**Start date:** October 2010

**End Date:** September 2020

This research is on nanotechnology-related projects at Howard University. Students were able to use lithography to prepare nanotechnology samples. They also had hands-on experience with various instrument techniques, including Scanning Electron Microscopy (SEM), Nuclear Magnetic Resonance Spectroscopy (NMR), FTIR spectroscopy, and MS Spectrometry. The students synthesized a variety of organic precursors that will be used for the synthesis of nanomaterials by chemical vapor deposition method. Three Gallaudet students participated in an internship under the supervision of Dr. Sabila. This internship also tested a new template that could be used for future research collaborations between Gallaudet and other universities where Deaf and hard of hearing Gallaudet students work in a hearing research environment.

### Principal Investigator

- **Sabila, Paul S.** • Science, Technology, and Mathematics

### Additional Investigators

- **Habtemichael, Amelework** (Student) • Science, Technology, and Mathematics
- **Houghton, Mandy** (Student) • Science, Technology, and Mathematics
- **Marceaux, Brandt** (Student) • Science, Technology, and Mathematics
- **Van Wey, John** (Student) • Science, Technology, and Mathematics
- **Yang, Fang** (Student) • Science, Technology, and Mathematics

### Funding Source

- National Science Foundation (NSF)

### Product

Mbochwa, C., Habtemichael, A., & Sabila, P. (2014, October). *Growth of molybdenum disulfide films on silicon wafers*. Presented at the Summer Undergraduate Research Symposium, University of Maryland-Baltimore County, Baltimore, MD.

### Population genetics of connexin 26 deafness

**Status:** Ongoing

**Start date:** January 2010

**End Date:** January 2018

The researchers aim to explore two anthropological explanations for the high prevalence and mutational diversity of deafness-causing *GJB2* mutations in the North American population, as well as the association of specific *GJB2* mutations within ethnic groups. The first is heterotic balancing selection, in which *GJB2* heterozygotes may have increased fitness, possibly due to resistance to bacillary dysentery. A second explanation is linguistic homogamy, meaning in this case that culturally Deaf individuals have actively sought mates with compatible fluency in signed languages. This mate-selection phenomenon may have begun ~200 years ago with the introduction of signed language in residential schools for the Deaf. The significance of linguistic homogamy in Deaf communities is that in the broader human population, the same mechanism may have driven the inexplicably rapid evolution of *FOXP2* and 21 other genes implicated in human speech since their appearance in early humans 100,000-200,000 years ago.

### Principal Investigator

- **Braun, Derek** • Science, Technology, and Mathematics

### Additional Investigators

- **Armstrong, David F.** (Retired)
- **Arnos, Kathleen S.** • Science, Technology, and Mathematics
- **Herlod, Brienna** (Student) • Science, Technology, and Mathematics
- **Nance, Walter E.** • Virginia Commonwealth University
- **Pandya, Arti** • Virginia Commonwealth University
- **Tekin, Mustafa** • Miller School of Medicine • University of Miami

### Funding Sources

- Sorenson Legacy Foundation
- Mellon Foundation
- NASA-Space Grant

## Goal E: Research and Outreach

### Products

Braun, D. C. (2015, September). *Population genetics of Cx26 deafness: Frequency, mutability, history and geography*. Presented at the National Institute on Deafness and Other Communication Disorders Seminar, Bethesda, MD.

Braun, D. C., Craft, E. A., Herold, B. K., Arnos, K. S., Tekin, M., & Pandya, A. (2014, October). *Does genetic hypermutability contribute to the prevalence of connexin 26 deafness?* Poster presented at the meeting of the American Society for Human Genetics, San Diego, CA.

Jain, S., Epstein, E., & Braun, D. C. (2014, October). *Linguistic homogamy explains the recent increase in phenotypic deafness, but does not predict an increase in frequency of deafness alleles*. Poster presented at the Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, MD.

McBride, C., Chin, J., & Braun, D. C. (2014, October). *Practical and inexpensive DNA fingerprinting for undergraduate science majors and high school students*. Poster presented at the Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, MD.

### Potential societal impact of advances in genetic deafness

**Status:** Ongoing

**Start date:** September 2003

**End Date:** September 2018

This project was designed to assess the impact of testing for genes for deafness on the Deaf community and hearing parents of deaf and hard-of-hearing children. The first goal was to conduct focus groups and perform a survey of these groups to determine the attitudes and concerns related to genetics technologies and advances in the identification of genes for deafness. A second goal was to assess the impact of genetic testing on culturally Deaf couples by measuring its influence on selection of a marriage partner.

### Principal Investigators

- **Arnos, Kathleen S.** • Science, Technology, and Mathematics
- **Pandya, Arti** • Virginia Commonwealth University

### Additional Investigators

- **Blanton, Susan H.** • University of Miami
- **Nance, Walter E.** • Virginia Commonwealth University
- **Norris, Virginia** • Science, Technology, and Mathematics

### Site-directed mutagenesis of RasGRP2

**Status:** Completed

**Start date:** October 2008

**End Date:** September 2014

Extracellular ligands, such as drugs, tumor promoters, and natural ligands, activate receptors located on the cellular membrane to elicit intracellular responses. This leads to a multitude of downstream signaling cascades, modulated by intracellular proteins. The researchers' project focuses on the Ras guanyl nucleotide-releasing protein (RasGRP). After activation of receptors located at the cellular membrane, the activated RasGRP «turns on» the Ras protein «switch.» Activated Ras then broadcasts signals from the cell surface to other parts of the cell, such as downstream signaling on the Ras gene, triggering cell proliferation and differentiation, essential for sustaining life. However, mutations on proteins that activate this pathway can stimulate cell division inappropriately, promoting the development of cancer. In collaboration with the National Cancer Institute, the Gallaudet University Molecular Genetics Laboratory utilizes site-directed mutagenesis to mutate specific residues of RasGRP1 and RasGRP2 isoforms to identify the reasons behind different binding affinities of the isoforms to phorbol esters, which are tumor-promoting ligands. Mutations of the RasGRP isoforms, DNA, and protein purification are performed in the Gallaudet University Molecular Genetics Laboratory. The National Cancer Institute then performs radioligand binding assays with phorbol esters to determine the binding affinities (increased or decreased Ras activation) of the mutated RasGRP. The long-term goal of this project is to develop novel strategies for manipulation of signaling pathways that involve RasGRP.

### Principal Investigator

- **Lundberg, Daniel J.** • Science, Technology, and Mathematics

### Additional Investigators

- **Blumberg, Peter** • National Cancer Institute
- **Braun, Derek** • Science, Technology, and Mathematics
- **Merritt, Raymond C.** • Science, Technology, and Mathematics

### Funding Source

- National Cancer Institute

## Goal E: Research and Outreach

### Synthesis of bismuth telluride nanomaterials

**Status:** Ongoing

**Start date:** May 2015

**End Date:** August 2024

To synthesize nanomaterials of Bismuth Telluride using chemical exfoliation method. We have successfully used chemical exfoliation to prepare molybdenum disulfide nanomaterials and films. We wanted to see if the same approach could be applied to bulk bismuth telluride to prepared thin films (2-dimensional materials). Bismuth telluride has been shown to exhibit interesting thermoelectric properties that converts heat to electricity. The goal of this project is to design a method for producing bismuth telluride films on silicon wafers. The films will be analyzed using Scanning Electron Microscopy (SEM), optical microscopy and Raman spectroscopy. We are also interested in studying the depth and density of deposited bismuth telluride films on silicon wafers.

#### Principal Investigator

- **Sabila, Paul** • Science, Technology, and Mathematics

#### Additional Investigator

- **Marceaux, Brandt** (Student) • Science, Technology, and Mathematics

#### Funding Source

- National Science Foundation (NSF)

#### Product

Marceaux, B., Snyder, H. D., Sabila, P. S., & Huber, T. (2015, August). *Exfoliation of Bismuth Telluride (Bi<sub>2</sub>Te<sub>3</sub>)*. Presented at the Centre for Information Quality Management Research Convocation, MIT, Boston, MA.

### Using ArcGIS and Carlson's Trophic State Index to monitor north-central Minnesota lakes

**Status:** Completed

**Start date:** May 2015

**End Date:** September 2015

The trophic state index (TSI) measures water quality of a lake or reservoir. With increasing human impact on lakes in the popular Brainerd, MN lakes resort area and the appearance of invasive species, it is essential to monitor a lake's TSI over time in order to maintain its desired state: oligotrophic, mesotrophic, eutrophic, or hypereutrophic. The TSI can be determined by three parameters: water clarity, chlorophyll-a, and total phosphorus. A Secchi disc determined the water clar-

ity, chlorophyll-a was measured by a fluorometer, and the total phosphorus was determined by a UV-Vis spectrometer after acid digestion. A certified research laboratory, A.W. Research Laboratories, (AWRL) determined the chlorophyll-a and total phosphorus concentrations and the students compared their results from laboratory experiments done at Central Lakes College with certified AWRL results, to determine their accuracy in lab technique. Dissolved oxygen and temperature profiles of the water column also were collected. ArcGIS (Geographic Information System) was used to determine the watershed boundary of a lake, calculate the land use in the watershed, identify the pour points of subwatersheds to identify possible sources of pollution or nutrient loading in the lake, and generate 3-dimensional images of both the watershed topography and lake bathymetry. The wealth of information is useful in educating lake associations on the health of their lakes. Well water samples were also collected and tested for: arsenic, coliform, lead, fluoride, nitrate, PCBs, volatile organic chemicals, and heavy metals at a lake that had a history of scrapyard pollution. Eight lakes, with different management goals, were sampled and results on two lakes (Agate Lake and Crow Wing Lake) were reported to the lake associations at the end of the students' internships.

#### Principal Investigator

- **Lundberg, Daniel J.** • Science, Technology, and Mathematics

#### Additional Investigators

- **Ocampos, Jeronimo** (Student) • Science, Technology, and Mathematics
- **Vazquez, Giovanna** (Student) • Science, Technology, and Mathematics

#### Funding Source

- NASA-Space Grant

#### Products

Bergeron, A., & Lundberg, D. J. (2015, February). *Agate Lake report*. Presented at the meeting of the Agate Lake Association and Minnesota Pollution Control Agency, Brainerd, MN.

Call, B., Ocampos, J., & Vazquez, G. (2015, July). *Crow Wing Lake*. Presented at the meeting of the Crow Wing Lake Association, Brainerd, MN.

Call, B., Ocampos, J., & Vazquez, G. (2015, July). *Agate Lake*. Presented at the meeting of the Agate Lake Association, Lake Shore, MN.

## Goal E: Research and Outreach

### Scholarly and Creative Activity

Gormally, C. (2015, July). *Building teachable units and assessing learning*. Workshop conducted at the National Socio-Environmental Synthesis Center, Annapolis, MD.

### Social Work

The Department of Social Work provides an atmosphere to prepare students for a career in their field by emphasizing the application of knowledge and theories that are acquired. Research is a large part of applying this knowledge in a way that fosters experimentation and developing skills needed for their career.

### Research Projects

#### Perspectives of Deaf individuals on telemental health services

**Status:** Ongoing

**Start date:** August 2014

**End Date:** December 2015

The purpose of this project is to explore the potential benefits and challenges involved with telemental health services with Deaf individuals. The study is a mixed method design that includes qualitative interview and anonymous survey data to explore the use of technology to provide psychotherapy to Deaf individuals.

#### Principal Investigator

- Crowe, Teresa • Social Work

#### Telemental health services for Deaf individuals who live in rural areas

**Status:** Completed

**Start date:** July 2012

**End Date:** June 2015

Mental illness is difficult to address in deaf communities. Access to care is limited by cultural barriers, availability of translators, and technological matters. The prevalence of mental illness is higher in deaf communities compared to the general population. The most common mental illnesses in the general population are the same as those in deaf communities. Low self-esteem, failure to be understood, and feelings of rejection are risk factors that exacerbate the development of mental illness in deaf communities. These risk factors also complicate the relationship between deaf patients and their healthcare providers resulting in mistrust. These risks limit

deaf patients' access to care. Telepsychiatry can mitigate the deaf community's lack of access to care. Telepsychiatry allows for deaf individuals in remote communities access to care with facilities that cater to their needs. Telepsychiatry was as effective as traditional face-to-face psychotherapy with deaf adults who have chronic mental illness. Deaf individuals living in remote locations reported an improvement in accessibility to mental health services. Deaf consumers who received telepsychiatry reported high and comparable levels of satisfaction of services to those receiving traditional services. The quality and outcome of care was not compromised through the use of telepsychiatry in deaf patients. Since telepsychiatry does not compromise the quality of care, it is a good means of reaching out to members of the deaf community that cannot readily access mental health resources that meet their needs.

#### Principal Investigator

- Crowe, Teresa • Social Work

### Scholarly and Creative Activity

Crowe, T., Jani, S., & Patel, S. (2014). *Telepsychiatry for deaf and hard of hearing individuals in rural areas*. Presented at the meeting of the American Psychiatric Association, Toronto, Canada.

Jani, N., Musser, C., Dreany-Pyles, L., Smith, C., & Crowe, T. (2014). *Mental health and addictions services for the Deaf community on the eastern shore*. Workshop conducted at the meeting of Community Behavioral Health, Salisbury, MD.

Musser, C., Wooden, N., & Crowe, T. (2014). *Mental health services with deaf individuals*. Presented at the meeting of Community Behavioral Health, Salisbury, MD.

Moore, E. A. (2015, February). *The hope, the dream*. Presented at the Maryland School for the Deaf, Frederick, MD.

Moore, E. A. (2015, February). *The Hope, the Dream*. Presented at the Maryland School for the Deaf, Frederick, MD.

Moore, E. A., & Mertens, D. M. (2015). Deaf culture and Youth resilience in diverse American communities. In L. Theron, M. Ungar, & L. Liebenberg (Eds.), *Resilience and cultures: Commonalities and complexities* (pp. 143-155). Dorchester, Netherlands: Springer.

Moore, E. A., & Mertens, D. M. (2015). Deaf culture and youth resilience in diverse American communities. In L. Theron, M. Ungar, & L. Liebenberg (Eds.), *Resilience and cultures: Commonalities and complexities* (pp. 143-155). Dorchester, Netherlands: Springer.

## Goal E: Research and Outreach

### World Languages and Cultures

Our department seeks to broaden student perspectives through language and cultural studies pertaining to both Deaf and hearing communities worldwide. Research interests and creative endeavors tend to focus on pedagogy, community building, literary study, and linguistic analysis of both signed and written/spoken languages.

#### Research Projects

##### ASL co-activation study

**Status:** Ongoing

**Start date:** January 2008

**End Date:** December 2016

The researchers are conducting several studies testing whether Deaf and hearing ASL bilinguals at different levels of proficiency activate ASL signs when they read English words. The purpose is to gain a better understanding of the lexical architecture of ASL-English bilinguals and how this might affect their literacy development.

##### Principal Investigators

- **Piñar, Pilar** • World Languages and Cultures
- **Kroll, Judith** • Pennsylvania State University
- **Morford, Jill** • University of New Mexico
- **Wilkinson, Erin** • University of Manitoba

##### Additional Investigator

- **Occhino-Kehoe, Corrine** • University of New Mexico

##### Funding Source

- National Science Foundation (NSF) - Directorate for Social, Behavioral & Economic Sciences (SBE)

#### Product

Morford, J. P., Occhino-Kehoe, C., Piñar, P., & Wilkinson, E. (2015, May). *When does English print activate signs in deaf ASL-English bilinguals?* Paper presented at the International Symposium on Biligualism, Rutgers University, New Brunswick, NJ.

##### Cross-language activation during sentence comprehension in Deaf bilinguals

*See in Science of Learning Center on Visual Language & Visual Learning (VL2)*

##### Visual span in Deaf readers

**Status:** Ongoing

**Start date:** September 2013

Understanding how people read depends on understanding the *perceptual span* — the portion of the visual field that provides useful visual information during reading. It is unknown whether models of eye-movement control from hearing readers apply equally well to Deaf readers. In the absence of baseline information on eye-movement control in Deaf readers, lexical and sentence processing studies cannot be fully interpreted. The specific aim of this proposal is to pilot experiments that will start testing the degree to which eye-movement control in Deaf readers resembles similar processes in hearing readers.

##### Principal Investigators

- **Piñar, Pilar** • World Languages and Cultures
- **Kartheiser, George** (Student) • Linguistics
- **Traxler, Matthew** • University of California, Davis

##### Funding Source

- Gallaudet Small Research Grant



*Some of the student work on display at the March 24-April 6, #RealGallaudet photography exhibition included photography showing the H Street Corridor development, which has revitalized the Northeast D.C. area near campus. This, along with the Sixth Street Development on the campus edge at 6th Street and Florida Avenue, will provide the campus community more interaction with its surrounding neighbors and will help further create a “college town” atmosphere.*

Photo by Zhee Chatmon



## Goal E: Research and Outreach

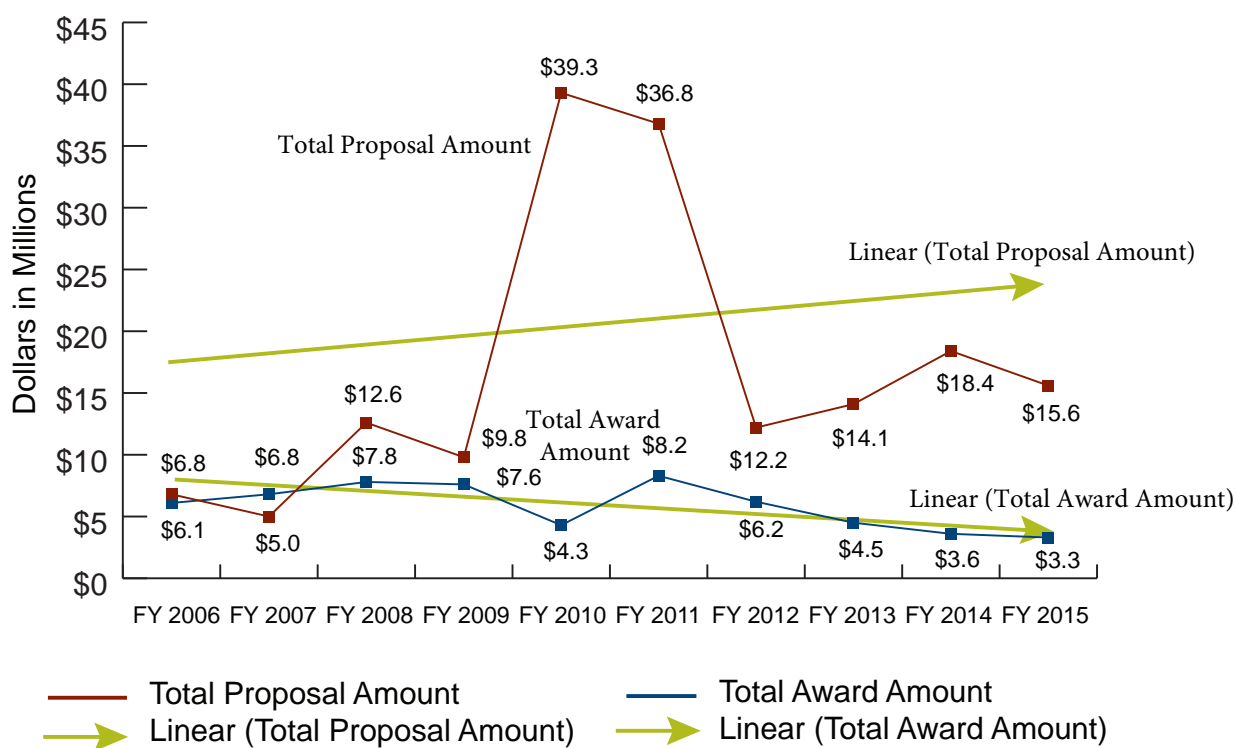
### VI. Sponsored Programs

The Office of Sponsored Programs (OSP) provides services and support to all Gallaudet University and Clerc Center faculty, teachers, and professional staff seeking external sponsorship for research, scholarly projects, and educational programming. The primary source of these funds comes from competitively awarded federal agency competitions and occasionally cost-reimbursable awards from non-federal sponsors with federal-like requirements. The OSP offers guidance in the development of proposals and budgets and formally submits, negotiates, finalizes, and accepts awards on the university's behalf. The OSP is committed to increasing institutional resources in order to enhance the University's research and educational programming. For up-to-date information on the OSP, consult the OSP's website at: [www.gallaudet.edu/office\\_of\\_sponsored\\_programs/about\\_osp.html](http://www.gallaudet.edu/office_of_sponsored_programs/about_osp.html).

#### Overview

Gallaudet faculty and professional staff compete for grants and contracts that are awarded on the basis of rigorous review by experts in the field. The OSP directly supports Goal E of the University's Strategic Plan: "Establish Gallaudet as the epicenter of research, development and outreach leading to advancements in knowledge and practice for deaf & hard of hearing people and all humanity." Gallaudet's students directly or indirectly benefit from the relationships forged between Gallaudet faculty/staff and sponsored programs collaborators. The participation in the sponsored programs process in the past fiscal year by the Gallaudet community has resulted in a number of significant opportunities for the institution.

**Dollar Amounts in Millions for Proposals and Awards, FY 2006 – 2015**





## Goal E: Research and Outreach

The following is a list of other major universities, nonprofits, and for-profit organizations collaborating with Gallaudet on sponsored programs:

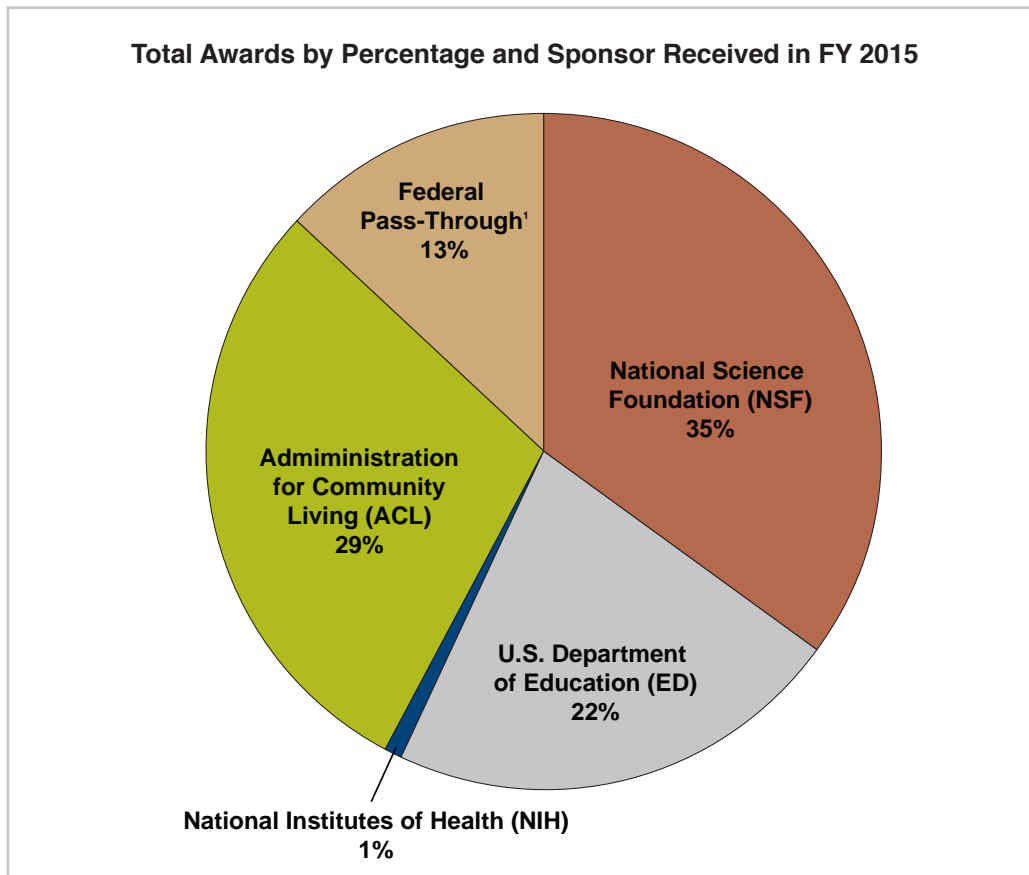
- American Institutes for Research
- AT&T
- American University
- Boston Museum of Science
- Boston University
- Brigham Young University
- Cornell University
- Edvantia
- El Camino College
- Washington University
- Georgetown University
- Greater Baltimore Medical Center
- Green Dot, Etc.
- Hand and Voices
- Harvard University
- Hearing Loss Association of America
- Howard University
- Julstrom Consulting and Development
- Labyrinth
- Marymount University
- Massachusetts Institute of Technology
- MITRE
- Northeastern University
- Nova Web Development
- Omnitor AB, Sweden
- Pennsylvania State University
- Prince George's Community College
- Reliable Systems
- Rochester Institute of Technology
- San Diego State University
- St. Catherine's University
- TCS Associates
- Universidade Federal de Santa Catarina, Brazil
- University of Alberta, Canada
- University of California-Davis
- University of California Los Angeles
- University of California-San Diego
- University of Colorado at Boulder
- University of Connecticut
- University of Eastern Kentucky
- University of Hawaii/ Kapiolani Community College
- University of Illinois-Urbana-Champaign
- University of Iowa
- University of Manitoba
- University of Maryland Center for Environmental Sciences
- University of New Mexico
- University of North Florida
- University of Northern Colorado
- University of Pittsburgh
- University of Rochester
- University of South Florida
- University of Southern California
- University of Texas-Austin
- University of Washington
- University of Wisconsin-Madison
- VSecure
- Washington University in St. Louis
- Western Oregon University
- Yale University

## Goal E: Research and Outreach

These relationships are enabled either by funds that flowed through Gallaudet from federal sources to collaborators or through the collaborators to Gallaudet.

The following pie chart shows the dollar amount of awards received by sponsor. This year, Gallaudet has seen a decline in funding which is attributed to the highly competitive environment created by cuts in federal funding and the rumored

government shut down. In FY 2015, there were 31 proposals submitted compared to 34 submitted last fiscal year. Gallaudet continues to submit highly competitive research proposals which is a positive indicator of the university's pursuit of achieving Goal E. A total of \$3.3 million in federal funding was awarded to Gallaudet in FY 2015. This includes a \$1 million NSF INSPIRE grant that encourages potentially transformative research through interdisciplinary collaborations.



\* Federal Pass-Through and Other Sponsors: American University (NASA) 7%; Howard University (Harvard & NSF) 17%; MITRE (CMS) 1%; University of California- Davis (NIH) 16%; University of Rochester (CDC) 1%; University of Wisconsin – Madison (ED) 5%; and VTCSecure (FCC) 53%.

## Goal E: Research and Outreach

### Research Compliance

In support of Goal E, Objective 2, the OSP recruited a research compliance specialist in FY 2015 who began working with the Institutional Review Board chair and the dean of the Graduate School and Continuing Studies to improve Gal-

laudet's research compliance infrastructure. Future projects for FY 2016 include training for department chairs/budget unit heads and principal investigators/project directors. Upcoming changes to the OSP website will provide the campus community with up-to-date information on hot topics in research compliance.

### FY 2015 Awards

Principal Investigator	School	Department	Title	Sponsor	Begin/ End Dates	Award Amount	Award Date
<b>Research Related Awards</b>							
PI: Allen, Thomas Co-PI/Science Director: Petitto, Laura-Ann	R, GS, CS, & IP	Visual Language and Visual Learning (VL2)	Collaborative Research: Science of Learning Center: Visual Language and Visual Learning (VL2); Travel Supplement	National Science Foundation; Directorate for Social Behavioral and Economic Sciences	10/1/2014-9/30/2015	\$48,847	6/15/2015
PI: Benaissa, Senda	R,GS, CS, & IP	RSIA	Deaf Weight Wise (DWW): 2.0	University of Rochester (Center for Disease Control)	10/1/2014-9/30/2019	\$3,117	1/8/2015
PI: Petitto, Laura-Ann	R,GA, CS, & IP	BL2	INSPIRE: The RAVE Revolution for Children with Minimal Language Experience During Sensitive Periods of Brain and Language Development	National Science Foundation	10/1/2015-9/30/2018	\$1,000,000	8/25/2015
PI: Petitto, Laura-Ann	R,GA, CS, & IP	BL2	Neuroplasticity of Spatial Working Memory in Signed Language Processing	National Institutes of Health; Eunice Kennedy Shriver National Institute of Child Health and Human Development	8/20/2015-8/19/2016	\$38,088	7/29/2015
PI: Pinar, Pilar	CAS	Foreign Languages, Literatures and Cultures	Literacy Skills in Deaf Readers	University of California-Davis (National Institutes of Health)	12/1/2015-11/30/2016	\$70,035	11/10/2014
PI: Sabila, Paul Co-PIs: Sorensen, Charlene & Snyder, Henry	CAS	Science, Technology, and Mathematics	Center for Reduced Dimensional Systems	Howard University (National Science Foundation)	6/1/2013-5/31/2014	\$44,523	7/8/2015
PI: Sabila, Paul	CAS	Science, Technology, and Mathematics	Center for Integrated Quantum Materials	Howard University (Harvard/National Science Foundation)	10/1/2014-9/30/2015	\$30,000	5/5/2015

## Goal E: Research and Outreach

### FY 2015 Awards (continued)

PI: Vogler, Christian	R,GA, CS, & IP	Communication Studies	Proposal for RERC on improving the accessibility usability and performance of technology for individuals who are deaf or hard of hearing	Administration for Community Living	9/30/2015-9/29/2016	\$950,000	9/9/2015
PI: Vogler, Christian	R,GA, CS, & IP	Communication Studies	VATRP Requirements Guidance, Outreach, and Systems Testing – CLIN 2	VTCSecure (Federal Communications Commission)	8/1/2015-7/31/2016	\$199,999.92	8/14/2015
PI: Vogler, Christian	R,GA, CS, & IP	Communication Studies	TRS Usability Study and COE Support	MITRE (Centers for Medicare and Medicaid)	8/1/2015-9/30/2015	\$5,545	8/13/2015
PI: Vogler, Christian	R,GA, CS, & IP	Communication Studies	Video Access Technology Reference Platform (VATRP) – CLIN 1	VTCSecure (Federal Communications Commission)	5/11/2015-7/15/2015	\$30,866.50	5/11/2015
PI: Vogler, Christian	R,GA, CS, & IP	Communication Studies	Rehabilitation Engineering Research Center (RERC) on Telecommunications Access	University of Wisconsin-Madison (U.S. Department of Education)	10/1/2014-9/30/2015	\$21,212	12/12/2014
Total Research Related Awards (12 Awards, 6 PI/PDs, 3 Co-PI/PDs)						\$2,442,233.42	
Training, Scholarships, and Other Awards							
PI: Arnos, Kathleen	CAS	Science, Technology, and Mathematics	S-STEM Scholars: Overcoming Barriers to STEM Success for Deaf Undergraduates	National Science Foundation; Directorate for Education and Human Resources	5/15/2014-4/30/2015	\$103,640	5/3/2015
PD: Bradbury, Jill	CAS	English	Eyes on Shakespeare: Shakespeare and His First Folio Traveling Exhibition	American Library Association	8/1/2015-12/31/2016	\$0	2/26/2015
PD: Hile, Amy Co-PD: Simms, Laurene	SEBHS	Education	Widening the Bottle-neck: Preparing Highly Qualified Diverse Deaf and Minority Teachers for Deaf/Hard of Hearing School Age Children (Ages 3-21)	U.S. Department of Education; Office of Special Education and Rehabilitative Services	10/1/2015-9/30/2016	\$25,879	7/15/2015

## Goal E: Research and Outreach

### FY 2015 Awards (continued)

PD: Hollrah, Beverly	SEBHS	Interpretation	Gallaudet University Regional Interpreter Education Center (GURIEC)	U.S. Department of Education; Rehabilitative Services Agency	10/1/2015-9/30/2016	\$300,000	9/23/2015
PD: Lytle, Linda	SEBHS	Counseling	Dual Certification Through a Hybrid Program of Studies: A Masters of Arts Degree in School Counseling Combined with a Deaf and Hard of Hearing Infants, Toddler, and Their Families Collaboration and Leadership Interdisciplinary Graduate Certificate	U.S. Department of Education; Office of Special Education & Rehabilitative Services	1/1/2016-12/31/2017	\$245,379	7/15/2015
PD: Smith, Kendra Co-PD: Hufnell, Mary	SEBHS	Counseling	RSA Long-Term Training Grant	U.S. Department of Education; Rehabilitation Services Administration	10/1/2015-9/30/2016	\$150,000	9/14/2015
PI: Snyder, Henry	CAS	Science, Technology, and Mathematics	National Space Grant College and Fellowship Program	American University (National Aeronautics and Space Administration)	8/26/2014-8/25/2015	\$30,000	3/4/2015
<b>Total Training, Scholarships, &amp; Other Awards (7 Awards, 7 PI/PDs, 2 Co-PI/PDs)</b>						<b>\$854,898</b>	
<b>GRAND TOTAL (19 Awards)</b>						<b>\$3,297,131.42</b>	

## Goal E: Research and Outreach

### FY 2015 Proposals

Principal Investigator	School	Department	Title	Sponsor	Begin/ End Dates	Proposed Amount	Proposed Date
<b>Research Related Proposals</b>							
PI: Allen, Thomas	R, GS, CS, & IP	Visual Language and Visual Learning (VL2)	Replication Study of Strategic and Interactive Writing Instruction	University of Tennessee (U.S. Department of Education; Institute of Education Sciences)	7/1/2016-8/30/2020	\$89,349	7/20/2015
PI: Allen, Thomas Co-PI/Science Director: Petitto, Laura-Ann	R, GS, CS, & IP	Visual Language and Visual Learning (VL2)	Collaborative Research: Science of Learning Center: Visual Language and Visual Learning (VL2); Travel Supplement	National Science Foundation; Directorate for Social Behavioral and Economic Sciences	10/1/2014-9/30/2015	\$48,847	3/11/2015
PI: Arora, Gaurav	CAS	Science, Technology, and Mathematics	NextGen Genome Solver	Georgetown (National Science Foundation)	9/1/2015-8/31/2017	\$23,089	2/25/2015
PI: Brice, Patrick Co-PI: Paludneviene, Raylene	CAS	Psychology	Healthy Deaf and Hard-of-Hearing Adolescents: Feasibility Testing of a Computer-Based Intervention to Promote Communicative Quality of Life Outcomes	Rochester Institute of Technology (National Institutes of Health)	9/1/2015-8/31/2020	\$410,163	5/29/2015
PI: Chen Pichler, Deborah	CAS	Linguistics	Development of Bimodal Bilingualism	National Science Foundation	7/1/2015-6/30/2018	\$192,666	1/14/2015
PI: Hile, Amy Co-PI: Simms, Laurene	SEBHS	Education	ASL Instruction Program for K-12 Deaf and Hard of Hearing Students	U.S. Department of Education; Institute of Education Sciences	9/1/2016-8/31/2020	\$1,346,181	8/1/2015
PI: Kuntze, Marlon	SEBHS	Government and Public Affairs	Mediated Approach to Literacy Development: Support for Deaf Readers	U.S. Department of Education; Institute of Education Sciences	9/1/2016-8/31/2020	\$1,582,033	8/6/2015
PI: Kwon, Bomjun	SEBHS	HSLs	Place-Rate Pitch Coding for Cochlear Implants	National Institutes of Health	7/1/2015-6/30/2017	\$356,086	10/15/2014



## Goal E: Research and Outreach

### FY 2015 Proposals (continued)

PI: Langdon, Clifton	R, GS, CS, & IP	Educational Neuroscience	The role of sign language phonological awareness in deaf children's reading proficiency	National Institutes of Health; National Institute on Deafness and Other Communication Disorders	9/1/2015-8/31/2018	\$139,670	4/8/2015
PI: Langdon, Clifton	R, GS, CS, & IP	Educational Neuroscience	The Neural Basis of ASL Phonological Awareness: Implications for Literacy Development Among Deaf Learners	National Science Foundation; Directorate for Education & Human Resources, Division of Graduate Education	5/1/2015-4/30/2018	\$132,000	11/3/2014
PI: Medwetsky, Larry	SEBHS	HSLS	hiFocus - Auditory Focus Enhancement for Intelligent Hearing Instruments	Bucknell University (National Institutes of Health)	9/1/2015-8/31/2018	\$142,372	10/16/2014
PI: Nicodemus, Brenda	SEBHS	Interpretation	Examining linguistic features in American Sign Language interpretation that impact comprehension of healthcare instructions by deaf and hard of hearing patients	Agency for Healthcare Research and Quality	5/1/2015-4/30/2017	\$99,884	10/14/2014
PI: Petitto, Laura-Ann	R, GS, CS, & IP	Educational Neuroscience	INSPIRE: The RAVE Revolution for Children with Minimal Language Experience During Sensitive Periods of Brain and Language Development	National Science Foundation	10/1/2015-9/30/2018	\$1,000,000	6/1/2015
PI: Petitto, Laura-Ann	R, GS, CS, & IP	Educational Neuroscience	Neural Systems For Infant Sensitivity to Phonological Rhythmic-Temporal Patterning	National Institutes of Health; Eunice Kennedy Shriver National Institute of Child Health and Human Development	8/1/2015-8/31/2017	\$110,146	4/13/2015
PI: Petitto, Laura-Ann Co-PI: Langdon, Clifton	R, GS, CS, & IP	BL2	Gallaudet Major Research Instrumentation Grant	National Science Foundation; Directorate for Education & Human Resources	8/1/2015-7/31/2018	\$2,134,350	1/22/2015

## Goal E: Research and Outreach

### FY 2015 Proposals (continued)

PI: Vogler, Christian	R,GA, CS, & IP	Communica- tion Studies	VATRP Requirements Guidance, Outreach, and Systems Testing - CLIN2	VTCSecure (Federal Communications Commission)	8/1/2015-7/31/2016	\$199,999.92	8/1/2015
PI: Vogler, Christian	R,GA, CS, & IP	Communica- tion Studies	TRS Usability Study and COE Support	MITRE (Federal Communications Commission)	8/1/2015-9/08/2015	\$5,545	0813/2015
PI: Yuknis, Christina Co-PIs: Dorminy, Jerri Lyn & Jacoby, Susan	SEBHS	Education	Exploration of High School-to-Postsecondary Education Transition Experiences for Deaf and Hard of Hearing Students	U.S. Department of Education; Institute of Education Sciences	7/1/2016-6/30/2020	\$1,133,604	8/1/2015
Total Research Related Proposals (18 Proposals, 13 PI/PDs, 6 Co-PI/PDs)						\$9,145,984.92	
Training, Scholarships, and Other Proposals							
PD: Chukwuma, Emilia Co-PDs: Aciek, Makur & Alkoby, Karen	SEBHS	Business	Gallaudet University VITA program	Internal Revenue Services	7/1/2015-6/30/2016	\$105,920	6/1/2015
PD: Bergey, Jean	Provost's Office		Capturing Deaf Heritage	National Endowment for the Humanities	1/1/2016-12/31/2016	\$12,000	6/25/2015
PD: Bergey, Jean Co-PD: Greenwald, Brian	Provost's Office		Deaf Matters	National Endowment for the Humanities	1/1/2016-12/31/2016	\$149,999	6/24/2015
PD: Bradbury, Jill	CAS	English	Eyes on Shakespeare: Shakespeare and His First Folio Traveling Exhibition	American Library Association	8/1/2015-12/31/2016	\$0	10/24/2014
PD: Gannon, Christine	Student Affairs and Academic Support	Health and Wellness	2015-2018 Gallaudet Grant to Reduce Sexual Assault, Domestic Violence, Dating Violence, and Stalking on Campus	U.S. Department of Justice; Office of Violence Against Women	10/1/2015-9/30/2018	\$300,000	3/20/2015
PD: Hollrah, Beverly	SEBHS	Interpreta- tion	Gallaudet University Regional Interpreter Education Center (GU-RIEC)	U.S. Department of Education; Rehabilitative Services Agency	10/1/2015-9/30/2016	\$300,000	9/1/2015

## Goal E: Research and Outreach

### FY 2015 Proposals (continued)

PI: Mangrubang, Fred Co-PIs: Obiedat, Mohammad & Solomon, Caroline	SEBHS	Education	The Deaf and Hard of Hearing STEM Teacher Preparation Program (D/HH STEM TP2)	National Science Foundation	2/1/2016-1/31/2021	\$1,200,000	7/31/2015
PD: Metzger, Melanie Co-PD: Hollrah, Bev	SEBHS	Interpretation	Project IDEA: "Individuals who are Deaf and Educational Accessibility, An IDEA Whose Time has Come: Preparing Future Ph.D. Faculty in Interpreter Education to Address the Needs of Deaf and Hard of Hearing Pediatric Populations"	U.S. Department of Education; Office of Special Education Programs	8/1/2015-7/31/2020	\$1,244,127	12/11/2014
PD: Mitchiner, Julie Co-PD: Batamula, Christi	SEBHS	Education	Optimizing & Safeguarding ALL Deaf and Hard of Hearing Children's (Birth to Eight) Linguistic, Cognitive, and Social Emotional Development: Teacher Preparation & Professional Development (2015-2020)	U.S. Department of Education; Office of Special Education and Rehabilitative Services	7/1/2015-6/30/2020	\$1,173,575	12/5/2014
PD: Smith, Kendra Co-PD: Hufnell, Mary	SEBHS	Counseling	RSA Long-Term Training Grant	U.S. Department of Education; Rehabilitation Services Administration	10/1/2015-9/30/2020	\$750,000	5/26/2015
PI: Snyder, Henry	CAS	Science, Technology, and Mathematics	National Space Grant College and Fellowship Program	American University (National Aeronautics and Space Administration)	8/26/2015-8/25/2018	\$64,000	2/20/2015
PD: Takayama, Kota Co-PD: Sheridan, Martha	SEBHS	Social Work	Training School Social Workers to Enhance the Social, Emotional, and School Success of High Need Deaf and Hard of Hearing Children	U.S. Department of Education; Office of Special Education and Rehabilitative Services	8/1/2015-7/31/2020	\$1,153,788	12/5/2014

## Goal E: Research and Outreach

### FY 2015 Proposals (continued)

PD: Yuknis, Christina	SEBHS	Education	Explorations in Critical Theory: Promoting Advancement in the Education of Deaf Learners	American Education Research Association	7/1/2015-6/30/2016	\$29,700	3/2/2015
<b>Total Training, Scholarships, &amp; Other Proposals (13 Proposals, 12 PI/PDs, 10 Co-PI/PDs)</b>						<b>\$6,483,109</b>	
<b>GRAND TOTAL PROPOSED PROPOSALS (31 Proposals)</b>						<b>\$15,629,093.92</b>	

*President T. Alan Hurwitz (back, left) and Jesse Saunders (back, right), associate director of Youth Programs, appear with the Battle of the Books team from Montgomery County Public Schools (Md.), the Buff Division third place finisher in the 2014-15 National Competition, held April 2-5. Gallaudet's Battle of the Books is a middle school competition consisting of three groups of students who read at the 2nd/3rd grade levels, 4th/5th grade levels, and the 6th and above levels. There are three parts to the competition: preliminaries, playoffs, and nationals. Sixteen teams from across the country competed at nationals.*

Photo by Zhee Chatmon



### VII. Outreach

Gallaudet University offers a comprehensive array of professional development, leadership, and outreach programs and services for deaf and hard of hearing people, their families, communities, and the professionals working with them across the globe. Programs and services are developed to address the needs and interests of diverse constituencies through the offering of graduate, undergraduate, professional studies, and non-credit courses and programs. Through its network of Gallaudet University Regional Centers (GURC), the programs and services of the University and the Laurent Clerc National Deaf Education Center are disseminated.

Programs and services include both credit and non-credit offerings within a bilingual (ASL/English) learning environment, and are created to support the goals of the Gallaudet Strategic Plan. Programs are provided using multiple formats – within traditional classroom settings, online and distance learning, and through hybrid approaches – delivering professional development, enrichment, and leadership programs both on campus, online, and at sites around the country.

Its regional, national, and international programs, extend the University's "reach" by providing:

- graduate, undergraduate, and professional studies courses across the United States, often in collaboration with sponsoring schools, programs, and agencies, providing opportunities to study with experts in fields such as American Sign Language, deaf education, language planning, bilingual education, deaf studies, interpreting, and linguistics;
- direct programming and outreach services to schools, agencies, and corporations actively engaged in the provision of education and/or human services for deaf and hard of hearing people;
- online and distance education delivery formats for courses and programming;
- special events, on and off campus, that engage the broader community, showcase Gallaudet's unique programs, and share the expertise of Gallaudet faculty, staff, and students;
- international programs, such as study abroad and global internships, and the English Language Institute, which provide rich academic and cultural opportunities for visiting students, scholars, researchers, and other professionals;
- summer programs which offer a broad array of academic and enrichment opportunities and courses for graduate, undergraduate, and professional studies credit, along with dynamic and empowering programs for high school students, providing educational, student development, and experiential learning opportunities;
- Gallaudet University Academic Bowl for Deaf and Hard of Hearing High School Students and the Battle of the Books for middle-school students, which recognize academic achievement of students from all parts of the country and also serve as recruitment and enrollment tools for the University.

During FY 2015, Gallaudet University documented 17,140 people served through training and technical assistance/consultation, and 20,765 through exhibits and performances, and recruitment as the table below illustrates. An additional 75,558 people received information through marketing and press releases, and 23,026 people received information through other forms of information dissemination using a variety of formats, including listservs.

## Goal E: Research and Outreach

### FY 2015 Activities and People Served

	Activities	People Served
Training & Technical Assistance	1,506	17,140
Exhibits & Performances/Recruitment	62	20,765
Marketing & Press Releases	141	125,369
Other Information Dissemination	518	23,026
<b>TOTAL</b>	<b>2,227</b>	<b>186,300</b>

Source: Activity Summary/Contact Log Database

### Enrollment

Professional Studies and Training (PST) courses are offered

on campus, online, and at sites across the United States. The following tables show enrollment figures of students enrolled in PST classes during FY 2015.

### PST Annual Headcount Enrollment Trend

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Students enrolled only in PST courses	747	664	616	604	588
Undergraduate/Graduate students also enrolled in PST courses	153	178	136	113	87

### PST Enrollment Counts per Class by Student Type

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Students enrolled only in PST courses	1,192	1,099	901	887	806
Graduate students enrolled in PST courses	114	157	129	112	122
Undergraduate students enrolled in PST courses	93	92	56	47	18
<b>TOTAL</b>	<b>1,399</b>	<b>1,348</b>	<b>1,086</b>	<b>1046</b>	<b>946</b>
Faculty/Staff	81	69	46	61	59
Online	651	289	317	380	376
Extension	34	141	85	18	0



## Goal E: Research and Outreach

### PST Fall Census Enrollment Trend<sup>1</sup>

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
102	147	122	119	119

<sup>1</sup>Excludes graduate and undergraduate students enrolled in PST courses.

Gallaudet also offers a number of non-credit activities throughout the year from the provision of conferences, trainings, and special events. Participation in these events is not part of the PST figures (headcount or enrollment in courses).

### Non-Credit Program Offerings and Participation Trend (outside of PST courses)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Activities	17	23	26	30	27
Participants	1,038	1,351	7,069	2,200	1,295

### FY 2015 Non-credit Enrollment by Program

	Activities	Participants
Conferences/Special Events	5	584
External Contract Programs	5	525
Non-Credit Courses	17	186
<b>TOTAL</b>	<b>27</b>	<b>1,295</b>

### Academic Bowl for Deaf and Hard of Hearing High School Students

This year marked the 19th anniversary of the Gallaudet University Academic Bowl for Deaf and Hard of Hearing High School students. This highly successful event was established to promote academic excellence and achievement among deaf and hard of hearing students. In addition to promoting a spirit of academic competition and sportsmanship, the Academic Bowl provides social opportunities among participants, who come from all around the country. The competition also serves

as public recognition for the honor and importance of academic achievement, and serves as a major recruitment strategy for the University.

During FY 2015, the Academic Bowl held five regional competitions and one national competition. This helped ensure greater interaction with prospective students. In 2014, 78 high school teams participated, totaling of 308 students and 152 coaches. Of the 108 seniors participating in the competitions, 30 enrolled at Gallaudet in fall 2015.

## Goal E: Research and Outreach

### Participation in National Academic Bowl for Deaf and Hard of Hearing Students Trend

	FY 2013	FY 2014	FY 2015
Schools/Programs	78	80	76
Teachers/Staff	150	156	148
Students	306	316	300

### FY 2015 Participation in Regional Academic Bowl for Deaf and Hard of Hearing Students

	Midwest	Northeast	Southeast	Southwest	West
Schools/Programs	16	16	16	11	17
Teachers/Staff	30	32	32	20	34
Students	63	64	62	44	67

### Regional Academic Bowls

Coordinating the regional competitions was a major responsibility and highlight for the GURCs. This coordination included working with schools and programs to promote

academic achievement and high expectations for all deaf and hard of hearing students while introducing students, parents, and educators to the opportunities available at Gallaudet University.

### FY 2015 Regional Academic Bowl Host Institutions

GURC	Regional Academic Bowl Host Institution
Midwest	Kentucky School for the Deaf: Vacated due to snowstorm; competition done through videoconferencing
Northeast	New York State School for the Deaf in Rome, N.Y.
Southeast	Delaware School for the Deaf in Newark, Del.
Southwest	New Mexico School for the Deaf in Santa Fe, N.M.
West	Oregon School for the Deaf in Salem, Ore.

## Goal E: Research and Outreach

### Battle of the Books: An Academic Competition for Middle School Students

During FY 2015, Gallaudet's Battle of the Books took place for the third year. The Battle of the Books purpose is multi-faceted: to promote literacy, foster a spirit of academic competition and good sportsmanship, and to develop critical thinking

skills among deaf and hard of hearing middle school students. During the competition, 66 teams from 36 schools/programs participated, totaling 330 students and 55 chaperones. Data in regards to enrollment rates is not available until the first group of students from the Battle's first year (2012-2013) is eligible to enroll at Gallaudet in the fall of 2017.

#### Participation in Battle of the Books Trend

	FY 2013	FY 2014	FY 2015
Schools/Programs	17	31	36
Teachers/Staff	35	60	69
Students	105	305	330

### Summer Youth Programs

During FY 2015, Summer Youth Programs were held July 9-17, 2015. The Summer Youth Programs include three programs: Immerse into ASL, Discover Your Future, and Young Scholars Program: Exploring the Sciences. Immerse into ASL is an intensive program on campus where deaf, hard of hearing and hearing students immerse themselves into deaf culture

and learn American Sign Language. Discover Your Future is a career-oriented program for deaf and hard of hearing students. Young Scholars Program: Exploring the Sciences is for deaf and hard of hearing students who have an aptitude for science.

*Note: Young Scholars Program is currently on hiatus due to construction of laboratories in the science department.*

#### Total Participation in Summer Youth Programs Trend

	FY 2013	FY 2014	FY 2015
Number of Campers	97	133	89

#### FY 2015 Participation in Summer Youth Programs

	Number of Campers
Immerse Into ASL	64
Discover Your Future	25

## Goal E: Research and Outreach

### American Sign Language as a Second Language (ASL2) Program

In direct support of Gallaudet University's bilingual mission, the ASL2 Program provides instruction to faculty, staff, and students as well as students from other area schools and colleges, federal government employees, area businesses, and other individuals interested in learning American Sign Language (ASL). It offers ASL levels I–VI as credit bearing courses and other ASL learning opportunities, such as short courses focusing on specialized aspects of ASL (e.g., non-manual markers, fingerspelling) or on needs of specific disciplines, departments or units on campus. ASL2 has partnered with the Center for Bilingual Teaching and Learning to offer “ASL Gatherings,” a thrice-weekly gathering intended to develop ASL proficiency among Gallaudet faculty and staff. The ASL2 program also offers ASL I and II classes online. The area businesses, government agencies, schools, and organizations that contract with Gallaudet for ASL classes include the Department of Navy, Securities and Exchange Commission University, and the Office of the State Superintendent of Education, among others.

During FY 2015 (fall 2014 through summer 2015), there were a total of 686 enrollments in ASL classes, with 355 taking onsite courses during the summer immersion program. This number also included 135 online enrollments in the fall and spring compared with 122 the previous year. Each student placement in these courses was conducted by the ASL2 program as ASL Screening Interview.

As a result of increased interest in ASL online, the Department of ASL and Deaf Studies is in the development phase of an extensive project, ASL Connect, which will feature free online ASL lessons, ASL I–IV online, an ASL Certificate Program, Deaf Studies Certificate Program, ASL Placement Testing, and ASL Tutoring. In support of this effort, the university was awarded a grant from the Cafritz Foundation, amounting to \$250,000 over a two-year time period. In addition, the university has partnered with Blackboard, Inc., to assist with the expansion and development of ASL Connect along with other online educational initiatives.

### Gallaudet University Museum

The Gallaudet University Museum was formed in 2007 when a museum committee consisting of three faculty and four staff members presented the Provost of the Division of Academic Affairs with mission and vision statements that became the foundation of the museum.

### Mission Statement

The Gallaudet University Museum promotes and interprets the rich and complex deaf experience. This cuts to the very core of the University's mission by offering students, their families, and the wider public a mechanism to analyze this “bilingual, diverse, and multicultural institution.”

### Vision Statement

As a premier research and information resource center, the Gallaudet University Museum will:

- Provide national leadership on public presentations of deaf history and contemporary life of the deaf community.
- Collect and preserve cultural material for scholarly research and for posterity, working in close collaboration with the Gallaudet University Archives.
- Exhibit artifacts and ideas that inform, inspire, and challenge common understandings of deaf life from cultural, linguistic, and sensory perspectives.
- Create public programming serving the campus, the neighborhood surrounding Gallaudet University, diverse Washington, D.C. constituencies, and local, national, and international audiences.
- Advance the educational mission of Gallaudet University by providing opportunities for shared research and academic collaboration.

### Tagline

Mapping the Future, Guided by the Past

### Role of the Museum

The Gallaudet University Museum presents the heritage of an evolving cultural community, and traces the historic roots of the University. By promoting the open exchange of ideas about what it means to be deaf – and, conversely, what it means to be hearing – with the local, national, and international communities, the Museum inspires examination of community identities. As a place of historic, linguistic, and cultural scholarship, the museum also serves the University and its visitors as an accessible resource on deaf life and artistic expression.

## Goal E: Research and Outreach

In the spring of 2012, the University's national historic landmark, Chapel Hall, was designated as the main Museum site, and renovations were completed in fall 2013. With exhibition space of approximately 3,600 square feet, plans for Chapel Hall involved the permanent exhibition unveiled on April 8, 2014; revolving exhibitions with topics designed to keep the Museum alive and current; a "Living Circle" sensory lab program; a center for lecture series and gala events. The Museum in Chapel Hall has played host in 2015 to a press conference for the Mayor of Washington DC, student organization events, and formal ceremonies.

In 2015, the museum designated the Weyerhaeuser Family Art Gallery and Exhibition Hall as the Museum Annex. The Museum Annex and Weyerhaeuser Gallery serves as an educational and community nexus for students in the I. King Jordan Student Academic Center. The Deaf Peace Corps exhibit, on display since 2011, was taken down to make way for the Deaf HERStory exhibit in spring 2015.

Dr. Jack Gannon and Mrs. Rosalyn Gannon are honorary chairs of the museum, and founders of the museum endowment fund. Dr. Gerald Burstein, in creating a museum fund, is also a significant contributing member of the Museum. The museum has received endorsement from the Gallaudet University Alumni Association, the National Association of the Deaf, the National Black Deaf Advocates, Inc., and the World Federation of the Deaf. The Gallaudet University Museum is registered with the American Alliance of Museums (AAM) and the Association of Academic Museums and Galleries (AAMG).

Information on the museum can be found on its website, [www.gallaudet.edu/museum.html](http://www.gallaudet.edu/museum.html), which also offers links to its social media presence.

### Exhibitions

#### **Permanent: "Gallaudet at 150 and Beyond"**

Arranged to coincide with the University's 150th anniversary, the Gallaudet University Museum's first permanent exhibit, "Gallaudet at 150 and Beyond," opened on Charter Day 2014. The exhibition presents the story of this one-of-a-kind institution, and fosters analysis of broad societal issues and specific deaf themes. Drawing on the unsurpassed collection of deaf history and contemporary material in the University's archives, as well as the expertise of scholars, the exhibit seeks to analyze issues both proud and painful to advance a greater understanding of deaf life and the national and international role of Gallaudet University over the past 150 years.

#### **Rotating: "Andrew J. Foster: Missionary, Educator, and Advocate"**

Opened on April 8, 2014, with the permanent exhibition, the museum's first rotating exhibit in Chapel Hall tells the story of one of its most successful alumni, Andrew Foster. Jointly curated by museum staff and the Dean of the School of Education, Business, and Human Services, the exhibit uses text, photographs, a timeline, and maps to tell the story of the University's first African-American graduate. It is the first exhibit at the Gallaudet University Museum to address issues of diversity, and sets the stage for future exhibits on themes of diversity and personal stories.

#### **Rotating: "Then and Now"**

A visual look at Gallaudet University in the past and present, "Then and Now" opened on April 8, 2014. It identifies key themes throughout the University's history, such as academics, connection with the surrounding community, and others; these themes are then examined through adjacent photographs depicting different eras of the University's history.

#### **Ongoing: "Deaf HERstory"**

The Museum's newest exhibit opened on September 29, 2015 in the Museum Annex and Weyerhaeuser Gallery. This exhibit focuses on the history and lives of Deaf women, with sections focusing on education, overcoming struggle, family life, and social movements.

#### **Past: "Making a Difference: Deaf Peace Corps Volunteers"**

As part of the 50th Anniversary of the Peace Corps, the Gallaudet University Museum debuted a new exhibit on October 25, 2011 at the Weyerhaeuser Family Art Gallery and Exhibition Hall. The exhibition explored the resourcefulness of Deaf Returned Peace Corps Volunteers, and the challenges they faced while on assignment.

#### **Past: "Olof Hanson, Conspicuous Leader (1862-1933)"**

The Gallaudet University Museum's first exhibition opened in the Weyerhaeuser Family Art Gallery and Exhibition Hall on October 22, 2009, and closed on October 1, 2011. It focused on the life of Gallaudet alumnus Olof Hanson, a deaf architect, advocate, and clergyman. From its opening day until mid-August 2010, scheduled campus tours conducted by the Visitor's Center introduced more than 4,300 visitors to the exhibit. Portions of the exhibit may be seen today in the basement of Chapel Hall, and the full exhibit is available online.

## Goal E: Research and Outreach

### International Affairs

The outreach activities reported here are those specifically conducted in support of the international goals in the Gallaudet Strategic Plan, specifically: (A) Increasing enrollment of international students; (B) Preparing students for career success and career opportunities; (C) Increasing revenues, scholarships and donations; and (E) Establish Gallaudet as the epicenter of research, development and outreach leading to advancements in knowledge and practice for deaf and hard of hearing people and all humanity.

International Affairs is a component of the Office of Research Support and International Affairs (RSIA). The office was formed in FY 2014 by merging three longstanding campus units—Gallaudet Research Institute, Office of International Relations, and Office of International Programs and Services—to more effectively fulfill the University’s mission to enhance scholarly research and engage the global deaf community. RSIA is under the auspices of the Office of the Provost.

Gallaudet University’s commitment to global education and outreach is reinforced by International Affairs, which serves as the initial point of contact for international visitors and scholars to the Gallaudet campus. International Affairs cultivates and strengthens international partnerships that benefit Gallaudet students and the global deaf community, and encourages personal and academic growth for the University’s faculty and students by overseeing and facilitating international and intercultural education opportunities.

International Affairs supports the many programs and other opportunities Gallaudet University makes available for scholars from around the world. These allow scholars to come to campus on a long- or short-term basis to study, conduct research, or to enhance their educational opportunities by taking advantage of the University’s notable resources on Deaf culture.

Achievements during FY 2015 include:

### Expanding Number of International Scholars on Campus

#### International Students

A total of 49 countries were represented in Gallaudet University’s student enrollment in 2015. That year, 22 international students graduated from the University. Three of these graduates earned bachelor’s and master’s degrees in International Studies and International Development, an interdisciplinary major that supports Gallaudet University’s outreach efforts.

This year marks a commitment to enhanced “transition support” for entering international students, including a longer and more comprehensive orientation, access to ASL learning in JumpStart, and regular informational events. In addition, three Gallaudet student leaders and representatives from many departments across campus shared their time and expertise to help RSIA welcome 27 international students from 15 countries to International Student Orientation August 25 to 27. Their efforts helped ease these new students’ transition to campus and academic life at Gallaudet, and therefore help ensure their success and well-being.

### International Special Student Program (ISSP)

The International Special Students Program (ISSP) provides a tremendous learning experience for non-U.S. students who are not pursuing an academic degree at Gallaudet University. While at Gallaudet they can audit courses, be exposed to what is happening on campus, and visit schools, organizations, and agencies. International special students (non-degree) are now offered an opportunity to develop a customized “learning agreement” to assist them in choosing the courses and support services that they need to reach their goals at Gallaudet, including preparing to enter a degree program. In FY 2015, there were 18 ISSP participants on campus from eight countries: Japan and Netherlands took the lead with three, followed by China and Saudi Arabia with two, and one each from Denmark, Dominican Republic, Egypt, Korea, Kuwait, Sweden and Switzerland and Vietnam.

Anne Vikkelsø, a deaf advocacy worker from Denmark, is an ideal example of how ISSP enriches participants’ professional and personal lives. She spent the fall 2014 academic semester at Gallaudet broadening her knowledge about best practices in serving the deaf community. Vikkelsø is the head of the Competence Centre at the Center for the Deaf (CFD), the largest provider in Denmark of services for deaf, deaf-blind, and hard of hearing people, including cochlear implant users. CFD serves an estimated 4,000 people, offers a wide range of services, including interpreting, mental health counseling, social work assistance, education, and help with finding jobs. Vikkelsø said interaction with other deaf leaders and professionals at Gallaudet was empowering—something that she does not get at home, where she is the only deaf person in a leadership position. She was impressed with the wide range of courses at Gallaudet that link the deaf community to the academic world. Vikkelsø feels that more deaf professionals like herself who need to update their skills should avail themselves of the training Gallaudet offers.



## Goal E: Research and Outreach

### International Visiting Researcher Program (IVRP)

The International Visiting Researcher Program (IVRP) at Gallaudet University was established to accommodate a limited number of scholars who wish to use the facilities at Gallaudet University each academic year to work on their research studies. During FY 2015, there were four IVRP participants on campus from China, Brazil, Finland, and Italy.

Visiting researchers are sponsored by a variety of organizations, including the U.S. State Department's Fulbright Scholars program. The Fulbright Program aims to increase mutual understanding between the peoples of the United States and other countries, through the exchange of knowledge and skills. For FY 2015, the University welcomed Dr. Giulia Petitta, a scholar from Rome, to its Department of Interpretation, a collaboration made possible through the Fulbright program. Dr. Petitta was a guest lecturer and teacher for undergraduate and graduate classes, provided support for the department's Summer Research Interpretation and Translation Research Institute, and worked closely with Dr. Brenda Nicodemus, associate professor and director of the Center for the Advancement of Interpreting and Translation Research, and Ph.D. student Mark Halley on a research project examining interpreters' management of metalinguistic references in discourse. The research team presented its findings at the European Forum of Sign Language Interpreters conference in Warsaw, Poland.

In addition, Dr. Raschelle Theoharis, an associate professor in the University's Department of Education, was awarded a grant to work at St. Patrick's College in Dublin, Ireland for the spring semester, where she developed a curriculum and program for deaf students at the college.

### World Deaf Leadership Scholarship (WDL)

The World Deaf Leadership (WDL) Scholarship is an endowed scholarship funded by the Nippon Foundation, Tokyo, Japan. Gallaudet selects WDL Scholars from developing nations who demonstrate the ability to become international leaders and make significant contributions to their nation and possibly the world. On campus during FY 2015 were five WDL Scholars, who came from China, Egypt, Mali, Nepal, and Vietnam. The scholars from China, Mali, and Nepal graduated and received degrees from the University. An example of WDL's impact in empowering deaf professionals is Hu Ke of China, who received his M.A. in Linguistics in May, and is now a professor at Beijing Union University, Gallaudet's partner university in China. His goal is to use his training at Gallaudet to heighten awareness among deaf people and the general populace of China about the linguistic aspects of Chinese Sign Language.

### International Scholarships

The Sasakawa International Scholarship (SIS) Fund provides financial assistance to qualified, deserving, deaf international students who are enrolled in at least their second year of a degree-granting program at Gallaudet University to help ensure they have the financial means to complete their degree and graduate. Preference is given to students who are residents of developing countries. For FY 2015, 11 continuing undergraduate and graduate students from China, Ghana, India, Kenya, Nigeria, and Sri Lanka were working on their degrees at Gallaudet, thanks to SIS scholarships.

In addition, 12 smaller but equally important scholarships helped make a Gallaudet education possible for another 20 international students.

### International Visitors

The University regularly receives requests for visits from individuals outside the United States. These range from leaders in higher education and special education who look to Gallaudet to share its expertise in improving opportunities for their country's deaf and hard of hearing population, to individuals and small groups planning to visit the U.S. who are familiar with Gallaudet's world renowned reputation and want a tour of campus to be part of their itinerary when visiting landmarks in Washington, D.C.

Gallaudet welcomed 200 visitors representing 56 countries in FY 2015. These visitors came to campus for a variety of reasons, including attending workshops, seminars, and presentations; observing classes; consulting with faculty on best practices in educating deaf and hard of hearing students; or simply to tour the University and learn more about deaf history and culture. Support for these visitors was provided by the U.S. Department of State, embassies, educational agencies and organizations, and many others.

Notable among the visitors this year was the extended visit by two groups of staff, faculty, and administrators from the University of Warmia and Mazury in Olsztyn, Poland. The group learned how to enhance support for the approximately 50 deaf students attending their university, as well as methods to recruit more deaf students.

Hoping to maximize the spirit of volunteerism Gallaudet's diverse community is noted for, RSIA issued a call for members of the campus to support the University's international efforts. A request for international students to serve as ambassadors for visitors from other countries brought seven volunteers to assist with a group of students and educators from Beijing Union University who visited Gallaudet for two weeks last summer.

## Goal E: Research and Outreach

These volunteers included Gallaudet students from China who interpreted Chinese Sign Language to American Sign Language.

### Maintaining an international presence

#### Faculty/Researcher Activities Abroad

Several Gallaudet faculty and staff members, representing a wide range of disciplines, shared their expertise abroad during FY 2015. Their efforts contribute to the University's long-standing commitment to outreach that leads to greater understanding of deaf people and, ultimately, improve educational and employment opportunities, and a better quality of life. Faculty and staff represented the University at the XVII World Congress of the World Federation of the Deaf in Istanbul, Turkey; the 22nd International Conference on the Education of the Deaf in Athens, Greece; the International Conference on Sign Language Acquisition in Amsterdam, Netherlands; and numerous workshops and conferences in Canada, Costa Rica, Czech Republic, France, Ireland, Italy, Switzerland, United Arab Emirates, and the United Kingdom.

An excellent example of Gallaudet's international outreach last year was the contributions of two students in the Ph.D. in Educational Neuroscience program who helped promote the University of Hong Kong's (UHK) efforts to build an Educational Neuroscience fNIRS Neuroimaging Laboratory and to establish a Science of Learning Center in Hong Kong. Thanks to a supplemental grant to the National Science Foundation (NSF), Adam Stone and Geo Kartheiser joined scientists involved in UHK's The Science of Learning Initiative, attended UHK's Summerfest in Educational Neuroscience, learned advanced techniques in neuroimaging and neurorecording (fMRI, EEG), and shared Gallaudet's advances in Educational Neuroscience by leading lectures and an intensive workshop in Functional near-infrared spectroscopy methods and analysis. Dr. Laura-Ann Petitto, co-principal investigator of the NSF's Science of Learning Center, Visual Language and Visual Learning, and a co-founder of the PEN program, also attended and shared her expertise and support. The long-term goal of this initiative is to build scientific bridges between Asia and the United States.

### Overseas Opportunities for Gallaudet Students

#### China Study Abroad

Six Gallaudet undergraduates carried on in the footsteps of other small groups of students from the past two years by being immersed in the culture, art, history, and architecture of

China, one of the world's oldest civilizations. Like the 2013 and 2014 study two-week study abroad excursions, this year's group was based at Beijing Union University (BUU), which co-hosts the study abroad with RSIA through a cooperative agreement with the U.S. Department of State.

The study abroad to China follows a spring semester World Languages and Cultures 395 course, which varies by theme each year. The title of this year's course was "DeafSpace Principles in Ancient Chinese Architecture," co-taught by Hansel Bauman, executive director of Campus Design and Construction, and Derrick Behm, project coordinator for the Office of Program Development. Behm led the May 17 to 28 study abroad, with collaboration from Jiayi Zhou, a former World Deaf Leadership Scholar from China who received her master's degree in international development at Gallaudet.

RSIA had an opportunity to reciprocate on the hospitality offered by BUU by hosting a group of 12 students and two faculty members from BUU from July 27-August 8. During their stay, the students took workshops within their academic major and the faculty learned ways to teach deaf students more effectively. The BUU group visit to Gallaudet was part of the China Study Abroad Program, co-hosted by BUU and RSIA, and a cooperative agreement with the U.S. Department of State.

#### International Internships

In FY 2015, Gallaudet students interned in nine countries. Undergraduate and graduate students who are interested in enhancing their education by attaining a global perspective find that interning, working, or volunteering abroad offers an invaluable perspective. International internships are often part of a student's academic program and earn credits toward graduation. Student internship duties vary, and have included activities such as teaching, recreational program management, advocacy work, community involvement, and research. Along with gaining knowledge and skills in any of a wide variety of areas, these students are able to network with professionals working in another part of the world.

#### Partnerships

Gallaudet University's formal agreements with universities around the globe aim to advance opportunities to share knowledge. These agreements include student exchange and technical cooperation. Gallaudet also seeks ways for more people outside the U.S. to study at the University, thereby enriching their lives and the cultural diversity of the campus community. During FY 2015 there was varied partnering activity, notably:

## Goal E: Research and Outreach

### China

As part of Gallaudet's agreement with Beijing Union University (BUU), during FY 2015, the process for Chinese students interested in applying to study at Gallaudet was simplified, a liaison at BUU for contact with Gallaudet was named, and two-way exchanges of students were carried out (see China Study Abroad above).

### Czech Republic

A five-year educational exchange agreement was signed with Masaryk University, the second largest university in the Czech Republic. The agreement is for academic years 2015-2016 through 2019-2020. The agreement will provide internships for Gallaudet's Master of Sign Language Education Program (MASLED) students in teaching ASL as a second signed language for Masaryk's deaf and hard of hearing students. Masaryk students at both the undergraduate and terminal degree levels can enroll as special students at Gallaudet to take courses or conduct research toward completion of their degree requirements. The agreement also encourages exchanges and academic visits of faculty and staff and joint research projects, particularly in the fields of deaf studies and sign language research and interpreting, as well as for teaching the oral languages of deaf people.

### Japan

Three staff and four students from National University Corporation of Tsukuba University of Technology (NTUT), visited Gallaudet from March 9 to 11, 2015. NTUT is the only higher educational institute in Japan for deaf, hard of hearing, and deaf-blind students. The purpose of their visit to Gallaudet was to gain the University's expertise to help them achieve the following goals: for their students to be professionals with a high degree of sophistication as well as solid vocational skills; for their students to be socio-economically independent and to become leaders in the deaf and disability communities; and for their university to develop new methodologies of education for sensory disabled people and contribute to the improvement of their educational environment, not only in Japan but throughout the world.

### Panama

A Memorandum of Agreement signed in 2011 with The Republic of Panama's Instituto para la Formación y Aprovechamiento de Recursos Humanos (IFARHU) in Panama City continues to provide opportunities for Panamanian professionals to pursue graduate studies at Gallaudet. In FY 2015 one Panamanian student transferred from Gallaudet's English Language Institute (ELI) to the University's Graduate Program, and a second has enrolled in the ELI program.

## English Language Institute

The Commission on English Language Program Accreditation (CEA) extended the English Language Institute's (ELI) initial one-year accreditation for four more years, after an extensive review of the ELI's academic and service programs. The ELI is currently the only accredited ESL program serving deaf international students in the United States.

Two program levels were added to better meet the range of the students' skills: an intensive developmental English level, focusing on the development of basic bilingual communication skills in English and in ASL, and an exit level (level 6) that prepares students to transition into the undergraduate program. New services were added to the program, such as an in-house tutorial service and a "buddy" group support system. The ELI studio was created with sophisticated video equipment for the design of bilingual ASL/English materials in support of Gallaudet's bilingual mission.

In fall 2014, the ELI established a new partnership with Oman. As a result, 20 Omani students enrolled in the ELI program in spring 2015. The program has also begun a new partnership with Qatar and re-established relationships with the United Arab Emirates.

The Program Operations Specialist represented the ELI at the World Federation of the Deaf August meeting in Turkey, as part of the program's on-going recruitment efforts.

ELI enrollments experienced a significant increase, reaching its highest numbers in the last ten years. Its summer program reached a record enrollment with 38 students.

## Goal E: Research and Outreach

### English Language Institute Enrollment Trend

FY 2011		FY 2012		FY 2013		FY 2014		FY 2015	
Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
59	54	65	72	90	77	64	78	81	91

### Gallaudet University Regional Centers

The Gallaudet University Regional Centers (GURCs) bring Gallaudet University and the Laurent Clerc National Deaf

Education Center resources and expertise to regions, indicated below, throughout the United States and its territories. This is achieved through extension courses, training programs, workshops, conferences, special events, consultation services, and other innovative programming.

### Gallaudet University Regional Center Locations

GURC Region	Host Institution	Location
Midwest	John A. Logan College	Illinois
Northeast	Northern Essex Community College	Massachusetts
Southeast	Gallaudet University	Washington, D.C.
Southwest	Austin Community College	Texas
West	Ohlone College	California
Hawai'i & Pacific Initiatives	Office of Regional and National Outreach	Washington, D.C.

During FY 2015, GURC initiatives continued to be streamlined, and priorities remained aligned in support of the Gallaudet Strategic Plan (GSP). GURCs served 14,208 people through training and technical assistance and consultation, and 18,954 people through exhibits, performances, and recruitment activities. In addition, 120,782 people were reached through marketing and publicity, and 22,753 people through other forms of information dissemination, such as email lists.

The GURCs serve a significant role in accomplishing the GSP goals, and disseminating information about the Laurent Clerc National Deaf Education Center programs and services. To do this, each GURC develops and implements a multi-tiered outreach plan for each region, and responds to the GSP. GURCs'

primary scope of work aligns with GSP: Goal A (grow Gallaudet's enrollment), GSP: Goal C (secure sustainable resource base through revenues and partnerships, and GSP: Goal E (establish Gallaudet as the epicenter of research, development and outreach).

The GURC has a role in enhancing "outreach integrating research and practice, particularly to benefit deaf and hard of hearing PreK-12 students" (GSP objective E.3) by seeking "partnerships with universities, PreK-12 programs, community organizations, private foundations, government programs, and businesses aimed at developing, implementing, and assessing educational innovations and impacts on student learning" (GSP strategy E.3.2).

## Goal E: Research and Outreach

### GURC Activities and People Served Trend

	FY 2013	FY 2014	FY 2015
<b>ACTIVITIES</b>			
Training & Technical Assistance	1,255	971	1,313
Exhibits & Performances	55	63	56
Marketing & Press Releases	217	182	130
Other Information Dissemination	895	421	466
<b>ACTIVITIES TOTAL</b>	<b>2,422</b>	<b>1,637</b>	<b>1,965</b>
<b>PEOPLE SERVED</b>			
Training & Technical Assistance	28,162	15,763	14,208
Exhibits & Performances/Recruitment	28,635	20,405	18,954
Marketing & Press Releases	171,288	75,558	120,782
Other Information Dissemination	66,198	18,446	22,753
<b>PEOPLE SERVED TOTAL</b>	<b>294,283</b>	<b>130,172</b>	<b>176,697</b>

Source: Activity Summary/Contact Log Database

### FY 2015 GURC Activities and People Served by Region

	Midwest	Northeast	Pacific	Southeast	South-west	West	National	TOTAL
<b>ACTIVITIES</b>								
Training & Technical Assistance	44	816	249	33	136	27	7	1,312
Exhibits & Performances/Recruitment	6	14	7	7	10	8	4	56
Marketing & Press Releases	23	53	2	5	36	10	1	130
Other Information Dissemination	46	197	0	114	109	0	0	466
<b>ACTIVITIES TOTAL</b>	<b>119</b>	<b>1,080</b>	<b>258</b>	<b>159</b>	<b>291</b>	<b>45</b>	<b>12</b>	<b>1,964</b>
<b>PEOPLE SERVED</b>								
Training & Technical Assistance	1,711	5,974	2,729	657	1,364	1,630	143	14,208
Exhibits & Performances/Recruitment	1,222	2,890	1,554	1,043	4,042	6,739	1,464	18,954
Marketing & Press Releases	26,277	56,947	599	910	27,303	8,436	310	120,782
Other Information Dissemination	163	10,381	0	12,044	165	0	0	22,753
<b>PEOPLE SERVED TOTAL</b>	<b>29,373</b>	<b>76,192</b>	<b>4,882</b>	<b>14,654</b>	<b>32,874</b>	<b>16,805</b>	<b>1,917</b>	<b>176,697</b>

Source: Activity Summary/Contact Log Database



## Goal E: Research and Outreach

In addition, GURCs maintain Goal A as a high priority, increasing enrollment and recruiting a diverse student population. The GURCs promote Gallaudet University as the “first choice” for deaf and hard of hearing students throughout the world, as well as hearing students pursuing careers related to deaf and hard of hearing people.

The GURC staff work together as a team to accomplish national-level objectives. In addition, each of the GURCs conducts its own region-specific programs, designed to meet the needs of Gallaudet University constituents within the region. The following section provides an overview of significant accomplishments in FY 2015.

### National-Level Initiatives

#### National Outreach Conference

GURC-West took the lead, with support from other centers, in planning the 2015 National Outreach Conference (NOC) in Tacoma, Wash., in collaboration with the Washington State Center for Childhood Deafness and Hearing Loss (CDHL). Sixty-one participants, representing 27 outreach programs throughout the country, gathered at the conference where the theme was partnerships at the direct service level, enhancing the direct service provider’s toolbox. By having CDHL staff presenting at the conference, Washington State Center for CDHL and South Carolina School for the Deaf and the Blind’s Statewide Division of Outreach Services were highlighted.

#### Deaf WorldTeach in the Federated States of Micronesia and the Republic of the Marshall Islands

Through a collaboration between Gallaudet University and WorldTeach, Inc. (a nonprofit organization based in Cambridge, Mass.), Deaf WorldTeach supported five volunteer teachers on two islands, Majuro and Ebeye, in the Republic of the Marshall Islands. The volunteer teachers taught approximately 70 deaf students from prekindergarten through high school. Funded by the Ministry of Education of the Republic of the Marshall Islands, the volunteers also taught college and community sign language classes and worked with families with deaf children.

#### Regional Academic Bowls

Gallaudet continues to conduct five regional Academic Bowl competitions and one national competition. Coordinating the regional competitions is a major responsibility and a highlight for all GURC regions. GURCs work with schools and programs to promote academic achievement and high expectations for all deaf and hard of hearing students while also

introducing students, parents, and educators to the outstanding opportunities available at Gallaudet University.

#### Additional Initiatives

Working with the Bachelors of Arts in Interpretation (BAI) department at Gallaudet University, the regional centers facilitated collaborative agreements with interpreting training programs in their regions to boost educational opportunities for future sign language interpreters. This partnership allows students in two-year interpreting training programs to transfer credits into Gallaudet’s four-year BAI program as they live and study with deaf and hard of hearing people. GURCs have entered into three agreements with:

- Central Piedmont Community College, Charlotte, N.C.
- Austin Community College, Austin, Texas
- Front Range Community College, Westminster, Colo.

Agreements with other institutions are currently underway for FY 2016.

### Region-Specific Initiatives

#### GURC-Midwest, John Logan Community College, Cartersville, Ill.

##### Outreach and Education

- Collaboration with the Illinois School for the Deaf (ISD) Outreach Program continued throughout this year. ISD launched a new basic ASL online course offered at no cost to families of deaf children in the state. GURC-Midwest and the ISD Outreach Program promoted this course to schools and programs serving diverse families throughout the state. During May and June, 14 sections of this course were offered.
- GURC-Midwest maintained a working relationship with CHOICES for Parents on an American Library Association grant to improve literacy skills among deaf and hard of hearing children in Chicago public schools. GURC visited five inner-city public schools and read books in ASL to the children and talked about the importance of reading. Each child was given a book bag containing donated books and information for parents about the Fifteen Principles for Reading for Deaf Children from the Clerc Center.
- GURC-Midwest supported the Indiana School for the Deaf by co-sponsoring the American Society for Deaf



## Goal E: Research and Outreach

Children conference, held at the school in June 2015. GURC-MW also co-sponsored the Indiana conference on Deaf Education and Educational Interpreting in Indianapolis. Information about Gallaudet University and the Clerc Center were shared at these events.

- GURC-Midwest collaborated with the Kentucky School for the Deaf outreach program by providing a workshop, “Deaf Culture in the General School Environment,” to administrators, teachers and parents at the Kentucky Council for Exceptional Children Conference. Valuable information and resources related to Gallaudet University, Gallaudet’s Visual Language and Visual Learning lab, and the Clerc Center were included in the training.

### Professional Development and Collaboration

- In January, GURC- Midwest partnered with the Indiana Center for Deaf and Hard of Hearing Education and the Illinois School for the Deaf Outreach Program by sponsoring several workshops led by Dr. Melissa Herzig of the Gallaudet University National Science Foundation-funded Science of Learning Center on Visual Language and Visual Learning (VL2). Dr. Herzig shared VL2’s research on bilingualism and the brain, and helpful VL2 resources and teaching tools for professionals and families.
- GURC- Midwest led a training, “Promoting Early Literacy Skills,” at the National Early Hearing Detection and Intervention Conference in Louisville, Ky., on March 10. GURC encouraged participants to explore professional training opportunities offered at Gallaudet and shared ways to tap into beneficial teaching materials available through VL2 and the Clerc Center.
- On March 23, the Illinois CHOICES for Parents invited GURC-MW to lead a “Call for All” live webinar on “Promoting Literacy Skills for Deaf and Hard of Hearing Children” to parents of deaf and hard of hearing infants and toddlers from all over the state. GURC-Midwest shared helpful articles from Odyssey magazine, the 15 Principles for Reading to Deaf Children by the Clerc Center, VL2 research briefs and VL2 storybook apps.
- As part of the Illinois Consortium for International Studies and Programs and as a Gallaudet representative, GURC-Midwest Director Sheri Cook visited the Netherlands in May 2015. She visited students and faculty members in the Deaf Studies and Interpreter Preparation Programs at Hogeschool University in Nijmegen, Netherlands, and gave several presentations about Gallaudet

University’s English Language Institute (ELI), Bachelor of Arts in Interpreting and ASL/Deaf Studies programs. Sheri also visited two Kentalis Schools for the Deaf in Amsterdam and shared information about Gallaudet University’s ELI and undergraduate programs with students and instructors there.

- GURC-Midwest collaborated with South Dakota School for the Deaf, North Dakota School for the Deaf and Augustana College by co-sponsoring the 2015 Midwest Conference on Deaf Education on June 11-12, 2015 in Sioux Falls, SD. Gallaudet University faculty and staff members Beth Benedict, Amy Hile, Maribel Garate and Matthew Rider presented at this conference.
- The Illinois School for the Deaf outreach program established Camp ISD, a new weeklong learning vacation for families of deaf and hard of hearing children in Illinois. GURC-Midwest provided support by co-sponsoring the Clerc Center “Family Dynamics” workshop led by Matthew Rider on June 18 and 19.

### Recruitment Efforts

- GURC-Midwest participated in the Spring Fling event organized by the Nebraska Regional Programs for Students who are Deaf or Hard of Hearing in Omaha. GURC met with deaf and hard of hearing teens from all over the state and talked about college readiness skills and Gallaudet. GURC also presented a new video created by Gallaudet athletes and basketball coach Stephanie Stevens (“Video for Spring Outing” available on the GUBisonWBB channel on YouTube), showcasing the athletics program and facilities, along with why they chose Gallaudet. The video was a successful visual tool in enhancing the students’ knowledge of Gallaudet.
- A partnership with the Southwest Cook County Cooperative Association for Special Education (Illinois) was established, and GURC-Midwest attended an advocacy event for over 200 middle school and high school deaf and hard of hearing children from Chicago and the southwest suburbs. Numerous diverse families attended this event, and GURC-MW materials were distributed in Spanish and other languages. GURC-MW also gave a presentation about self-advocacy skills to mainstreamed deaf and hard of hearing students.
- GURC-Midwest visited Iowa School for the Deaf and shared information about Gallaudet’s undergraduate programs and summer youth programs to the high school

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students and the on-campus vocational rehabilitation counselor

- During March and April, GURC-Midwest assisted a teacher of deaf students from Northview High School in Grand Rapids, Mich., in making plans for her students to visit Gallaudet. On April 27, GURC-Midwest Director Sheri Cook met with students, teachers, and administrators. The group also met with an admissions counselor and toured the campus. As a result of this visit, the Northview group decided to establish an Academic Bowl team for the 2016 Midwest Academic Bowl event.

### **GURC-Northeast Region at Northern Essex Community College, Haverhill, Mass.**

#### **Professional Development and Collaboration**

- GURC-Northeast, with The Learning Center for the Deaf, hosted a successful American Sign Language Round Table Conference (ASLRT) in November 2015. With support from GURC-West and the Regional and National Outreach Office, 100 individuals came from schools and programs from across the country and Canada. During ASLRT, GURC-Northeast collaborated with the Clerc Center to arrange for a separate discussion group focused on ASL Standards.
- As part of Gallaudet's partnership with host institutions, GURC staff partnered with Northern Essex Community College (NECC) to provide training to the first class of police recruits in NECC's new police academy in communicating with deaf and hard of hearing individuals, which includes basic signs, information about deaf culture, and interacting with deaf individuals. Forty-five recruits graduated from the academy and all participated in the training. This is a new initiative that is expected to continue as the college welcomes its second class of recruits this fall.
- Collaboration with the Rhode Island School for the Deaf (RISD) continued this year by providing marketing materials for RISD's Early Intervention conference. GURC-Northeast also provided major support to RISD for its Shared Reading Saturday program in June. This included consulting with the coordinator, providing technical support and providing use of an FM system.
- GURC-Northeast worked closely with professional development staff at Rochester School for the Deaf to bring Janet Weinstock from the Clerc Center for professional

development in literacy. She also provided a presentation to RSD parents.

#### **Outreach and Education**

- GURC-Northeast staff, two tutors and a parent provided a workshop through the Family Sign Language Program at the Massachusetts Early Intervention Consortium. Over 100 individuals participated in the workshop. Another presentation regarding the Family Sign Language Program took place at The Learning Center's annual early intervention workshop for professionals.
- GURC-Northeast continued to operate the Massachusetts statewide Family Sign Language Program, receiving over 60 referrals during this year. Families are added to distribution lists and receive regular announcements, including information from Gallaudet and the Clerc Center. In addition, the monthly Shared Reading Saturdays Program continues to successfully serve 10-15 families, in ASL, English and Spanish.
- GURC-Northeast collaborated with Boston Children's Hospital Deaf and Hard of Hearing program to arrange for presentations at the hospital's Fall College Transition Seminar for Deaf and Hard of Hearing Students. In addition to having an exhibition booth, Gallaudet's Charity Reedy Warigon provided a keynote presentation on preparing for college, and Gallaudet alum and admissions counselor Tony Tatum shared his experiences by being part of a panel of young adults who recently completed college.

### **Hawai'i & Pacific Initiatives, Office of Regional and National Outreach, Washington, D.C.**

In September 2014, the Gallaudet University Regional Center-Pacific (GURC-Pacific) at Kapi'olani Community College (KCC) was closed after 26 years of service. However, support for Hawai'i and Pacific initiatives continued as part of Regional and National Outreach:

#### **External Funding in Support of Hawai'i-Pacific Initiatives**

- Two Hawai'i teams participated in the West Regional Academic Bowl competition, with RNO support of fundraising efforts, Pearl City High School and Hawai'i School for the Deaf and the Blind.
- Three U.S. Department of Education grants provided funding support for preparing teachers for Hawaii and the Pacific area:

## Goal E: Research and Outreach

- o PILI Deaf Education Teacher Preparation Program (U.S. Department of Education (USDOE)/Office of Special Education Programs (OSEP).
- o CORE Deaf Education Paraprofessional Program (USDOE/OSEP)
- o CORE Program Improvement Grant (USDOE/OSEP)
- Funding from the Republic of the Marshall Islands (RMI), Ministry of Education, a grant from the Australian Embassy AusAID Program, and shared funding from the RMI Early Hearing Detection and Intervention program (EHDI), supported five Deaf WorldTeach volunteers and one contract teacher/former Deaf WorldTeach volunteer to teach on two islands, Majuro and Ebeye. Four deaf teachers taught 45 deaf and deaf-blind students at the Majuro Deaf Education Center (MDEC) and two deaf teachers taught 17 deaf students at the Ebeye Deaf Education Center (EDEC).

Deaf students in these two programs are taught using four languages of instruction: Local sign language used in Majuro (see next section about indigenous signed languages), ASL, written English, and written Marshallese. Additional outreach efforts included weekly sign language classes taught by deaf teachers; one ASL class was taught at the College of the Marshall Islands and five community sign classes at various locations on both islands (teaching the local sign language used in Majuro and Ebeye), weekly training classes for local deaf Marshallese serving as paraprofessionals at MDEC. The teachers also worked with families of young deaf children, including weekly home visits through the EHDI program. Gallaudet provided training and mentoring support to Deaf WorldTeach volunteers throughout the year.

- Dr. James Woodward, sign language linguist, conducted a preliminary study of the signing used by Marshallese deaf adults on Majuro and identified it as a unique language distinct from ASL. Dr. Woodward, a former faculty/researcher at Gallaudet University, is currently at the Chinese University of Hong Kong and University of Hawai'i, Manoa. Funding is being sought for expansion of this research and documentation to include deaf adults on Ebeye.
- In collaboration with the RMI Ministry of Education and the Assistant Secretary Education of Kwajalein Atoll, a grant proposal to the Embassy of Japan (Grant Assistance

for Grassroot Projects) was developed to fund the building of a four-room Ebeye Deaf Education Center. Hansel Bauman, "DeafSpace" architect, developed a preliminary design of the proposed building. The plan development for this Deaf Education Center continues, and will be submitted with the grant proposal for funding from the Japanese Embassy by the Ministry of Education.

### **GURC –Southeast Region at Gallaudet University, Washington D.C.**

#### **Professional Development and Collaborations**

- The GURC-Southeast office coordinated a new partnership between Gallaudet University and Central Piedmont Community College (CPCC) of Charlotte, N.C., and created a collaborative agreement to enhance educational opportunities for sign language interpreters. This partnership allows students in the two-year CPCC Associate in Applied Science degree in Interpretation Education program to transfer credits to Gallaudet's four-year Bachelor of Arts in Interpretation (BAI) program. A signing ceremony, followed by a reception, took place via video-conferencing in December 2014.
- The Virginia Association of the Deaf (VAD) and GURC-Southeast co-sponsored legislative training as part of VAD's leadership development training program. The National Association of the Deaf's coordinator of state legislative affairs provided the training in November 2014.
- As a result of ongoing networking efforts between state organizations in Virginia, the Office of the Secretary of the Commonwealth in Virginia appointed GURC-Southeast's Karen Sheffer to the Virginia Department for the Deaf and Hard-of-Hearing Advisory Board for a four-year term.
- In conjunction with Gallaudet's undergraduate recruitment efforts, GURC-Southeast attended several statewide teacher conferences, including in North Carolina, Tennessee and South Carolina.
- Partnership-building with two more community colleges' interpreter training programs have been ongoing, with an anticipated signing of memorandums of understanding during FY 2016.

### **GURC-Southwest, Austin Community College, Austin, Tex.**

With an interim director brought in for the final year of a five-year agreement, it was a transition year.

## Goal E: Research and Outreach

### Youth Leadership Training

- For the past three fiscal years, GURC-Southwest has provided youth leadership training to 21 schools/programs in the region, including Arizona, Arkansas, Colorado, Louisiana, and Oklahoma.
- GURC-Southwest sponsored a youth leadership training, “Individual Assessment, Culture Awareness, Community Connection: Building Tomorrow’s Leaders,” in New Mexico in March 2015, and trained Tulsa Community College ASL department staff to provide this same training in Oklahoma. To date, 244 students have been trained at 10 schools, organizations and/or agencies. The learning objectives focus on culture and language teaching in K-12 deaf education. In addition, it is an opportunity for students to gain a better understanding through identity assessment, culture awareness and community connection.

### Transition Fairs and Exhibitions

- GURC-Southwest provided an exhibition for the Riverbat Bash transition fair at Austin Community College, with 150 participants.
- GURC-Southwest also shared Gallaudet University materials at the Texas School for the Deaf Family Weekend Retreat with 175 attendees, and at a DeafNation Expo in Austin that had over 3,600 attendees.

### Partnerships

- GURC-Southwest provided technical assistance support at the Registry of Interpreters for the Deaf conference in New Orleans as well as the Texas Hands and Voices conference.
- GURC-Southwest has led efforts in revamping the National Student Life for the Deaf and Hard of Hearing conference by providing technical assistance. Over 96 administrators and residential staff from 22 deaf schools participated in the conference this year, held at the Texas School for the Deaf.
- In September 2015, GURC-Southwest formed two articulation agreements for interpreter training programs (ITP) with Austin Community College in Texas, and Front Range Community College in Colorado. The agreement is for students transferring credits into Gallaudet’s four-year Bachelor of Arts in Interpretation (BAI) program.

- During fiscal year 2015, GURC-Southwest attended, worked with and/or participated in the Texas Association of the Deaf Youth Programs, Texas Child First/Texas National Agenda Collaborative, Arizona Commission for the Deaf and Hard of Hearing Education Task Force, ASLI Advisory Committee, the Statewide Conference of Education of the Deaf/Hard-of-Hearing, Austin Association of the Deaf Youth Committee, and Deaf Women of Texas.

### GURC-West, Ohlone College, Fremont, Calif.

#### Partnerships

- GURC-West continues a partnership with the Center for Childhood Deafness and Hearing Loss (CDHL) in Washington State. This state agency is the umbrella agency for the Washington School for the Deaf and provides outreach and professional development throughout the state. GURC-West is a member of CDHL’s statewide outreach team, particularly in serving as a liaison to Gallaudet University. This collaboration resulted in a multi-year professional development schedule for Gallaudet extension courses and Clerc Center workshops.
- GURC-West continues to support a long-standing partnership with the Montana School for the Deaf and the Blind (MSDB) to provide learning opportunities for families in rural areas. Families attending the Family Learning Weekend at MSDB learned about navigating the deaf education system and college planning from a Gallaudet Admissions Office representative, who also facilitated parent groups; middle school and high school students participated in a college exploration workshop.
- GURC-West also strengthened its commitment to students in Washington with involvement in the expansion of the CDHL program through Junior Achievement.
- GURC-West sponsored the Deaf Women United Northwest Regional Conference in Seattle in March 2015. Capitalizing on partnership, a CDHL representative presented on GURC partnerships and program services.
- GURC-West supported interpreters of color and deaf-parented interpreters at the Registry of Interpreters for the Deaf national conference in New Orleans. This was done by participating in section meetings and discussions.

#### Outreach and Professional Development

- GURC-West visited three programs serving primarily multicultural students in San Diego and Los Angeles to

## Goal E: Research and Outreach

provide information on youth programs and academic programs at Gallaudet University. GURC-West continues to provide information to potential transfer students and identify programs for university partnership.

- Working with the Gallaudet Admissions Office, GURC-West attended the Ohlone College Transfer Day event in Fremont, Calif.
- Working with the BAI program at Gallaudet, GURC-West facilitated potential partnerships with Ohlone College, American River College and the College of Southern Nevada.
- GURC-West continues to support a long-standing partnership with the Montana School for the Deaf and the Blind (MSDB) to provide learning opportunities for families in rural areas. Families attending the Family Learning Weekend at MSDB learned about navigating the deaf education system and college planning from a Gallaudet Admissions Office representative, who also facilitated parent groups; middle school and high school students participated in a college exploration workshop.
- GURC-West continues to support workshops and trainings related to diverse communities. Work with the deaf Asian community included partnering with Ohlone College to support a presentation and book signing by Ronald Hirano, a Deaf Nisei and Gallaudet Alum (AAS-'57). His presentation featured his book, *The Life Story of Mother Delight Rice and Her Children* a chronicle of Delight Rice's legendary contributions to deaf education in the United States and the Philippines.
- GURC-West continues to support professional development in deaf education through consultation and Gallaudet representation at the California Educators of the Deaf (CAL-ED) and the Washington Combined Summer Institute.







*Former Senator Tom Harkin (D-IA) joined a group of honored guests and students on June 3, 2015, for the official groundbreaking of the new Model Secondary School for the Deaf state-of-the-art dorm. Front row (L-R): MSSD students Selena Alvarez, Brandon Holst, Markea Howard, Shakema Nanco, Tateiana La Guerre, Greta Wolcott, Ju'wan Blackewll, and Marcus Pointer. Back row (L-R) Gallaudet Assistant Vice President for Administration Fred Weiner, Clerc Center Vice President Ed Bosso, Gallaudet trustees James Macfadden and Nancy Kelly-Jones, former Senator Tom Harkin (D-IA), Gallaudet President T. Alan Hurwitz, and MSSD Principal Mindi Failing.*

Photo by Ben Hoshina

## Laurent Clerc National Deaf Education Center

The Laurent Clerc National Deaf Education Center, a division of Gallaudet University, includes Kendall Demonstration Elementary School (KDES), the Model Secondary School for the Deaf (MSSD), and associated research, evaluation, training, and dissemination services. The primary purpose of the Clerc Center is to fulfill the national mission of improving the quality of education afforded to deaf and hard of hearing students from birth through age 21 across the country.



## I. Overview of the Clerc Center

While providing an exemplary education to the students attending Kendall Demonstration Elementary School (KDES) and the Model Secondary School for the Deaf (MSSD), the Clerc Center works in partnership with a network of programs and schools throughout the nation to identify and share best practices in the field. This partnership is the cornerstone for activities designed to have national impact. Its goal is the provision of quality educational opportunities to all students, with emphasis on students who are lower achieving academically, who come from families that speak a language other than English in the home, who have additional disabilities, who are members of diverse racial or cultural groups, or who live in rural areas. The Clerc Center publishes and disseminates materials and information, establishes and publicizes its research priorities through a process allowing for public input, and provides training and technical assistance to families of children who are deaf or hard of hearing and the professionals who work with them.

### FY 2015 Highlights

During FY 2015, the Clerc Center engaged in a number of activities designed to improve education and outcomes for deaf and hard of hearing children at the Clerc Center and nationwide. Specifically, the Clerc Center remained engaged with reform efforts and devoted significant resources to the continued implementation of the Common Core State Standards for English/language arts and mathematics, and in preparation for next generation assessment implementation including the PARCC assessment for the purpose of improving academic achievement among its students. Further, the Clerc Center continued planning and implementation of initiatives in three demonstration school and three national priority areas that comprise the Clerc Center Strategic Plan 2020 (CCSP 2020).

### Highlights from KDES and MSSD

- Refined strategies in the priority areas of reading/writing, mathematics, and school climate to better focus implementation efforts and resource allocation as part of the CCSP 2020.
- Successfully completed the demonstration school's mid-cycle review as required by the Excellence by Design (EBD) strategic planning protocol. The Clerc Center's re-

port was accepted as written by Middle States Association (MSA), the accrediting body that oversees the mid-cycle review process.

- Implemented the third year of English/language arts and mathematics K-12 curriculum units aligned with the Common Core State Standards.
- Provided ongoing training and support to teachers focused on text-based reading and writing.
- Conducted a two-day math program planning "summit" involving a consultant and school leadership to review best practices in math instruction, provide coaching support to curriculum and instructional support personnel, and develop a long-range vision for math instruction in the schools.

### Highlights from the Clerc Center's National Service

- Completed the first phase of planning and implementation for the CCSP 2020. Work including project planning and development for eleven strategies in the three national priority areas:
  - o Collaboration—Facilitate the recognition and development of productive collaborations among organizations at the national and state level to effectively meet the linguistic, educational, and social-emotional needs of deaf and hard of hearing children from birth to 21 years of age.
  - o Professional Development—Support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional development and achievement of deaf and hard of hearing children from birth to 21 years of age.
  - o Family-School Partnerships—Promote the use of proactive partnerships between families and professionals at schools and/or in programs to effectively meet the linguistic, educational, and social-emotional needs of deaf and hard of hearing children from birth to 21 years of age.

### Resources that will result from these strategies

- A bookmark series that will provide guidance and resource information to classroom teachers who have little training or experience working with deaf or hard of hearing students.
- A smartphone app that will support parent advocacy during IEP, 504, and other school support meetings.
- A literature review of current research and practice in the area of collaboration, one of the CCSP 2020 priorities identified by national stakeholders. Findings from the literature review will be published as an article in the 2016 issue of *Odyssey* which will focus on collaboration.
- A Spanish-language version of *Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or Hard of Hearing*, a web-based, seven module series on language access and early intervention services for deaf and hard of hearing children and their families. Each module is available in ASL and English. The initial product was the result of a collaboration between the Clerc Center and the Boston Center for Deaf and Hard of Hearing Children of Boston Children's Hospital.
- An on-line tutorial to support the effective use of *Students with Cochlear Implants: Guidelines for Educational Program Planning* by educational planning teams. The guidelines were the result of a collaboration between the Clerc Center and the Boston Center for Deaf and Hard of Hearing Children of Boston Children's Hospital.
- Consistently reach more than 1,000 people through Facebook posts each week and reach over 3,000 people via Twitter monthly
- Significantly improved Google search engine rankings from below 25 to:
  - Keyword “deaf” - #2
  - Keyword “deaf children” - #2
  - Keyword “national resources deaf” - #4
  - Keyword “deaf education” - #8
- Drafted the Clerc Center's research agenda aligned with the CCSP 2020 and reflective of its national priorities and public input. Three areas of focus for collaborative and internal research efforts: 1) family engagement, 2) educational best practices, and 3) social and emotional well-being.
- Completed data collection for a national survey of parent advocacy. Responses were received from more than 1,000 respondents. Data will be analyzed and decisions made about publication and dissemination during FY 2016.

### Expanded dissemination efforts of new Clerc Center resources

- *Students with Cochlear Implants: Guidelines for Educational Program Planning*, guidelines designed to facilitate planning discussions when determining programs and services for students with cochlear implants regardless of language or communication modality or educational placement.
- *Classroom Interpreting for Students who are Deaf or Hard of Hearing: A Series of Guides for Parents, Professionals, and Students*, five publications for school administrators, educators, educational interpreters, students, and parents to support language access for deaf and hard of hearing students in general education settings.
- *Considerations for ASL and Spoken English Bilingual Development in Young Children Who are Deaf or Hard of Hearing: An Overview*, a workshop describing ASL/English bilingualism and the language planning process necessary

### Highlights from CCSP 2020

- Developed and began planning for the first stage of a multi-year outreach and dissemination plan to enhance and expand efforts to reach professionals and parents of deaf and hard of hearing students in all educational environments, especially those in public school settings.
- Selected and began design of a customer-relations management (CRM) system to better capture, track, and connect with constituents across the nation.
- Expanded and improved outreach via electronic search engines and social media:
  - Over a 100 percent increase in followers on social media sites in last six months of fiscal year



## Clerc Center

to establish an environment that values both languages and meets the needs of the deaf and hard of hearing children and families it serves.

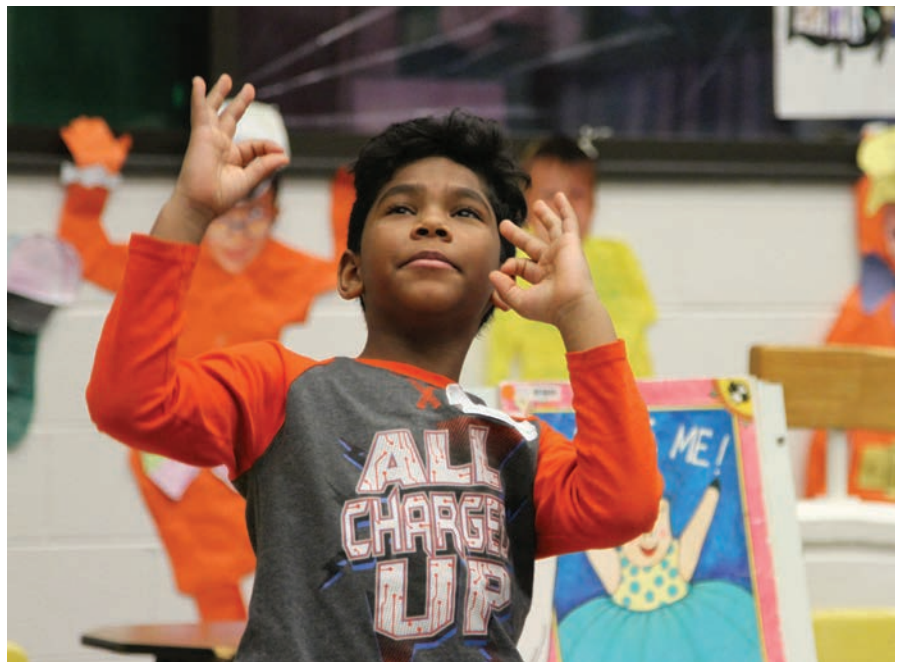
- The Clerc Center's annual publication, *Odyssey* magazine, was recognized by the Council of Educational Adminis-

trators of Schools and Programs for the Deaf (CEASD) with their Edward Allen Fay award as a significant publication in the field of deafness.

The Clerc Center is pleased to provide this report of achievements.

*KDES student Darien Lopez was one of 44 KDES students who performed and presented ASL Poetry, Storytelling, and Deaf Art entries for the Marie Jean Philip Competition held on February 11, 2015. The contest is named in honor Philip as a leading advocate for American Sign Language and Deaf Culture. The students presented their entries in front of a panel of three judges and an audience of students, teachers, and families in the Kendall auditorium. The Kendall First Place winners' videos and original artworks were sent to Northeastern University for the judging in 2015 Marie Jean Philip's Competition national finals on April 17, in Boston. KDES student Jamie Antal won second place for his entry in the 9-12 year-old category.*

Photo by Susan Flanigan



## II. Education of the Deaf Act

The Education of the Deaf Act (EDA), reauthorized in 2008 (P.L. 110-315), directly impacts Gallaudet University and the Clerc Center, including KDES and MSSD. The EDA specifically outlines both the primary responsibilities of the Clerc Center and the demonstration schools and the reporting requirements for Gallaudet University, many of which also apply to the Clerc Center. This section includes excerpts of the EDA that apply to the Clerc Center.

Note: Where “...” appears below, sections of the EDA that do not apply to the Clerc Center have been removed.

### Primary Responsibilities of the Clerc Center

The EDA mandates activities specific to the Clerc Center. It authorizes the Board of Trustees of Gallaudet University to maintain and operate the Clerc Center to carry out exemplary elementary and secondary education programs, projects, and activities for the primary purpose of developing, evaluating, and disseminating innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments serving individuals who are deaf or hard of hearing throughout the nation.

The EDA requires the Clerc Center’s elementary and secondary programs to serve students with a broad spectrum of needs, including students who are lower achieving academically, who come from families that speak a language other than English in the home, who have secondary disabilities, who are members of diverse racial or cultural groups, or who are from rural areas.

The EDA states that the elementary and secondary programs must include:

- KDES, to provide day facilities for elementary education for individuals who are deaf to provide such individuals with the vocational, transitional, independent living, and related services they need to function independently and to prepare such individuals for high school and other secondary study. (See section VII.)
- MSSD, to provide day and residential facilities for secondary education for individuals who are deaf, to provide such individuals with the vocational, transitional, independent living, and related services they need to function independently and to prepare such individuals for college,

other postsecondary opportunities, or the workplace. (See section VII.)

The EDA also mandates the Clerc Center to:

- Provide technical assistance and outreach throughout the nation to meet the training and information needs of parents of infants and children who are deaf or hard of hearing. (See section VI.)
- Provide technical assistance and training to personnel for use in teaching students who are deaf or hard of hearing in various educational environments and students who are deaf or hard of hearing with a broad spectrum of needs.... (See section VI.)
- Establish and publish priorities for research, development, and demonstration through a process that allows for public input. (See section III.)

To the extent possible, the Clerc Center must provide the services required in an equitable manner based on the national distribution of students who are deaf or hard of hearing in educational environments, including regular classes; resource rooms; separate classes; separate, public, or private nonresidential schools; separate, public, or private residential schools; and homebound or hospital environments. (See section VI.)

In 2008, the EDA added language requiring the University, for the purposes of KDES and MSSD, to:

- Select challenging academic content standards, challenging student academic achievement standards, and academic assessments of a State, adopted and implemented, as appropriate, pursuant to the applicable provisions of the Elementary and Secondary Education Act of 1965 and approved by the Secretary; and implement such standards and assessments for such programs by no later than the beginning of the 2009-10 academic year;
- Annually determine whether such programs at the Clerc Center are making adequate yearly progress...; and
- Publicly report the results of the academic assessments, except where such reporting would not yield statistically reliable information or would reveal personally identifiable information about an individual student, and whether the programs at the Clerc Center are making adequate yearly progress.... (See section VII.)



## Reporting Requirements for the EDA

The Board of Trustees of Gallaudet University ... shall prepare and submit an annual report to the Secretary and to the Committee on Education and Labor of the House of Representatives and the Committee on Health, Education, Labor, and Pensions of the Senate no later than 100 days after the end of each fiscal year, which shall include the following:

1. The number of students during the preceding academic year who enrolled and whether these were first-time enrollments, who graduated, who found employment, and who left without completing a program of study reported under each of the programs of the University (i.e., elementary, secondary).... (See sections VIII and IX.)
2. For the preceding academic year, and to the extent possible, the following data on individuals who are deaf and from minority backgrounds and who are students (at all educational levels) or employees:
  - A. The number of students enrolled full time and part time. (See sections VII, VIII, and IX below.)
  - B. The number of these students who completed or graduated from each of the educational programs. (See sections VII and IX.)

- C. The disposition of these students on the date that is one year after the date of graduation or completion of programs at...the University and its elementary and secondary schools in comparison to students from non-minority backgrounds. (See section IX.)
- D. The number of students needing and receiving support services (e.g., tutoring, counseling) at all educational levels. (See section VI.)
- E. Strategies (e.g., parent groups and training classes in the development of individualized education programs) used by the elementary and secondary programs and the extension centers to reach and actively involve minority parents in the educational programs of their children who are deaf or hard of hearing and the number of parents who have been served as a result of these activities. (See section VII.)

*Note: This annual report satisfies these requirements.*



*Ten KDES students attended a “Let’s Read, Let’s Move!” event hosted by the U.S. Department of Education at the White House on January 21. The program supports First Lady Michelle Obama’s Let’s Move! initiative to promote healthy lifestyle choices and nutrition while also encouraging strong early learning programs to ensure bright futures for children. KDES second grader Tristan Macfadden introduced First Lady Michelle Obama to the groups of school children who gathered in the East Room of the White House for storytelling and movement games. Pictured are (from left): Tristan Macfadden, Teacher Akilah English, Fiona Keegan, Lilly Spicer, Latrael Fisher, Nalani Hill-Levy, Mekyia Howell, Lamonte Fisher, Kimora Thomas, Principal Debra Trapani, Jamila Gutierrez, and Darien Lopez.*

## III. Public Input

Through the EDA, the Clerc Center is required by the United States Congress “to establish and publish priorities for research, development, and demonstration through a process that allows for public input.” In 2009, the Clerc Center redesigned its system to collect input from a broad range of stakeholder groups. Supported by the U.S. Department of Education, the new system included input mechanisms and processes that ensure the Clerc Center has a broad perspective based on a range of experiences. The input collected is used to inform the selection of national service priorities for the Clerc Center Strategic Plans.

### Priority Setting

During its most recent public input cycle, 2010-2012, the Clerc Center used a series of mechanisms to gather public input, including targeted meetings, surveys, conference exhibits, and individual contacts. Following analysis, public input information was used to guide the Clerc Center’s priority setting process for the national service portion of the Clerc Center Strategic Plan 2020 (CCSP 2020) which began this fiscal year.

To establish its priorities, the Clerc Center convened a National Priority Setting Meeting in February 2013. Participating were parents, teachers, school professionals, early intervention service providers, organizational leaders, and university professionals from across the nation. The Clerc Center used a process called the “Structured Dialogic Design Process” (SDD) designed by Dr. Alexander “Aleco” Christakis. Christakis has more than 35 years of working in the field of complex change and consulted with the Clerc Center to plan and execute this meeting or “co-laboratory.” Co-laboratories are focused, action-oriented, democratic meetings during which every perspective is recognized and honored. The SDD process was selected because it promotes consensus building and shared ownership and would result in the identification of priorities based on the collective wisdom of Clerc Center stakeholders.

By the end of the process, all participants developed a shared understanding of the challenges that, if addressed by the Clerc Center, would have a positive impact on the success of current and future generations of deaf and hard of hearing children.

The process resulted in the identification of three priorities that serve as the foundation for the CCSP 2020:

1. **Professional Development** - The Clerc Center will support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional development and achievement of children (birth through high school) who are deaf or hard of hearing.
2. **Family-School Partnerships** - The Clerc Center will promote the development of knowledge necessary for effective partnerships between families and professionals with schools or service agencies to effectively meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.
3. **Collaboration** - The Clerc Center will facilitate the recognition that productive collaborations among organizations at the national level are essential in meeting the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

Based on a review of timelines for the current and next strategic planning processes, it was determined that the review of the Clerc Center’s public input processes and mechanisms would begin in FY 2016. This review would be an opportunity to identify areas for improvement and enhancement. Any changes will be shared with the U.S. Department of Education prior to the next cycle of public input collection set to begin in late FY 2016 or FY 2017.

## IV. Clerc Center Strategic Plan 2020

The CCSP 2020 focuses on its national service and demonstration school activities for the upcoming five-year period. The national service portion of the plan supports professionals and parents of students (birth through high school) who are deaf or hard of hearing in accordance with the EDA, the Clerc Center's guiding federal legislation. The national service goal focuses on three priority areas identified during the Clerc Center's National Priority Setting Meeting which took place in February 2013 on the Gallaudet University campus in Washington, D.C.

The process to focus each priority area, develop the objectives, and select the strategies that the Clerc Center will undertake over the next five years was based on input and information from a number of national sources. These included dialogue during the National Priority Setting Meeting; collection and analysis of public input from 2010-2012, a summary of which can be found at [www.gallaudet.edu/clerc-center/our-resources/publications/pi-summary.html](http://www.gallaudet.edu/clerc-center/our-resources/publications/pi-summary.html); evaluation feedback on select

trainings and products; and current research, practice, and resources in the priority areas. The strategies were carefully selected based on their potential impact in each priority area as well as on the Clerc Center's ability to complete them with the limited human and fiscal resources available. The completed strategic plan was carefully reviewed to ensure alignment among the Clerc Center mission, the national service goal and related objectives, the strategies, and compliance with the EDA.

### National Service Goal

The Clerc Center supports professionals and families through the dissemination of resources, training, and evidence-based information in the areas of professional development, family-school partnerships, and national collaborations to meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

### Professional Development

The Clerc Center will support the needs of professionals by addressing gaps in their knowledge and facilitating the growth of necessary skills to meet the linguistic, academic, and social-emotional development and achievement of children (birth through high school) who are deaf or hard of hearing.

#### Objective 1

Increase the understanding and awareness of teachers and professionals with limited knowledge or experience in teaching and/or working with children who are deaf or hard of hearing about how to foster student success and enrich their educational experiences through current teaching and professional practices.

#### Strategies worked on in FY 2015

- Develop an information series for professionals
- Publish annual Odyssey issues focused on priority areas
- Complete a review and revision of training and technical assistance services
- Update Reading to Deaf Children: Learning from Deaf Adults

#### FY 2015 Major Activities

- Reviewed the research, and established topics for the information series for professionals
- Published the 2015 issue of Odyssey, The Influence, Impact and Opportunity of Technology. This issue had 15 different articles focusing on the use and interactions with technology used with deaf and hard of hearing children
- Completed a review of best practices in provision of training and technical assistance; developed recommendations to improve and enhance the Clerc Center Training and Technical Assistance program

#### Additional Strategies for Objective 1

- Develop a module on promoting fostering a positive sense of self in students who are deaf or hard of hearing
- Develop a publication on interpreters working with students with cochlear implants
- Design a workshop series to increase awareness and understanding among general education professionals

## Clerc Center

### Professional Development (continued)

#### Objective 2

Increase knowledge and strengthen effective teaching and professional practices of educators and other professionals who are knowledgeable and experienced in working with children who are deaf or hard of hearing.

#### Strategies worked on in FY 2015

- Create a training on the effective use of Students with Cochlear Implants: Guidelines for Educational Planning
- Develop and disseminate K-12 ASL Content Standards
- Publish annual Odyssey issues focused on priority areas
- Complete a review and revision of training and technical assistance services

#### FY 2015 Major Activities

- Developed an online training to assist practitioners in using Students with Cochlear Implants: Guidelines for Educational Planning
- Published Odyssey 2015
- Continued the development of ASL Content Standards.
  - Established a collaboration with California School for the Deaf-Fremont to develop the K-12 content standards
  - Completed and received feedback on the K-3 standards from ASL teachers and specialists at the national ASL Round Table (ASLRT)
  - Completed the development of Grades 3-8 standards
- Completed review of training and technical assistance

#### Additional Strategies for Objective 2

- Develop a series of professional development offerings on high-need, high-interest areas
- Develop resources for allied professionals that supports students who are hard of hearing and/or who are alone in general education settings
- Transfer Shared Reading Project site training to a self-paced, on-line format
- Develop an action plan to support K-12 ASL Content Standards implementation and dissemination
- Host a Clerc Center symposium (focus TBD)
- Develop a publication on interpreters working with students with cochlear implants

#### Objective 3

Adopt a comprehensive plan for improving the awareness of professionals with limited knowledge or experience in working with children who are deaf or hard of hearing as well as parents of those children across the United States about the resources, support, and activities of the Clerc Center.

#### Strategies worked on in FY 2015

- Develop a comprehensive, multi-year dissemination plan
- Redesign and expand Info to Go
- Review products and training materials to ensure content is provided in language appropriate for the intended audience
- Complete a review and revision of training and technical assistance services

#### FY 2015 Major Activities

- Identified a Customer Relationship Management (CRM) system and began building the CRM to better engage with Clerc Center stakeholders
- Developed and implemented series of strategies to increase the Clerc Center presence on social media specifically Facebook and Twitter; increased the number of followers on Facebook by 50%
- Completed review of training and technical assistance (see Priority 1, Objective 1)
- Developed and piloted a system to review resources to ensure that the language used in written publications is accessible and effective for the intended audience
- Began development of a process to ensure the language access and effectiveness for ASL based products

\* Some strategies apply to more than one objective and are listed multiple times.

## Clerc Center

### Family-School/Agency Partnerships

The Clerc Center will promote the development of knowledge necessary for effective partnerships between families and professionals with schools or service agencies to effectively meet the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

#### Objective 1

Disseminate resources and information to parents and caregivers to increase their knowledge to effectively advocate for the needs of their children who are deaf or hard of hearing when interacting with school or agency professionals.

#### Strategies worked on in FY 2015

- Develop a literature review on parent advocacy for those parents who are disconnected, alienated, and under-served
- Create a parent advocacy app

#### FY 2015 Major Activities

- Completed a literature review on parent advocacy focusing on parents who are disconnected, alienated and under-served. This review will be used to identify the following:
  - Parents most likely advocate;
  - Reasons parents do not advocate
  - Key factors shown to improve advocacy, particularly for those parents who are disconnected, alienated, and under-served
- Advocacy App Development
  - Built internal capacity for design and development of apps
  - Designed our process for app development

#### Additional Strategies for Objective 1

- Develop one publication in the information series on family-school/agency partnerships
- Expand content in Info to Go related to parent advocacy and family-school/agency partnerships
- Develop materials to support parents' sharing the resources for allied professionals in support of their children's needs
- Add a Parent Advocacy section to the Deaf Students with Disabilities Network
- Publish annual Odyssey issues to focus on parent-school/agency partnerships
- Develop materials for parents so they can share the information series for professionals with school/agency professionals to support their children's needs

#### Objective 2

Disseminate resources and information to increase the awareness and understanding of school personnel and administrators with limited prior knowledge of or experience with children who are deaf or hard of hearing about how to foster home-school/agency partnerships that value the parent and caregiver advocate role.

#### Strategies worked on in FY 2015

- Develop a literature review on parent advocacy for those parents who are disconnected, alienated, and under-served
- Develop materials for professionals related to "Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf and Hard of Hearing" in ASL, English and Spanish so they can use it as a tool to facilitate relationships with parents or caregivers
- Publish annual Odyssey issues focused on family-school/agency partnerships

#### FY 2015 Major Activities

- Completed a literature review on parent advocacy
- Identified key factors shown to improve advocacy, particularly for those parents who are disconnected, alienated, and under-served
- Developed the Spanish version of "Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf and Hard of Hearing"
- Completed article and author identification for the 2016 issue of Odyssey focusing on collaboration to be published in partnership with PEPNET2

#### Additional Strategies for Objective 2

- Develop an information series for professionals—one in the series would focus on family-school/agency partnerships

\* Some strategies apply to more than one objective and are listed multiple times.



## Clerc Center

### Collaboration

The Clerc Center will facilitate the recognition that productive collaborations among organizations at the national level are essential in meeting the linguistic, educational, and social-emotional needs of children (birth through high school) who are deaf or hard of hearing.

#### Objective 1 (Years One and Two)

Increase the internal capacity of the Clerc Center professionals to identify and carry out activities that will promote meaningful dialogues to identify areas for potential partnerships among agencies at the national level that will foster/enhance the educational experiences of all children who are deaf or hard of hearing and their families.

#### Strategies worked on in FY 2015

- Review practices and processes of organizational collaboration

#### FY 2015 Major Activities

- Completed the review of practices and processes for collaboration
- Developed an article for the 2016 issue of Odyssey magazine addressing global themes and practices for successful collaborations in education, business and health industries

#### Additional Strategies for Objective 1

- Develop an infrastructure to provide co-laboratories for democracy to select schools or organizations
- Establish a national collaboration focused on student transition
- Develop a collaboration objective and strategies for years three through five

\* Some strategies apply to more than one objective and are listed multiple times.

KDES and MSSD have joint accreditation by the Middle States Association (MSA) and the Conference of Educational Administrators of Schools and Programs for the Deaf (CEASD). In 2010, as part of the process to commence the re-accreditation cycle, the schools began an 18-month self-study process. Excellence by Design (EBD), a strategic planning accreditation protocol, was chosen for its focus on student achievement as well as for the organizational capacity to support that achievement. Through the EBD process, the schools identified two student achievement and one organizational capacity goal with related objectives and measurable annual targets. Action plans were developed for each goal area and work on the strategies in those plans began in 2012.

In 2014, the school leadership team began a mid-cycle review of efforts to date in all goal areas. They reviewed the data and identified strategies, progress made, and resources in the context of changes that have occurred within the schools and

the Clerc Center since the action plans were established. The intent of the mid-cycle review was to focus efforts on those strategies believed to have the greatest potential impact on achieving the goals within the time and resources available. The EBD goals, objectives, and revised strategies were then incorporated into the CCSP 2020, creating a single institutional strategic plan that reflects both national service and demonstration school priority work.

### Demonstration Schools Goal

Implement teaching and learning practices and promote a school climate that maximizes the academic potential of students who are deaf or hard of hearing in preparation for graduation and transition to postsecondary education and/or the workplace.



## Reading and Writing

### Objective 1

- By 2018, KDES students will improve their reading skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the Ohio Achievement Assessments (OAA) reading subtest. The 2010 baseline was 11 percent (N=38) for grades three through eight. The seven-year target is 75 percent.
- By 2018, MSSD students will improve their reading skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the Ohio Graduation Tests (OGT) reading subtest. The 2010 baseline was <10 percent (N=80) for grades 11 and 12. The seven-year target is 75 percent.

### Strategies worked on in FY 2015

- Implement and monitor a systematic approach to reading and writing instruction across all content areas
- Establish individual ASL/English bilingual plans for all students
- Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- Develop accurate and cohesive Individualized Education Programs (IEPs)
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction
- Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

### FY 2015 Major Activities

- Reviewed close reading strategies with provided ongoing support and dialogue about implementation
- Provided training on text-based writing instructional strategies and formative data collection
- Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing
- Implemented the four blocks literacy structure in classes in the elementary grades
- Introduced ASL/English bilingual principles for instruction and followed through with individual departments and teachers on implementing whole to part instructional strategies
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages
- Provided training and support for teachers in use and collection of formative classroom data
- Provided training on additional aspects of accurate and cohesive IEP development (profile present level of performance, transition section, writing better goals)

### Additional Strategies for Objective 1

- Select and implement a reading intervention program

### Objective 2

- By 2018, KDES students will improve their reading skills as measured by increasing the percentage of kindergarten through grade five students whose independent reading level is at grade level or above on the Developmental Reading Assessment 2 (DRA2). The 2011 baseline is 17 percent of students (N=42). The seven-year target is 75 percent.
- By 2018, MSSD students will demonstrate improved use of higher order thinking skills in reading as measured by increasing the percentage of grade 11 and 12 students who earn at least half of the available points on constructed response items on the OGT reading subtest. The 2010 baseline is <10 percent of students (N=80). The seven-year target is that 60 percent of students will earn at least half of the available points.

### Strategies worked on in FY 2015

- Implement and monitor a systematic approach to reading and writing instruction across all content areas
- Establish individual ASL/English bilingual plans for all students
- Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- Develop accurate and cohesive Individualized Education Programs (IEPs)
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction
- Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

## Reading and Writing (continued)

### FY 2015 Major Activities

- Reviewed close reading strategies with provided ongoing support and dialogue about implementation
- Provided training on text-based writing instructional strategies and formative data collection
- Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing
- Implemented the four blocks literacy structure in classes in the elementary grades
- Introduced ASL/English bilingual principles for instruction and followed through with individual departments and teachers on implementing whole to part instructional strategies
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages
- Provided training and support for teachers in use and collection of formative classroom data
- Provided training on additional aspects of accurate and cohesive IEP development (profile present level of performance, transition section, writing better goals)

### Additional Strategies for Objective 2

- Develop individual language allocation plans for all students
- Provide training on additional ASL/English bilingual instructional strategies

### Objective 3

- By 2018, KDES students will improve their writing skills as measured by increasing the percentage of students who attain a score of 3 or above on the holistic scale of 1 to 5 on the Writing Assessment. The 2011 baseline was <10 percent for grades three through eight (N=40). The seven-year target is 70 percent
- By 2018, MSSD students will improve their writing skills as measured by increasing the percentage of students who attain a score of 3 or above on the holistic scale of 1 to 5 on the Writing Assessment. The 2011 baseline was 34 percent for grades nine through 12 (N=137). The seven-year target is 80 percent.

### Strategies worked on in FY 2015

- Implement and monitor a systematic approach to reading and writing instruction across all content areas
- Establish individual ASL/English bilingual plans for all students
- Develop a system to provide students with opportunities to take Common Core on-line practice reading and writing assessments
- Select and implement a research-based reading intervention program(s)
- Develop accurate and cohesive Individualized Education Programs (IEPs)
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction
- Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

### FY 2015 Major Activities

- Provided training on text-based writing instructional strategies and formative data collection
- Conducted ongoing support sessions with teachers to discuss and review implementation of text-based reading and writing
- Implemented the four blocks literacy structure in classes in the elementary grades
- Introduced ASL/English bilingual principles for instruction and followed through with individual departments and teachers on implementing whole to part instructional strategies
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages, including using signing workshops as a bridge to writing workshops

### Additional Strategies for Objective 3

- Provide students with opportunities to take Common Core on-line practice reading and writing assessments

## Clerc Center

### Math

#### Objective 1

- By 2018, KDES students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OAA mathematics subtest. The 2010 baseline was <10 percent (N=40) for grades three through eight. The seven-year target is 75 percent.
- By 2018, MSSD students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OGT mathematics subtest. The 2010 baseline was 14 percent (N=80) for grades 11 and 12. The seven-year target is 75 percent.

#### Strategies worked on in FY 2015

- Develop, implement, and monitor a systematic approach to math instruction
- Develop a system to provide students with opportunities to take Common Core on-line practice math assessments
- Select and implement a research-based math intervention program(s)
- Develop accurate and cohesive IEPs
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction
- Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

#### FY 2015 Major Activities

- Conducted a two-day math program planning "summit" involving a consultant and school leadership to review best practices in math instruction, provide coaching support to curriculum and instructional support personnel, and develop a long-range vision for math instruction in the schools
- Implemented initial flexible grouping for math in grades 3-8
- Focused training on the use of manipulatives, representations/modeling (Singapore Bars), and other developmentally appropriate math instruction strategies
- Provided training on promoting accessibility to grade-level standards using Universal Design for Learning principles
- Continued work unpacking the math standards and reviewing math progressions across grades

#### Additional Strategies for Objective 1

- Provide students with opportunities to take Common Core on-line practice mathematics assessments

#### Objective 2

- By 2018, KDES students will improve their mathematics skills as measured by increasing the percentage of students who attain performance levels of "Meets Standards" or "Exceeds Standards" on the OAA number, number sense, and operations standard. The 2010 baseline was 13 percent (N=40) for grades three through eight. The seven-year target is 75 percent.
- By 2018, MSSD students will improve their mathematics skills as measured by increasing the percentage of students who attain a score of 14 or above on the mathematics subtest of the ACT (Gallaudet's freshman admissions criterion). The 2010 baseline was 68 percent (N=47) for grade 11. The seven-year target is 90 percent.

#### Strategies worked on in FY 2015

- Develop, implement, and monitor a systematic approach to math instruction
- Develop a system to provide students with opportunities to take Common Core on-line practice math assessments
- Select and implement a research-based math intervention program(s)
- Develop accurate and cohesive IEPs
- Develop and implement framework of strategies to individualize instruction
- Use data to inform instruction.
- Develop and implement standards-based report cards (KDES) and end-of-course assessments (MSSD)

## Clerc Center

### Math (continued)

#### FY 2015 Major Activities

- Conducted a two-day math program planning “summit” involving a consultant and school leadership to review best practices in math instruction, provide coaching support to curriculum and instructional support personnel, and develop a long-range vision for math instruction in the schools
- Implemented initial flexible grouping for math in grades 3-8
- Focused training on the use of manipulatives, representations/modeling (Singapore Bars), and other developmentally appropriate math instruction strategies
- Provided training on promoting accessibility to grade-level standards using Universal Design for Learning principles
- Continued work unpacking the math standards and reviewing math progressions across grades

#### Additional Strategies for Objective 2

- Develop a series of informational trainings on high priority differentiation and inclusion needs

*First grader Latrael Fisher works on a math problem with ASL Language Arts teacher Francica Rangel using a program called Monster Math: Word Problem Solving, and using colorful laminated monster props. Latrael used the laptop for pre-assessment and for working on the problems. Then afterwards, for the post-assessment, he signed the problem and explained in ASL how he solved the problems.*

Photo by John Consoli



## Clerc Center

### School Climate

#### Objective 1

By 2018, Clerc Center school personnel will express positive feelings about school morale and involvement in decision making as measured by increasing the percentage of responses in the positive range on the Leadership and Professional Relationships dimensions of the Comprehensive School Climate Inventory (CSCI) to at least 85 percent on each dimension.

#### Strategies worked on in FY 2015

- Select and implement school connectedness strategies for administrators, teachers, and students
- Develop and implement a teacher induction program
- Establish a shared decision-making matrix among administrators, teachers, and staff

#### FY 2015 Major Activities

- Continued work with the Kendall School Climate Committee to design and implement schoolwide activities to enhance school climate
- Established MSSD School Climate Committee to support implementation of PBIS and address other issues of concern to the school climate
- Reviewed and refined implementation of the Employee Relations Committee (ERC) as a way for teachers and staff to raise and resolve issues of concern
- Provided new teachers with a three-day orientation program prior to the fall kick-off
- Designed a pilot induction program for new teachers to be implemented monthly beginning fall of 2015

#### Objective 2

By 2018, MSSD students will express positive perceptions about school safety as measured by increasing the percentage of responses in the positive range on the Rules and Norms and Sense of Physical Security dimensions of the CSCI to at least 85 percent on each dimension and on the Sense of Social-Emotional Security dimension to at least 75 percent.

#### Strategies worked on in FY 2015

- Implement Positive Behavior Interventions and Supports to develop a school climate that supports pro-social behaviors
- Implement the Olweus Bullying Prevention Program with fidelity

#### FY 2015 Major Activities

- Aligned PBIS and Olweus under one core committee at each school with new leadership
- Continued implementation of Tier 1 and began implementation of Tier 2 PBIS strategies
- Provided ongoing orientation to new teachers and staff

#### Additional Strategies for Objective 2

- Redesigned school data systems (PowerSchool) to better support data needs of Olweus

#### Objective 3

By 2018, the Clerc Center community will perceive the school environment as welcoming and physically appealing as measured by obtaining at least 75 percent of responses in the positive range from all stakeholder groups (i.e., students, parents, school personnel) on both the School Connectedness/Engagement and Physical Surroundings dimensions of the CSCI.

#### Strategies worked on in FY 2015

- Establish the Clerc Center's long-term facilities master plan
- Align the existing multi-year furniture replacement, construction, and maintenance plans with the Clerc Center's long-term facilities master plan and implement annual plans to ensure an environment that is welcoming and physically appealing. (Contingent upon resource availability)
- Select and implement school connectedness strategies for administrators, teachers, and students
- Implement strategies that will increase parental involvement in the schools

### School Climate (continued)

#### FY 2015 Major Activities

- Implemented a series of events with families to increase involvement with the school
- Provided several workshops for parents in areas of interest, such a cyber-safety
- Completed a long-range planning with the school's parent-teachers organization
- Sent six families to the American Society for Deaf Children (ASDC) conferenc

#### Additional Strategies for Objective 3

- Review current research on parental involvement
- Conduct interviews and focus groups with parents
- Develop specific action plan projects based on these data



*In April 2015, MSSD hosted a Bullying Awareness Week, as part of its ongoing implementation of the Olweus Anti-Bullying Awareness, an evidence-based program aimed at reducing bullying and harassment. For one of the awareness week activities, a group of students, like Perla Cerritos pictured here, volunteered to play the role of the “ghosts” of people who had died due to bully-related suicides. During their day at school they did not interact with others, but maintained a haunting presence.*

Photo by Susan Flanigan



## V. Research Plan, Priorities, and Projects

The Clerc Center’s Research Agenda guides internal and collaborative research designed to improve the educational outcomes for deaf and hard of hearing children from birth through 21 years of age. It is aligned with the CCSP 2020 and addresses identified gaps in knowledge and research as they relate to national service and demonstration school priority areas. This published list of priorities within the Research Agenda fulfills mandates set forth by the EDA and agreements made with the U.S. Department of Education to “establish and publish priorities for research, development, and demonstration.”

Gaps noted in the Research Agenda are based on current available research and practices as well as on the Clerc Center’s national public input process. The agenda serves to delineate priority areas of focus for internal research, to establish priorities for collaborations with external researchers, and to call attention to key areas that researchers and agencies across the country should consider when identifying areas of research need. Clerc Center research efforts support its mandate to carry out exemplary elementary and secondary education programs, projects, and activities for the primary purpose of developing, evaluating, and disseminating innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments serving individuals who are deaf or hard of hearing across the nation as is mandated by the U.S. Congress and the EDA. The Clerc Center intends to communicate and disseminate findings concerning methods, materials, and ways of organizing research that are shown to be effective or ineffective in the education of students who are deaf or hard of hearing. The Clerc Center recognizes the need for collaboration with external researchers to address key priority areas within its Research Agenda. External researchers who are interested in working with the Clerc Center should use these priorities as a guide for ideas and topics that would be acceptable for collaborative research.

### Establishing the Research Agenda

The Clerc Center’s Research Agenda was established in the spring of 2015 using data from its 2009-2012 public input process and is aligned with the priority areas of the CCSP 2020.

#### Resource 1: Public Input

The formal collection of public input assists the Clerc Center in establishing and publishing priorities for research, development, and demonstration as required by Congress. During the three-year cycle of collection, as accepted by the U.S. Department of Education, input was sought from diverse stakeholder groups and individuals to ensure a broad range of perspectives was obtained. Public input findings from 2009-2012 were published in 2013 as *Critical Needs of Students Who are Deaf or Hard of Hearing: A Public Input Summary*. This summary included an analysis of over 1,400 comments from 775 respondents who provided input based on the following trigger question: “What are the barriers that prevent deaf and hard of hearing students from achieving their academic, linguistic, and social-emotional potential?” The analysis identified four thematic areas in and five major barriers to the education of children who are deaf or hard of hearing. The themes identified were:

- Deaf and hard of hearing students’ need for language and communication access
- Limited resources (e.g., information, training and education, services) available for parents, teachers and professionals, and students who are deaf or hard of hearing
- Need to address deaf or hard of hearing students’ social-emotional needs and development
- Lack of direct service personnel (e.g., teachers, professionals) qualified to meet the various needs of students who are deaf or hard of hearing in K-12

The overarching barriers identified were:

- Need for knowledge and education of caregivers, professionals, and the general public
- Collaborative efforts

- Qualified professionals and services
- Meeting the needs of the student within a given school system
- Child's own development of self-concept

The themes and barriers were similar for all respondents regardless of their background, race, ethnicity, communication modality, or setting in which they worked. This suggested that identified barriers to educating children who are deaf or hard of hearing transcend language, setting, and location. Complete public input findings are available on the Clerc Center website at [www.gallaudet.edu/clerc-center/our-resources/publications/pi-summary.htm](http://www.gallaudet.edu/clerc-center/our-resources/publications/pi-summary.htm).

### Resource 2: CCSP 2020

The Clerc Center held its National Priority Setting Meeting in February 2013. Public input findings were provided to participants to use throughout the process, which resulted in the identification of three priority areas. These priority areas—professional development, family-school/agency partnerships, and collaboration—serve as the foundation for the Clerc Center's national service work for the next five years and are the basis for the national portion of the CCSP 2020. For more information on the CCSP 2020 and national priorities, please see Section V of this chapter about the CCSP 2020.

In addition to the Clerc Center's national service priorities, the CCSP 2020 also includes its priorities for KDES and MSSD, the Clerc Center's demonstration schools. These priorities—reading and writing, mathematics, and school climate—were established as part of the schools' accreditation process, Excellence By Design. To read more about the demonstration school priorities, see the section about demonstration school goals in the CCSP 2020.

### Research Agenda Areas of Focus

The Clerc Center's Research Agenda highlights three areas of focus: 1) family engagement, 2) educational best practices, and 3) social and emotional well-being. The areas of focus are designed to advance knowledge, best practices, curricula, intervention strategies, and resources for children who are deaf or hard of hearing, their families, and those who serve them.

Each area of focus is described below along with related guiding research questions. These questions were devised based on a review of existing research and are consistent with findings

from the Clerc Center's public input process. These research questions will serve as the foundation for the Clerc Center's long-term Research Agenda and will also help to ensure alignment with the CCSP 2020. The Research Agenda will be shared via the Clerc Center's website as well as in its Annual Report of Achievements. Annual updates will inform potential research about the initial development and ongoing refinement of the guiding research questions and related research activities. The Clerc Center recognizes that education is a dynamic field and, as such, the guiding questions and related projects will evolve in relation to changes in knowledge, available resources, and potential collaborating partners.

### Area of Focus #1: Family Engagement

Promoting parental engagement and family-school partnerships emerged as a priority during both the Clerc Center's National Priority Setting Meeting and the KDES/MSSD school accreditation process. This need is consistent with current research and educational practices that indicate the importance of understanding and promoting consistent and substantial parental engagement as crucial to the academic, linguistic, and social-emotional development of young deaf and hard of hearing children. These sources further suggest that a better understanding of how parents perceive their engagement and how schools and professionals foster involvement can minimize barriers and maximize student success.

Family engagement research of school-aged deaf and hard of hearing children is limited. While research shows that early family involvement in early intervention programs is linked with later positive outcomes (Moeller, 2000), the impact of family engagement and its relationship to the long-term successes of deaf and hard of hearing children in school is not known or well understood. For parents of children who are deaf or hard of hearing, involvement and engagement are rooted in parental self-efficacy (Desjardin, 2006), knowledge of the unique needs of the child, successful mediation of the parental stress of raising a child with a disability (Raya, Ruiz-Olivares, Pino, & Herruzo, 2013), and the ability of the parents to navigate their child's disability in the community and at school (Fishman & Nickerson, 2014). Current models (e.g., Hoover-Dempsey & Sandler, 2005) of family engagement and involvement and, ultimately, family-school partnerships may not fully consider these variables and thus may be incomplete for families of students who are deaf or hard of hearing, including those with disabilities. Furthermore, since children who are deaf or hard of hearing are also at risk for multiple disabilities (van Dijk, Nelson, Postma, & van Dijk, 2010),

behavioral challenges (Barker et al., 2009), and academic challenges (Marschark & Knoors, 2012), the role of family engagement and family-school relationships may be complicated in its perception and actualization. The Clerc Center believes parental engagement may be a key factor to long-term positive outcomes for deaf and hard of hearing students with disabilities.

The Clerc Center's focus on family engagement offers opportunities to contribute to the expansion of research in multiple disciplines (e.g., deaf education, special education, family engagement, child development), particularly since gaps have been identified in the research addressing the engagement of families in the education of deaf and hard of hearing children with and without disabilities. Results generated by research in this area will also support the Clerc Center's use of evidence to develop resources and information related to family engagement and advocacy, including a Parent Advocacy Literature Review and development of a Parent Advocacy app. It will further assist the demonstration schools in selecting possible strategies to facilitate family engagement and enhance school climate.

The research questions below are intended to guide possible research efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- How do parent engagement and parent-school partnerships impact the academic, emotional, or behavioral outcomes of a student?
- What is the role of parent advocacy, and what are the variables that may influence a parent's ability, knowledge, and/or willingness to advocate for the needs of his or her child?
- What are the perceptions of parents and professionals regarding family involvement and engagement, and how are these perceptions similar or different among these groups?
- Is the current Hoover-Dempsey model of parental involvement an accurate model for families of children who are deaf or hard of hearing?
- What school-based initiatives could yield positive parent-school partnerships for parents who do not feel knowledgeable about the needs of their child? How are the

initiatives different than those for parents who feel more confident in their knowledge?

- Are there any established tests of measures that would effectively measure parent engagement in education or in other critical aspects in the lives of children who are deaf or hard of hearing?

### Area of Focus #2: Educational Best Practices

Professional development for educators new to working with children who are deaf or hard of hearing and for experienced educators addressing new content standards, instructional practices, and related assessments was identified as a priority during the Clerc Center National Priority Setting Meeting and for educators in the Clerc Center's demonstration schools.

The majority of professionals responsible for teaching or providing services to deaf and hard of hearing children are not deaf or hard of hearing themselves, and they likely have limited experience or training in working with students who are deaf or hard of hearing (e.g., Ferrell et al., 2014). This limited experience coupled with the ever-evolving demands of professionals creates further challenges to effectively plan for and meet the needs of individual students. Teachers experienced in working with deaf and hard of hearing students face their own challenges, including increasing accountability, a need to implement rigorous standards-based instruction and related assessments, and the ongoing move towards data-based decision making.

Current research poses significant gaps in the knowledge and understanding of what educational best practices are effective for specific subgroups of deaf and hard of hearing students from birth to high school (e.g., students exposed to sign language from birth vs. those who learn sign language later). There is a clear need for more qualified professionals, more resources, and a better understanding of how to adapt and implement evidence-based practices during academic instruction and early intervention. Some research is beginning to emerge identifying evidence-based programs and interventions that may be beneficial for children who are deaf or hard of hearing. For example, Ferrell et al. (2014), Marschark & Knoors (2012), and Luckner (2011) have all published in-depth summaries of evidence-based programs for reading, writing, and math for deaf and hard of hearing children. However, little is known about school-wide implementation, efforts to make these practices more consistent across educators, and what progress can be expected if programs are implemented with fidelity.

The Clerc Center's focus on educational best practices will contribute to a better understanding of effective practices in the classroom, at school, and at home. Results in this area will support the Clerc Center's development of resources and information, including new training, workshops, and printed resources for professionals. Further, the research will assist the demonstration schools in their practice of using research and data to inform instruction and implement effective classroom instruction and related student interventions.

The research questions below are intended to guide possible efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- What are the current evidence-based strategies for reading and mathematics interventions that may be applicable for students who are deaf or hard of hearing? What are the necessary modifications, if any, to those intervention programs in order to yield positive results?
- How can alternative classroom designs (e.g., grouping students by skills rather than grade, designing classrooms to capitalize on visual gain) assist in academic outcomes?
- Are there any strategies that effectively mediate early intervention delivery services to foster long-term language development?
- What is the role of new technology (e.g., LENA technology for spoken language, on-line testing vs. paper testing) in ensuring student outcomes are measurable?

### Area of Focus #3: Social and Emotional Well-being

Furthering the knowledge of the social and emotional well-being of deaf and hard of hearing children and young adults was identified as a need by the Clerc Center's public input process and the National Priority Setting Meeting. The public input summary reports that while there is considerable information about what deaf and hard of hearing children and young adults cannot do or do not do well related to their social and emotional well-being, little is known about the characteristics or strengths of those children who are happy and healthy.

Research in this area has historically had a "weakness-based" or mental-health focus (e.g., Fellingner et al., 2005; Fellingner et al., 2007; Fellingner et al., 2009) rather than a "strength-based" one. Emerging research suggests the importance of identify-

ing the proactive emotional and social strategies successful deaf and hard of hearing young adults use to navigate daily challenges as well as those associated with critical milestones in their lives, such as transitioning from school to college and/or work (Cawthon, Schoffstall, & Garberoglio, 2014; Luft, 2013; Luft & Huff, 2011). Strength-based research specific to children who are deaf or hard of hearing suggests that variables such as self-control, sustained motivation, reframing negative thoughts, goal-oriented behavior, persistence, choosing social and professional settings that are a good fit, creatively learning proactive strategies, and resourcefulness may promote more healthy outlooks on life and greater overall happiness (Jacobs, 2012). Moving towards a strength-based approach would allow for investigation into the protective factors, resiliency factors, and positives of being deaf or hard of hearing.

Although societal challenges to social and emotional well-being of students who are deaf or hard of hearing may not be preventable, the Clerc Center seeks to provide these students and their families with tools and knowledge that can provide more positive social and emotional experiences. A strength-based focus on 'what works' offers a richer understanding of quality social participation, characteristics of healthy personality (e.g., Hintermair, 2008), and a better understanding of the key variables that educators can foster to ensure deaf and hard of hearing children can become resilient self-advocates and ultimately happy and healthy adults.

There is also a need to consider how professionals working with and teaching deaf and hard of hearing children can foster positive social and emotional well-being for both the child and the family. The need for collaboration amongst professionals was often highlighted as essential to this effort. At the Clerc Center, the demonstration schools have recognized this by working to increase positive supports for students that ensure positive behavioral outcomes and implementing evidence-based programming aimed at reducing bullying and harassment (e.g., Olweus, PBIS).

The Clerc Center's focus on social and emotional well-being as part of its Research Agenda offers opportunities to better understand the whole child and family using a lens of strengths rather than deficits. Research in this area of focus has the potential to allow multiple disciplines (e.g., deaf education, special education, family engagement, child development) to consider deaf and hard of hearing children through a positive lens, something that has historically been lacking in the research. Results generated by efforts in this area will also support the Clerc Center's development of resources and information, including an on-line training designed to teach

professionals how to foster social and emotional well-being in their students. Further, research will support the demonstration schools in maintaining their commitment to promoting positive behavior, reducing the prevalence of bullying, and fostering a positive sense of community.

The research questions below are intended to guide possible research efforts internally, externally, and collaboratively. These research questions may be addressed by the Clerc Center but are also being shared in the hopes that other potential researchers will consider these topics and their related needs within the field of deaf education:

- What are the attributes that foster a positive sense of self leading to resiliency?
- Are there current measures and instruments available to help school-based personnel understand a child's strengths rather than weaknesses? How can this recognition lead to greater social and emotional well-being?
- Are school-wide intervention programs (e.g., Olweus, PBIS) designed to improve the social-emotional health of deaf and hard of hearing students effective?
- How does parent and/or educator self-efficacy and knowledge of deafness contribute to the social and emotional well-being of a student who is deaf or hard of hearing?
- What is the role of parent and/or educator advocacy and expectations on academic success and persistence of a student who is deaf or hard of hearing?

The Clerc Center strongly believes that by establishing and publishing its priorities for research, development, and demonstration in family engagement, educational best practices, and social and emotional well-being, it can establish collaborations with researchers across the country and draw attention to these areas of need as well as focus its efforts within the demonstration schools. This work affords the opportunity to advance knowledge, best practices, curricula, intervention strategies, and resources for children who are deaf or hard of hearing, their families, and those who serve them.

### Scope of the Research Agenda

The scope of the Clerc Center's Research Agenda covers applied research that will be carried out by the Clerc Center and other programs and organizations with which it collaborates. For example, while the Clerc Center may not initiate basic

research in language acquisition and learning, it will encourage collaborative research in those areas where significant knowledge gaps exist through networking with other programs and organizations.

The Clerc Center also welcomes ongoing collaborations with research partners who engage in basic and applied research in identified priority area topics. Cooperative research includes research in which the Clerc Center has not been involved in the study design but agrees to participate by recruiting subjects and participating in data collection. The principal investigators will be encouraged to share their research findings with the Clerc Center to further its innovation and outreach work.

Research projects are implemented in two categories:

1. Current projects that fit the priority research topics identified in this Research Agenda and other immediate, important projects that can be conducted with currently available resources
2. Future research studies under consideration that will require additional resources, including grant funding or collaborative agreements, to plan and implement

### Project Types Defined

Following the subsequent sections detailing the three areas of focus is a data table which includes the names of the projects, the type of each project and its funding, and an estimated number of Clerc Center staff that were involved with the project. Both internal and external funding sources are reported.

Projects at the Clerc Center include:

1. Internal – Projects conducted solely by Clerc Center personnel
2. Internal and collaborative – Projects that originated with and were funded by the Clerc Center and involve researchers outside of the institution
3. External – Projects funded and led by researchers outside of the Clerc Center but involve Clerc Center personnel

Specifically, internal funding refers to a project with fiscal resources allocated primarily by the Clerc Center, and, where appropriate, the project budget, the internal fiscal allocation for FY 2015, is provided. External funding sources are those that were provided by outside researchers, collaborators, or organizations and as such no budget information is provided.



External projects often require Clerc Center personnel to facilitate logistics or data collection or to participate in the research study but do not necessitate the contribution of fiscal resources. Research projects resulting from both Clerc Center and outside funding are considered to be both internal and external.

### Research and Evaluation Activities

In accordance with the EDA, the Planning, Development, and Dissemination unit of the Clerc Center leads the development, evaluation, and dissemination of innovative curricula, instructional techniques and strategies, and materials that can be used in various educational environments by educators and families of deaf and hard of hearing students throughout the nation. Five research and evaluation staff members and two graduate assistants within Planning, Development, and Dissemination supported research and evaluation activities consistent with the above federal mandates.

The costs of research and evaluation activities in FY 2015 were \$380,626 in payroll and \$23,685 in non-payroll expenses.

During FY 2015, the Clerc Center focused on establishing a new Research Agenda aligned with its strategic plan, the CCSP 2020. It also engaged in a limited number of related internal research activities. The Clerc Center also focused research and evaluation resources to support the planning and development of select CCSP 2020 national service projects. This support included conducting literature reviews, leading guided discussions related to the research, and fostering project leaders understanding of research and current practice related to their assigned projects. A significant amount of staff time was also invested in the design and implementation of evaluation activities to ensure that the Clerc Center obtained information about the relevance, usefulness, and quality of its new and forthcoming resources.

Examples of these activities included:

- Compilation and analysis of feedback pertaining to Students with Cochlear Implants: Guidelines for Educational Program Planning. This feedback was then used to guide product revision prior to completion, publication, and dissemination.
- Compilation and analysis of feedback pertaining to Classroom Interpreting for Students Who are Deaf or Hard of Hearing: A Series of Guides. This feedback was then used

to guide product revision prior to completion, publication, and dissemination.

- Met with project leaders to discuss project design and to plan related research and evaluation needs.

During FY 2015, work also began to enhance the Clerc Center's ability to better measure its impact and reach across the nation. These efforts can best be seen via the Clerc Center's website, on which identified resources are being tracked via an electronic pop-up survey that collects targeted demographic information. In addition, members of research and evaluation also spent time developing print evaluation materials to accompany Clerc Center select resources and trainings.

### Summary of FY 2015 Research Projects and Activities

#### Area of Focus #1: Family Engagement

##### Critical Review of Measures of Parent Engagement and Involvement

(Internal Research Project)

The Clerc Center investigated measures of parental engagement and involvement currently used by professionals. This information will inform Clerc Center work in this area. Since these measures have not typically been used with children who are deaf or hard of hearing, the information could be useful to other researchers as well. Results will be shared electronically via an on-line website during FY 2016.

##### Parent Advocacy Survey

(Internal Research Project)

The Clerc Center designed a survey to better understand the advocacy process experienced by parents of deaf and hard of hearing children. The Clerc Center intentionally selected variables that are unique to families of children who are deaf or hard of hearing. Over 1,000 parents and caregivers completed the survey. Preliminary analysis suggests that advocating was, at times, a difficult and frustrating process and that it required parents to rely on numerous support networks specific to the needs of the child. During the latter part of FY 2015 and throughout FY 2016, results will be written and submitted for publication. Findings from this study will also support the development of CCSP 2020 projects.



## Area of Focus #2: Educational Best Practices

### American Sign Language Content Standards K-1

(Collaborative Research Project; Principal Investigators: Christen Szymanski, PhD, Clerc Center, and Rory Osbrink, California School for the Deaf)

During FY 2015, a partnership was established with the California School for the Deaf, Fremont (CSD) to complete K-12 American Sign Language (ASL) Content Standards and benchmarks. The Clerc Center maintains its commitment to ensuring that the benchmarks are rooted in evidence and reflect the language and rigor of the Common Core State Standards (CCSS). During FY 2015, drafts of grades K-5 standards and benchmarks were developed and grades K-2 were reviewed by ASL instructors at the national ASL Round Table (ASLRT). The standards and benchmarks will be directly linked to the related research summary and rationale. During FY 2016, CSD plans to complete the standards and benchmarks for grades 6-12. Filming of the ASL version of the K-5 standards is also anticipated.

### H4 Develop an Information Series for Professionals

(Internal Research Project)

To support the development of a bookmark series for professionals with limited knowledge and experience working with deaf and hard of hearing students, a literature search was con-

ducted to determine: 1) what information currently exists for educators working in general education environments, 2) gaps in available resources for this group of professionals, and 3) information that may support these professionals feeling better prepared to work with deaf and hard of hearing students. Information gathered was used to determine topics for the bookmark series which is to be completed in FY 2016.

### H4 Understanding Best Practices - Collaborative Efforts

(Internal Research Project)

To understand how organizations can better work together to meet the needs of deaf and hard of hearing children and their families, the Clerc Center completed a review of the current literature and practices related to collaboration. It explored the foundational principals necessary for effective collaborations as well as potential pitfalls and challenges. An article based on this work is in development for the 2016 issue of Odyssey focusing on collaboration.

## Area of Focus #3: Social and Emotional Well-being

As part of the Research Agenda development process, a review of the current literature and practices related to social and emotional well-being was completed in FY 2015. This information will be used to support future internal research projects, collaborations with external researchers, and the development of CCSP 2020 projects in this area.

## FY 2015 Research Projects Summary Information

Project Title	Funding Source	Type of Project	Internal Fiscal Allocation for FY 2015	Estimated number of Clerc Center Staff Involved
Critical review of measures of parent engagement and involvement	Internal	Internal	Not Applicable	1 Staff
Parent Advocacy Survey	Internal	Internal	Not Applicable	3 Staff
American Sign Language (ASL) Content Standards K-12	Internal	Internal	\$15,000	4 Staff, 1 Graduate Student
Information series for professionals	Internal	Internal	Not Applicable	1 Staff
Understanding best practices - collaborative efforts	Internal	Internal	Not Applicable	1 Staff

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## VI. Training and Technical Assistance

During FY 2015, the Clerc Center strategically allocated resources to reach families and professionals working with underserved populations and within all school systems where students who are deaf or hard of hearing are educated. The Clerc Center continues to ensure that information and support are available to meet the needs of a broad range of stakeholders in both of these groups.

The Clerc Center provided support to families and professionals through the distribution of products and publications; direct outreach by exhibiting and presenting at conferences and events; and technical assistance and training through training workshops, a series of e-learning opportunities, collaborative relationships, and consultative relationships with programs across the country.

### Products and Publications

During FY 2015, the Clerc Center distributed products and publications at conferences and exhibits as well as through downloads from the Clerc Center website, e-mail distributions, social media, and sales. The number of materials distributed through each channel are as follows:

- Free distribution of products: 39,256 publications and products
- Free distribution of on-line resources and publications through e-mail: 22,545
- Free distribution of information and resources through social media (Facebook, Twitter, National Outreach Resources network, Deaf Students with Disabilities Network): 91,152
- *Odyssey* magazine subscription list: 21,918 (includes schools, individual educators, libraries, parents, and other stakeholders); an additional 2,548 copies of the magazine were distributed at conferences and exhibits; articles can also be downloaded for free from the Clerc Center website
- Sales: 7,411 products

### Web Products

- *Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or Hard of Hearing* includes seven web-based modules for early interventionists, allied professionals, parents, families, and caregivers. This project is a collaboration with Boston Children's Hospital and is available in ASL, spoken English, and Spanish.
- *Educating Students Who are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings* includes three on-line modules: an introduction to having deaf and hard of hearing students in the classroom, instructional considerations for the classroom, and educational planning. This product was done in collaboration with the Texas Education Service Center, Region 20.
- The Early Intervention Network is an on-line resource for early intervention providers that highlights programs around the country that are using five overarching factors found to be supported in early intervention literature as integral to the development of linguistic competence. This product will include a discussion forum for stakeholders.
- The Deaf Students with Disabilities Network, an on-line resource for educators and parents of deaf and hard of hearing students with disabilities, now has 718 members and is designed to promote information sharing among people living and working with deaf and hard of hearing students with disabilities.
- The National Outreach Resources network, a website for outreach providers to interact and share resources to support deaf and hard of hearing children (birth through age 21), especially those in mainstream environments, continues to add new resources and information and now has over 762 members.
- Archived webcasts: "More Than Meets the Eye: An Introduction to Autism Spectrum Disorders" with Dr. Christen Szymanski, "Strategies to Prevent Visual Split-Attention in Classes for Students Who are Deaf or Hard of Hearing" with Dr. Susan Mather, "How Early Intervention Can Make a Difference: Research and Trends" with Dr. Beth Benedict, and "What the Eyes Reveal About the Brain: Advances in Human Language Acquisition--Insights from Visual Language and Visual Learning (VL2) and the Brain and Language Laboratory for Neuroimaging (BL2)" with

Dr. Laura-Ann Petitto are available for viewing on our website and have over 8,300 viewings to date.

### Publications

- *Odyssey* magazine—The 2015 issue of this publication focused on the influence, impact, and opportunity of technology for students who are deaf or hard of hearing. This issue featured 15 articles by 29 authors composed of families and professionals from around the country.
- *Odyssey Extra*—An on-line supplement to the *Odyssey* print issue was launched adding five new articles to the 2014 issue on “High Expectations for All: Their Importance and Influence.”
- *Classroom Interpreting for Students Who are Deaf or Hard of Hearing: A Series of Guides for Parents, Professionals, and Students*—This series of publications, developed through a collaboration with Dr. Brenda Schick ([www.classroominterpreting.org](http://www.classroominterpreting.org)) and Boys Town National Research Hospital, provides guidance to administrators, teachers, interpreters, parents, and students on the use of classroom interpreters. This work focuses on the effective involvement of educational interpreters working with students who are deaf or hard of hearing. The publications are now available on the Clerc Center website as well as on the Boys Town National Research Hospital Center for Childhood Deafness Auditory Consultant Resource Network website and the Classroom Interpreting website. The guides for parents and students are also available in Chinese and Spanish.
- *Students with Cochlear Implants: Guidelines for Educational Program Planning*—This comprehensive set of guidelines reflects the collaborative work between the Clerc Center and the Deaf and Hard of Hearing Program of Boston Children's Hospital. It is a tool designed to facilitate the planning of appropriate educational programs, supports, and services for students using cochlear implant technology in the classroom. It is available online as well as in print.
- *A Preliminary Study on Interpreting for Emergent Signers*, by Caitlin Smith and Danica Dicus, was published in the quarterly journal *Sign Language Studies* (winter 2015, volume 15, issue 2) published by Gallaudet University Press. This study addresses the gap in research that is revealed when considering the interaction between emergent signers and the interpreting field.
- “Getting Started: Hearing Screening, Evaluation, and Next Steps,” a chapter in the textbook *Deaf and Hard of Hearing Infants, Toddlers, and Their Families: An Interdisciplinary Perspective* was co-authored by Debra Nussbaum, project manager at the Clerc Center, with Linda Lytle, Rachel St. John, and Angela Shoup. It will be published in the fall of 2015.
- *Cochlear Implants: Considerations for Families (and the Professionals Who Work Alongside Them)* was authored by Debra Nussbaum for the *Raising and Educating Deaf Children* quarterly eBulletins that will be published in October 2015.

### Training

The Clerc Center provided workshops and training to 9,835 individuals who work with students who are deaf or hard of hearing. Workshops took place at mainstream and residential academic programs, professional conferences, training centers, Family Learning Vacations, and community programs for families. The goal of the Clerc Center training was to provide skills and knowledge to educators, service providers, and families who work with students who are deaf or hard of hearing with a range of abilities and needs.

During FY 2015, the Clerc Center provided a wide variety of training, including on-site training and eLearning opportunities. The Clerc Center provided one Visual Phonics workshop, three literacy-based workshops, nine social-emotional workshops, one workshop on special education advocacy, five language planning workshops, one presentation on current research on deafness and deaf education, three workshops addressing audiology and early intervention, and five presentations designed for people who have limited knowledge about the products and services offered by the Clerc Center. Clerc Center representatives provided 30 presentations, including two plenary sessions at state, regional, and national conferences such as the Council for Exceptional Children conference, the Northeast Cochlear Implant conference, the American Speech-Language-Hearing Association conference, the Midwest Conference of Deaf Education, the National American Sign Language and English Bilingual conference, and the Early Hearing Detection and Intervention conference. The Clerc Center also provided over 30 hours of on-site training to parents of deaf or hard of hearing children at three state family learning conferences.

In an effort to reach individuals working with rural and mainstreamed populations, the Clerc Center continues to target marketing and outreach efforts for its distance education training opportunities. Last year's webcasts were re-disseminated via our electronic newsletter and social media outlets (Facebook and Twitter) in order to expand their reach and impact. In addition to the re-dissemination of these webcasts, the Clerc Center has launched two new web products (Educating Students Who are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings and Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or Hard of Hearing) designed to provide information and resources to educators who work with students who are deaf or hard of hearing in a variety of academic settings and to family members with children who are deaf or hard of hearing.

### Outreach - Conferences and Exhibits

During FY 2015, the Clerc Center sent representatives to 17 events and conferences to make presentations, distribute and showcase materials, and provide information and support to event attendees. Events are carefully selected to ensure attendees are representing a wide cross-section of families and professionals, with an emphasis on those who work with traditionally underserved students and in mainstream programs. These events included participation in Virginia State's Opening Doors-Unlocking Potential conference, the Hands & Voices Leadership Conference, Clarke Mainstream Services Annual Fall Conference, the Association of College Educators of the Deaf and Hard-of-Hearing General and Special Education Conference, the California Educators of the Deaf and Hard of Hearing conference, the Early Hearing Detection and Intervention Teaching and Learning Conference, the Council for Exceptional Children conference, the National American Sign Language and English Bilingual Consortium for Early Childhood Education, the National Outreach Conference, the Conference of Educational Administrators of Schools and Programs for the Deaf, the National Academic Bowl, the Educational Audiology Association, the American Society for Deaf Children conference, the Northeast Cochlear Implant Conference, the National Black Deaf Advocates conference, and the Registry of Interpreters for the Deaf conference.

In order to expand outreach at these events, the Clerc Center provided showcase presentations and poster sessions in addition to attending caucus and board meetings for its target audiences. Through these events, the Clerc Center shared materials, resources, and support to more than 14,300 participants.

### Collaborations, Consultation, and Technical Assistance

The Clerc Center provided consultation and technical assistance to schools and programs at their request and sought collaborations with organizations and programs for joint initiatives. The following is a summary of the major collaborations in these categories that occurred in FY 2015.

#### Common Core State Standards and National Assessments

There are six consortia developing assessments for the Common Core State Standards (CCSS) in English/language arts and Mathematics: two consortia for the general assessments (Smarter Balanced Assessment Consortium [SBAC] and Partnership for Assessment of Readiness of College and Careers [PARCC]), two focused on alternative assessments (the National Center and State Collaborative and Dynamic Learning Maps), and two focused on creating assessments for English language learners (WIDA-ASSETS and ELPA21). The Clerc Center was involved in ensuring that the needs of students who are deaf or hard of hearing were considered throughout assessment development. The vice president of the Clerc Center was invited to serve on a number of committees supporting assessment development.

He continued to serve as one of 10 representatives on the Students with Disabilities Assessment Advisory Task Force established by the Council of Chief State School Officers (CCSSO). This national task force provided feedback to all six consortia groups by working to understand the demands of the CCSS and their impact on assessments as they relate to students with disabilities. As a member of the PARCC Access, Accommodations, and Fairness Technical Working Group, the vice president advised PARCC developers on issues of accessibility, accommodations, and fairness, helping to ensure assessments developed would be accessible while consistent with the initial vision for the assessment system. Throughout FY 2014, the vice president provided consultation to the SBAC and PARCC committees on a range of issues related to the assessment of students who are deaf or hard of hearing.

In addition, in FY 2015 the Clerc Center provided feedback to the PARCC accessibility and accommodations work group team members responsible for developing accommodations for students who are deaf and use ASL.



### **VL2—A Science of Learning Center on Visual Language and Visual Learning**

The Clerc Center continued its collaboration with Visual Language and Visual Learning (VL2), one of six such centers funded by the National Science Foundation. The purpose of VL2 is to gain a greater understanding of the biological, cognitive, linguistic, sociocultural, and pedagogical conditions that influence the acquisition of language and knowledge through the visual modality.

As part of this collaboration, the Clerc Center worked with VL2's preschool through grade 12 engagement manager to support dissemination of materials to birth to grade 12 educators.

In FY 2015, the Clerc Center collaborated with VL2 for the following activities:

- During the fall of 2014, the Clerc Center hosted two graduate students from VL2's doctoral program in educational neuropsychology. Students observed several classes, met with teachers and administrators, and led a parent-workshop on early language development.
- The Clerc Center shared VL2 research briefs and information about their Parent Information Package, Growing Together, through exhibits, training, social media, and other dissemination mechanisms.
- The Clerc Center published an article about VL2 bilingual storybook apps, "Bilingual Storybook Apps: An Interactive Reading Experience for Children" in the 2015 issue of *Odyssey* magazine.

### **Ohio Department of Education**

The Clerc Center maintained its partnership with the Ohio Department of Education to focus on the provision of state-level, standards-based assessments for students who are deaf or hard of hearing as stipulated by the U.S. Department of Education. Ohio had previously begun its transition to the CCSS and indicated its intention to participate in the PARCC test consortium, and the Clerc Center followed suit. In FY 2015 there was considerable debate in the Ohio legislature regarding the CCSS and PARCC assessments. While Ohio ultimately adopted the PARCC and a new "next generation" science assessment for 2015, the lengthy process delayed finalizing the Clerc Center agreement until mid-February of 2015. This did not allow sufficient time to negotiate an agreement with PARCC and Pearson, the vendor, nor to complete the

extensive preparation necessary for infrastructure testing, field testing, and preparing teachers and students for the significant change these new on-line assessments mandate before testing began in March. As a result, the Clerc Center was only able to provide the paper-based Ohio Graduation Test (OGT) at the high school level and the performance-based Alternate Assessment for Students with Significant Cognitive Disabilities. The Ohio Achievement Assessments (OAA) was no longer available and thus could not be administered to students in grades three through eight. The Clerc Center could not administer elementary and middle school assessments in reading/language arts and mathematics during the 2014-2015 school year as required by the EDA. While the Clerc Center will publicly report assessment results for students in grade 10 that took the OGT as well as an adequate yearly progress (AYP) determination for MSSD, it will not be able to publicly report results for students in grades three through eight or an AYP determination for KDES. The Clerc Center has signed a partnership agreement with the Maryland State Department of Education for the 2015-2016 school year to ensure KDES students in grades three through eight and high school students at MSSD take the required assessments in reading/language arts and mathematics and that the Clerc Center can publicly report assessment results and AYP determination for the upcoming school year as required by the EDA.

### **Gallaudet University Regional Centers/Clerc Center Collaboration**

The Clerc Center collaborated with the Gallaudet University Regional Centers (GURCs) to provide support for the fifth National Outreach Conference that was held in April 2015. The conference targeted outreach providers actively involved in the education of deaf and hard of hearing children (birth through age 21) and provided opportunities for networking and coalition building for outreach providers. The Clerc Center facilitated a structured networking session for all participants to encourage sharing of outreach strategies. The Clerc Center also continues to collaborate with the GURCs to coordinate training and technical assistance and increase dissemination in each region.

### **Pepnet 2**

The Clerc Center continued its collaboration with the staff of pepnet 2 to support the transition of deaf and hard of hearing students from secondary to postsecondary education and employment settings. Pepnet 2's mission is to improve the postsecondary outcomes of deaf and hard of hearing students.



During FY 2015, the executive director of Planning, Development, and Dissemination continued to serve on the pepnet 2 advisory panel, providing insight into the transition needs of deaf and hard of hearing high school students as well as allied professionals and families. In January 2015, the Clerc Center supported the Building State Capacity Summit to Address Critical Issues in Deaf Education: Transition from Secondary Education to Postsecondary Options by providing Clerc Center staff members to facilitate working sessions. This summit provided participants with an opportunity to learn from content experts, meet with state team members, and exchange information related to developing and implementing state team plans. In May 2015, Clerc Center staff member Dr. Nancylynn Ward filmed a webinar, “Taxonomy of Student-Focused Transition Planning,” for the pepnet 2 series Taxonomy for Transition Programming. The Clerc Center and pepnet 2 will also be partnering on the 2016 issue of *Odyssey* to share the work that has occurred through the Summit Series, focusing on the development, implementation, and maintenance of state-level collaborations—the planning processes undertaken by the state teams, including the successes and challenges they experienced and the outcomes that were achieved.

### **Boston Children’s Hospital**

The multi-year collaboration with Boston Children’s Hospital produced two new products. The first is *Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or Hard of Hearing*, a web-based product that supports professionals, families, and caregivers of young children in their understanding of the importance of early identification, intervention, and language acquisition for the development of linguistic competences in children who are deaf or hard of hearing. The second is *Students with Cochlear Implants: Guidelines for Educational Program Planning*, a publication of guidelines to help support full linguistic access for students with cochlear implants. These revised guidelines support educational program planning regardless of the language or communication modality used, thereby serving a wide range of student needs. The Clerc Center continues to collaborate with Boston Children’s Hospital in the dissemination of these products through co-presenting at conferences such as the Northeast Cochlear Implant Convention, exhibiting at appropriate events, and through coordinated marketing plans.

### **Texas Education Service Center, Region 20**

The Clerc Center collaborated with the Texas Education Service Center, Region 20, to develop *Educating Students Who are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings*, a product composed of three on-line modules. These modules were developed for educators in general education programs who have limited experience working with deaf and hard of hearing students. The modules provide introductory information about deafness as well as information on how to support the effective education of children who are deaf or hard of hearing in mainstream settings.

### **Holley Institute**

The Clerc Center has had an ongoing relationship with the Holley Institute, located in Detroit, Michigan, supporting its efforts to provide training and technical assistance to families of deaf and hard of hearing children in Michigan with an emphasis on families of diverse racial and ethnic backgrounds. The Clerc Center has sent trainers and consultants to the Holley Family Village in Brooklyn, Michigan, to train parents and families of deaf and hard of hearing children and to provide them with information on evidence-based practices in the areas of social-emotional development, transition, parent advocacy, and literacy. This year’s collaboration involved providing training on early literacy and parent advocacy and extended to involve funding support from Madonna University’s Deaf Literacy Program and a trainer from the Texas School for the Deaf Outreach Program.

### **Outreach Efforts by Region**

During FY 2015, the Clerc Center, in collaboration with efforts by the GURCs, documented 37,448 people served throughout the various geographical regions of the country through training and technical assistance, information dissemination, and exhibits/performances. Technical assistance refers to services that the Clerc Center provides to cooperating programs or assistance to individuals, programs, or agencies in relation to educating students who are deaf or hard of hearing. It includes information sharing and referrals, eLearning opportunities, and training about programs or strategies to further and support the education of deaf and hard of hearing children and their families.

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Information dissemination refers to information that was specifically requested and then disseminated, often through social media, individual e-mails, calls to Clerc Center teachers and staff, and in packets for conference participants. Exhibits and

performances include exhibit booths of products and services offered by the Clerc Center at national and regional conferences related to serving children who are deaf or hard of hearing.

### Training and Technical Assistance, Information Dissemination, and Exhibits and Performances

Region	Training and Technical Assistance		Information Dissemination		Exhibits and Performances		Total	
	Activities	Served	Activities	Served	Activities	Served	Activities	Served
International	0	0	5	5	0	0	5	5
Midwest	15	523	14	32	5	2,403	34	2,958
National	18	1,479	8	8	2	4,250	28	5,737
Northeast	803	5,009	222	951	8	2,410	1,033	8,370
Pacific	168	1,526	0	0	3	1,450	171	2,976
Southeast	13	265	20	22	8	4,570	41	4,857
Southwest	23	340	50	95	2	4,800	75	5,235
Western	11	693	6	6	6	6,530	23	7,229
Unknown	0	0	81	81	0	0	81	81
<b>TOTAL</b>	<b>1,051</b>	<b>9,835</b>	<b>406</b>	<b>1,200</b>	<b>34</b>	<b>26,413</b>	<b>1,491</b>	<b>37,448</b>

### Types of Requesting Programs Served

The recipients of the training and technical assistance and disseminated information varied considerably. In FY 2015, they included early intervention professionals, schools that serve deaf and hard of hearing students, teachers and administrators in general education programs, students enrolled at a college or university, professionals who run teacher training programs, professionals who work at hospitals, parent organizations, individuals served by nonprofit organizations, parents and caregivers of students who are deaf or hard of hearing,

and others. The next two charts illustrate the various types of programs requesting training and technical assistance by geographic region and similar data about information that was disseminated. Please note that totals for overall training and technical assistance and information dissemination on these two tables vary from the totals on the preceding chart due to the diversity of those receiving the information from a single training or event. For example, a teacher from a school for the deaf and a teacher from a general education program could attend the same workshop.

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### Training and Technical Assistance - Types of Requesting Programs Served

Region	Early Intervention	School for the Deaf	Main-streaming/ Inclusion	Post-Secondary	Organization/ Agency/ Community	Hospital/ Home-bound	Other Setting	Unknown	Total Requested
International	0	0	0	0	0	0	0	0	0
Midwest	2	10	7	0	4	0	0	0	23
National	6	2	5	8	2	0	0	1	24
Northeast	754	16	5	15	16	0	3	21	830
Pacific	68	88	0	3	15	0	1	0	175
Southeast	3	2	6	0	3	0	0	2	16
Southwest	0	8	4	2	3	0	3	3	23
Western	0	6	1	0	2	0	0	5	14
Unknown	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>833</b>	<b>132</b>	<b>28</b>	<b>28</b>	<b>45</b>	<b>0</b>	<b>7</b>	<b>32</b>	<b>1,105</b>

### Information Dissemination - Types of Requesting Programs Served

Region	Early Intervention	School for the Deaf	Main-streaming/ Inclusion	Post-Secondary	Organization/ Agency/ Community	Hospital/ Home-bound	Other Setting	Unknown	Total Requested
International	0	0	0	1	0	0	1	3	5
Midwest	1	3	1	1	4	0	3	2	15
National	0	0	0	0	0	0	5	3	8
Northeast	93	16	8	17	28	0	17	126	305
Pacific	0	0	0	0	0	0	0	0	0
Southeast	0	2	2	5	5	0	4	3	21
Southwest	0	15	17	4	12	0	2	0	50
Western	0	0	0	0	2	0	3	1	6
Unknown	0	0	0	0	0	0	0	81	81
<b>TOTAL</b>	<b>94</b>	<b>36</b>	<b>28</b>	<b>28</b>	<b>51</b>	<b>0</b>	<b>35</b>	<b>219</b>	<b>491</b>

### FY 2015 Outreach Efforts

Outreach efforts in FY 2015 focused on contacting and building relationships with state and district-level programs, national organizations, and state outreach programs serving students who are deaf or hard of hearing. As part of this effort, the Clerc Center focused on the development of targeted distribution lists and explorations for implementing a Customer Relations Management system. In addition, outreach was significantly increased by implementing new strategies to enhance our social media (Facebook and Twitter) dissemination efforts. For example, our Facebook reach has more than tripled over the last year as we implemented these strategies. The Clerc Center continued to support the planning of the National Outreach Conference, which provided opportunities for networking and coalition building to outreach providers, and the planning of a professional development summit for professionals in the rural mountain states. These efforts will continue to grow as a part of the dissemination planning strategy in the CCSP 2020.

The Clerc Center has developed several knowledge-building products to reach stakeholders via distance learning formats. It has developed three multi-module, on-line web products as well as maintained an on-line network for resource sharing and networking for educators and families focused on deaf students with co-occurring disabilities.

The Clerc Center continues to be intentional in the selection of conferences and events in order to reach professionals and parents of traditionally underserved students as well as educators and families in general education programs. The Clerc Center has redesigned its website, including the Info to Go section, expanding resources available to families and professionals working with students who are deaf or hard of hearing and making the site easier to use. This redesign includes a dedicated page for families of deaf and hard of hearing students and a page for professionals new to deaf education. The Clerc Center will continue to expand its outreach efforts to reach the identified audiences mentioned above as part of its strategic plan, CCSP 2020.



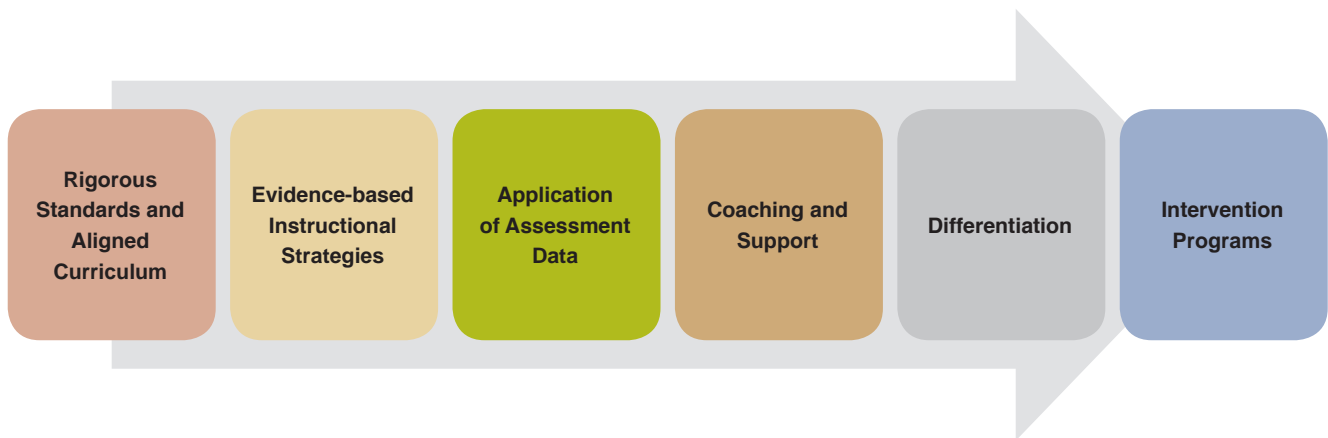
*Staff from the Planning, Development and Dissemination unit travel to national and regional conferences to share information on Clerc Center resources for educators, professionals, and families involved with the education of deaf and hard of hearing students. Pictured here Mary Lightfoot, project manager, Planning, Development and Dissemination shows the Clerc Center's 2015 Odyssey magazine to Aimee Stevens, GURC coordinator, Northeast region, Haverhill, MA at the Clerc Center exhibit booth at the Clarke Schools Conference on Mainstreaming held in Marlborough, Massachusetts.*

## VII. Demonstration Elementary and Secondary Schools

Both KDES and MSSD play a vital role in the Clerc Center's national mission. They are a place where innovative ideas, strategies, training, and technology applications begin and can later become national mission projects. Students in the schools are representative of deaf and hard of hearing students

across the United States, making the schools excellent sites for developing and evaluating promising educational practices that could be replicated at other schools and programs throughout the country.

### Implementing Standards-based Instruction and Assessment



As we move forward with implementing standards-based instruction and assessment, the following overarching themes continue to guide our thinking and planning:

- Identifying a long-range strategy to implement change following the above model progression
- Continuing ongoing focus on the CCSS for English/language arts and mathematics that serve as the foundation for curriculum and instruction through implementing newly-developed curricular units aligned with these standards for all classes from grades K-12
- Using information from research and evidence-based practice to redesign instructional efforts to meet the needs of all students
- Providing support for teacher instructional planning through a variety of job-embedded professional learning opportunities (e.g., weekly meetings; professional learning communities; mini-workshops; individual consultation from instructional support personnel, including coordinators of instructional support/differentiation and inclusion

and content specialists) and allocated planning time on professional development days and other times throughout the year

- Planning for multi-year allocation of resources
- Creating new instructional support positions to reinforce and sustain the work to change practice

### Instruction

Implementing standards-based instruction continues to evolve within the Clerc Center. The 2014-2015 school year witnessed the third year of implementing CCSS-aligned curricula in English/language arts and mathematics K-12, with an ongoing focus on understanding and implementing the key instruction shifts. In science, teachers have continued implementing Ohio's model science curriculum with a focus on identifying and working with essential questions based on the standards and the accompanying key academic vocabulary.

### Reading and Writing

- Opened the school year with a focus on text-based writing to build upon the foundation of close reading strategies as defined in the Common Core key instructional shifts
- Introduced ASL/English bilingual principles for instruction and followed through with individual departments and teachers on implementing whole to part instructional strategies
- Provided training on promoting accessibility to grade-level standards using Universal Design for Learning (UDL) principles
- Implemented weekly planning and discussion sessions on teaching and learning—Collaborating, Learning and Aiming Wednesdays (CLAWS)
- Continued flexible grouping K-8 to implement ASL/English bilingual strategies and develop linguistic skills in both languages
- Implemented the four blocks literacy structure in classes in the elementary grades

Raising the reading and writing achievement of the deaf and hard of hearing students attending our programs remains a significant challenge. The project implementations listed above testify to an intentional effort to develop and deliver a comprehensive language and literacy program. However, these have not yet resulted in the rise in achievement on our assessments that the schools would like to see. Achievement is tempered by complicating factors within the student population in both schools. In the time since our accreditation in 2011, the school community has reviewed research-based instructional strategies from general, special, and deaf education; adopted the CCSS; developed an entirely new CCSS-aligned curriculum; and provided training and support to teachers for planning and implementing the new curriculum. Instructional support positions have been created to work directly coaching teachers on planning and implementing research-based instructional strategies. The next step is to identify appropriate and accessible intervention programs in reading and math. The schools have consistently reviewed student achievement data and made changes to the action plans and strategies accordingly. This intentional approach to raising student achievement will continue to guide instruction and professional learning in the schools.

### Mathematics

- Conducted a two-day math program planning “summit” involving a consultant and school leadership to review best practices in math instruction, provide coaching support to curriculum and instructional support personnel, and develop a long-range vision for math instruction in the schools
- Implemented initial flexible grouping for math in grades three through eight
- Continued the focus on the use of manipulatives, representations/modeling (Singapore Bars), and other developmentally appropriate math instruction strategies
- Provided training on promoting accessibility to grade-level standards using Universal Design for Learning principles
- Continued work unpacking the math standards and reviewing math progressions across grades

The schools have followed a similar path as stated above with regards to math instruction. In the time since accreditation in 2011, the school community has reviewed research-based instructional strategies from general, special, and deaf education; adopted the CCSS; developed an entirely new CCSS-aligned curriculum; and provided training and support to teachers for planning and implementing the new curriculum. New instructional support positions have been created to work directly coaching teachers on planning and implementing research-based instructional strategies. The next step is to identify appropriate and accessible intervention programs in math.

Throughout this accreditation period, the Clerc Center has engaged the services of a math consultant who authored the CCSS-aligned math curriculum and has worked frequently with our teachers on reviewing the standards and delving into curriculum. This collaboration has extended to classroom observations, meetings with teachers, and “coaching the coaches.”

This year, the schools decided to refresh the vision of what a high-performing math program should look like. This resulted in a two-day math planning “summit” to review best practices in math instruction, the recommendations from the National Council of Teachers of Mathematics, and the CCSS key shifts and mathematical processes. The goal was to develop a shared body of knowledge among the school leaders most directly involved with supporting and coaching math teachers. From these meetings, a better understanding was gained of what an effective math program should be, and those results are being



used to make additional adjustments to the math action plans and work with teachers.

### Flexible Grouping

The KDES language arts program has been using a flexible grouping model for the past three years. This strategy aligns with best practices in bilingual language instruction as well as those of ASL/English deaf bilingual programs. This dynamic bilingual model benefits all deaf and hard of hearing learners with a variety of ASL and English language skills and recognizes that all learners are at different places on the continuum of social and academic language skills and modalities. Students are placed in instructional groupings for ASL and English language based on assessment data on their current skill level. This way teachers can concentrate on developing those language skills students need most in appropriately paced settings. Periodic ongoing assessments inform teachers about language skill development and impact instructional and grouping decisions.

The goal of flexible grouping is for all students to demonstrate full linguistic and communicative competency in both ASL and English. In order to achieve this, teachers meet weekly to discuss and review student data and then plan accordingly for instruction. As a result of regular reviews of student progress, teachers are able to make recommendations for necessary changes in group placement throughout the year to maximize students' language learning. Teachers make consensus group placement decisions strictly based on the collection of language assessment data.

The following assessments are included to review and discuss students' growth in both academic ASL and English languages:

- Developmental Reading Assessment 2nd edition (DRA-2)
- Writing Samples using the 6+1 Writing Traits model and rubrics
- Conversational Proficiency Levels (PL)
- Formative Assessments (in-class assessments : observations, work samples, reading progress observations and data)
- ASL Traits Rubric (Modified from Fremont's Signing Rubric)
- Discovery Education Assessment (standards-based benchmark assessment)

In FY 2015, teachers focused on consistent implementation of close reading strategies, following one of the key shifts in instruction aligned with the CCSS. They also learned more about and experimented with text-based writing strategies. In addition, teachers worked to implement signer's workshop (similar to writer's workshop but in a different modality). All three of these strategies will remain priorities in FY 2016, with a focus on consistent implementation.

### Teaching Strategies (Formerly the Creative Curriculum®)

In FY 2015, early childhood education (ECE) teachers continued to refine implementing the curriculum content in an effective and engaging manner. The focus has been on setting the environment to support the curricular investigations. Additionally, teachers worked to streamline and better integrate the information about student skill acquisition entered into the on-line assessment component of Teaching Strategies in order to present a more holistic view of each child's development for parents. In addition, the ECE teachers reviewed current information from the VL2 research regarding early visual language acquisition and development in order to align instructional practices with current research. Efforts in these areas will continue in FY 2016.

### Language and Communication Profile

Assessment and documentation of language development and proficiency is a key component in language planning. In FY 2015, the Clerc Center continued its use of the Language and Communication Profile (LCP), a profile developed at KDES to provide consolidated documentation of each child's language and communication functioning in both ASL and English to guide allocation of language use in the classroom and recommendations for goals to support skill development in each language. This profile can also be used to track development of a student's growth in each language.

In FY 2015, the use of the LCP was extended to grades K-8. The collection of this data supported the flexible scheduling initiative with ongoing assessment of student progress in developing both ASL and English skills. In addition, results from the Discovery Education Benchmark Assessment were added in order to better align assessment and instruction with the CCSS.

### Excellence By Design Accreditation Protocol

In FY 2012, the demonstration schools began implementation of the action plans in reading/writing, mathematics, and enhancing school climate. Numerous projects in these goal areas have been pursued under the action plans. In FY 2015, the schools completed a mid-cycle report as directed by the Excellence By Design (EBD) protocol. This report included a review of our context, planning process, and accreditation standards, all student achievement data since accreditation, the improvement objectives, and action plans. During this process, the action plans were streamlined to focus on strategies most likely to improve student achievement.

The following priority strategies have been identified for FY 2016:

- Implement close reading and text-based writing activities (inclusive of bilingual strategies and language planning) more consistently in the classroom
- Increase number sense and fluency in grades K-5 students through the use of dot cards, 5/10 frames, and open number lines
- Use concept-based planning for math instruction following the Concrete-Representational-Abstract (C-R-A) progression
- Demonstrate evidence of bilingual strategies/language planning and ASL in lesson plans, in the classroom, and in discussions with supervisors/coaches
- Identify and address unique student learning needs and implement IEP goals and accommodations with fidelity through collaborative teams of teachers and staff
- Collect formative assessment data to inform instruction, to document in IEPs, and to develop measurable standards-based objectives

### Emerging Signers Program

The Emerging Signers Program (ESP) is a systematic, comprehensive, and individualized support system designed to ensure academic success and linguistic development for deaf and hard of hearing students who have been raised with spoken language only, have minimal signed language skills, or come from a country that educates deaf and hard of hearing students in a signed language other than ASL. The ESP provides a process for an emerging signer to make a smooth transition into a visual learning environment through provision of interpreting

support until the student is able to function in class independently. Additionally, the ESP seeks to create an environment that supports social development and emotional intelligence, and encourages students to examine their identity as it relates to being deaf or hard of hearing.

Every student's needs are different, and students attain linguistic independence at different paces. Therefore, students are provided with the services that best meet their needs, and those services are gradually reduced in direct correlation to the student's expanding skills and independence.

Direct ASL instruction and social-emotional support are put in place for a full academic year. The student's teachers and the interpreters, working with the emerging signer, observe and document how the student is functioning. In addition, the lead interpreter, the interpreter coordinator, and/or the ESP coordinator also observe the student in class regularly. Information about the student's abilities, progress, and continued needs, as well as information about accommodations that are no longer needed, are then discussed with the IEP team for decisions regarding continuation, decrease, or termination of services.

Over the past two years, the population of students in the schools needing these services has increased. The Clerc Center has been successful in providing consistent, quality services while at the same time addressing the challenges of managing increasing costs. If this trend continues, the Clerc Center will need to do a systemic budget analysis and review of resource allocation. The focus in FY 2015 has been on building and maintaining an effective structure for the program to ensure continuity of service provision. Under the guidance of the interpreter coordinator, the program has worked to build a team of freelance interpreters who understand the program's goals, which differ from typical interpreting assignments, in order to provide a coordinated and consistent level of service. The ESP team also worked closely with school counselors and ASL specialists to provide a comprehensive approach that supports the student's linguistic, social, and personal development as he or she transitions to direct communication throughout the school environment.

### Assessments

The mandates of the EDA require the Clerc Center to partner with a state, use its standards and assessments, and publicly report results. The Clerc Center has partnered with the state of Ohio for the past six years. When Ohio adopted the new

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CCSS in reading and mathematics, the Clerc Center followed suit. Subsequently, the Clerc Center rolled out a new curriculum K-12 in English/language arts and math that aligns with the CCSS.

The original agreement with Ohio encompassed a period of three years. The Clerc Center has renewed this agreement subsequently with minimal effort. In FY 2015, however, the process was protracted. Last summer the Ohio legislature took up the issue of the CCSS and the new PARCC (Partnership for Assessment of Readiness for College and Careers) assessments. The protracted discussion and decision-making process delayed finalizing the Clerc Center's agreement with Ohio until mid-February of 2015. The Clerc Center did not have sufficient time before the March testing began to negotiate an agreement with PARCC and Pearson, the vendor, nor to complete the extensive preparation necessary for infrastructure testing, field testing, and preparing teachers and students for the significant change these new on-line assessments mandate. As a result, the Clerc Center was only able to provide the paper-based Ohio Graduation Test (OGT) and the performance-based Alternate Assessment for Students with Significant Cognitive Disabilities. The Ohio Achievement Assessment (OAA) for grades three through eight is no longer available and thus could not

be administered. Throughout this process, the Clerc Center has maintained open communication with the U.S. Department of Education and subsequently received a letter addressing the noncompliance issue. The Clerc Center has worked diligently to overcome the challenges in pursuing a partnership with another state in order to comply with regulations.

The schools have continued to monitor student progress using other internal assessments, including the Discovery Education Assessment, which provides predictive benchmarks for grades K-12 that are research-based and aligned to the Ohio state standards as well as the CCSS. These benchmark assessments were administered, scored, and reported three times this year at KDES and twice at MSSD.

The Clerc Center administered the OGT and the Alternate Assessment for Students with Significant Cognitive Disabilities in the spring of 2015. Results for the spring administration are presented in the next two tables. The first contains summary information for the Clerc Center for students in grade 10 on the OGT, and the second shows the summary information disaggregated by subgroup. There is no reportable summary information on AASCD testing since the n was less than 10.

**Student Achievement<sup>1</sup> – Summary Information<sup>2</sup> (OGT<sup>3</sup>)**

	Student Participation			Mean Scale Score	Percentage of Students Scoring in Each Performance Level				
	Valid Scores	Enrolled During Testing	Percentage Tested		Limited	Basic	Proficient	Accelerated	Advanced
<b>Reading</b>	36	36	>95.0	392	41.7	22.2	36.1	<10.0	<10.0
<b>Mathematics</b>	36	36	>95.0	392	47.2	22.2	19.4	<10.0	<10.0
<b>Science<sup>4</sup></b>	--	--	--	--	--	--	--	--	--

<sup>1</sup>No information will be reported when the number of students is less than 10.

<sup>2</sup>The OAA was not administered in 2015.

<sup>3</sup>Results are reported using Ohio's performance standards for students participating in the OGT in grade 10 in accordance with federal regulations.

<sup>4</sup>The science OGT was not administered in 2014-15.

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### Student Achievement<sup>1</sup> — Disaggregated Information (OGT)

	Reading			Mathematics			Science <sup>2</sup>		
	Enrolled	Percentage Tested	Percentage Met Standards	Enrolled	Percentage Tested	Percentage Met Standards	Enrolled	Percentage Tested	Percentage Met Standards
White	16	--	--	16	--	--	--	--	--
Black/African American	9	--	--	9	--	--	--	--	--
Hispanic/ Latino	4	--	--	4	--	--	--	--	--
Asian	4	--	--	4	--	--	--	--	--
American Indian/ Alaska Native/ Hawaiian	0	--	--	0	--	--	--	--	--
Race and ethnicity unknown	2	--	--	2	--	--	--	--	--
Two or more	1	--	--	1	--	--	--	--	--
LEP Students	0	--	--	0	--	--	--	--	--
Non-LEP Students	36	>95.0	36.1	36	>95.0	30.6	--	--	--
Low Income	11	--	--	11	--	--	--	--	--
Non-low Income	25	--	--	25	--	--	--	--	--
Male	14	--	--	14	--	--	--	--	--
Female	22	--	--	22	--	--	--	--	--

<sup>1</sup>Results include scores for students participating in the OGT in grade 10 and are disaggregated for student groups with at least 30 students.

<sup>2</sup>The science OGT was not administered in 2014-15.

As reflected in the previous two tables, nearly all students in the tested grades participated in the assessment administration. The results for students at MSSD reflect low levels of proficiency on the assessments. The spring of 2015 administration of the assessments represents the sixth year of standards-based instruction aligned with the state of Ohio and the third year of implementing new CCSS-aligned curricula in English/ language arts and math. The Clerc Center continues to monitor implementation of grade-level standards and to provide students with the exposure and “opportunity to learn” that these standards require. The Clerc Center analyzes and uses the assessment data collected to strategically target the focus on student performance.

The Clerc Center believes the following points remain relevant as it continues with standards-based implementation with a focus on the key instructional shifts identified in the CCSS initiative. Literature regarding instructional change suggests that change is a slow process requiring adoption of strategies by the teachers as well as students acquiring empowering knowledge and skills both in test taking and the curriculum from previous grades. Low levels of performance reflect students’ relative inexperience with the new curriculum content. Students are becoming more familiar with the process of testing and now will face the additional challenges posed by the next generation of on-line assessments. As teachers at the Clerc Center gain greater facility with the standards and as students have more

time in a CCSS-based learning environment and additional experience with the assessment process, it is expected that their scores will rise. These results underscore the need to continue redirecting instructional attention to supporting students' achievement of grade-level expectations.

The assessment instruments (i.e., the tests themselves) were adopted from the Ohio Department of Education in their entirety. Students at the Clerc Center saw and responded to the same test questions as students in the same grades in Ohio. At the Clerc Center, most students participated in the assessment with the use of one or more accommodations, such as ASL interpretation and small group administration. It is not yet known whether these accommodated test conditions adequately support students' access to the assessment and their ability to demonstrate their knowledge and skills. Thus it is not entirely clear that the assessment, even under accommodated testing conditions, yields meaningful scores for all students at the Clerc Center. Over time, as students have increased opportunities to learn to high standards and more is understood about how to accurately assess what deaf and hard of hearing students know and can do, it is anticipated that performance will increase.

### Accountability

Accountability principles at the Clerc Center, like elsewhere in the country, are meant to ensure that processes, programs, and systems are in place and functioning well to support continuous improvements in student achievement. Under the accountability provision of the EDA, the Clerc Center is required to calculate annually the proportion of students scoring at or above the "proficient" level of performance on the spring assessment and to report this information publicly. Given the challenges of our partnership with the Ohio Department of Education, the Clerc Center has partially fulfilled this requirement and an on-line report is operational.

- Reported OGT results in accordance with EDA requirements via the Clerc Center website
- Did not administer the OAA or other state assessments in grades three through eight

- Met all other Ohio and federal assessment and reporting requirements within the designated timelines
- Provided ongoing communication about progress with teachers, staff, families, and the community

### Adequate Yearly Progress

The Adequate Yearly Progress (AYP) report for the Clerc Center included demographics data regarding enrollment, graduation rate, attendance rate, and the percentage of students from low income families from both schools. These tables are included here. Fall 2015 enrollment figures have been included as well.

In the spring of 2015, MSSD students participated in the fifth and final official administration of the OGT as part of compliance with No Child Left Behind (NCLB). The Clerc Center was unable to administer state assessments to KDES students.

As a historical note, results of the assessments administered in the 2011 and 2012 school year were used to calculate the AYP determinations included in the school report cards and in the Clerc Center report card. As mandated by the U.S. Department of Education in relation to section 104(b)(5)(A) of the EDA, the 2011-2012 achievement assessment results reflect changes to scale scores and performance levels that make them not comparable to scores from previous years. These changes represent the implementation of the Ohio score scale and performance levels. Beginning in the 2011-2012 academic year, results of the graduation tests now reflect five levels of performance: limited, basic, proficient, accelerated, and advanced. The performance levels are based on Ohio's scale, cut scores, and performance-level descriptors. The 2011-2012 results will be comparable to those for FY 2013 and subsequent administrations of the OGT.

NCLB requires that states and schools make testing results public as part of the AYP reporting requirement. The Clerc Center's results for the 2014-2015 school year are available online at [www.gallaudet.edu/Documents/Clerc/2015ClercCenterAYP.pdf](http://www.gallaudet.edu/Documents/Clerc/2015ClercCenterAYP.pdf).

## VIII. KDES Student Characteristics, Related Educational Services Received, and Achievement

### Enrollment

KDES serves students from birth through age 15 who reside in the Washington, D.C. metropolitan area. On September 15, 2014, 87 students were enrolled at KDES. Six eighth grade students completed the KDES program in June.

#### AY 2014-2015 Enrollment at KDES

			Elementary Grades					Middle School		
	All Students	ECE <sup>1</sup>	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
September 15, 2014	87	38	6	4	7	7	8	6	6	5
First-time enrollments	25	17	2	1	3	2	1	0	0	0
Completed program	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6
Left before completing program	9	6	0	0	1	2	0	0	0	0

<sup>1</sup> Early Childhood Education (ECE) includes the Parent-Infant Program, preschool, and kindergarten.

### Student Characteristics

#### Hearing levels of KDES students

Fifty-one percent of KDES students had hearing losses measured at the profound level (91 decibels and greater).

In 2014-2015, the number of KDES students with cochlear implants was 11, or 13 percent of the school population. Ten of those students were still using their implants.

#### KDES Students by Hearing Level and Instructional Grouping

	All Students <sup>1</sup>		ECE		Elementary		Middle School	
All levels	78	100%	30	100%	31	100%	17	100%
Normal <sup>2</sup> (<27dB)	3	4%	1	3%	2	7%	0	0%
Mild (27-40 dB)	4	5%	1	3%	3	10%	0	0%
Moderate (41-55 dB)	6	8%	3	10%	2	7%	1	6%
Moderately severe (56-70 dB)	7	9%	2	7%	3	10%	2	12%
Severe (71-90 dB)	18	23%	7	23%	7	23%	4	24%
Profound (91 dB & above)	40	51%	16	53%	14	45%	10	59%

Note: Hearing level categories are based on the Better Ear Average. Percentages may not sum to 100 percent due to rounding.

<sup>1</sup> Current test data is not available for eight students.

<sup>2</sup> Three students had unilateral hearing loss.



## Clerc Center

### Traditionally Underserved Racial/Ethnic Groups

Sixty-nine percent of KDES students were members of traditionally underserved racial/ethnic groups.

#### KDES Students by Race/Ethnicity and Instructional Grouping

	All Teams		ECE		Elementary		Middle School	
<b>All groups</b>	<b>87</b>	<b>100%</b>	<b>38</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>17</b>	<b>100%</b>
White	27	31%	18	47%	9	28%	0	0%
Traditionally underserved racial/ethnic groups	60	69%	20	53%	23	72%	17	100%
Black/African American	31	36%	7	18%	13	41%	11	65%
Hispanic of any race	13	15%	5	13%	5	16%	3	18%
Asian	10	12%	6	16%	3	9%	1	6%
Two or more or other racial/ethnic groups	6	7%	2	5%	2	6%	2	12%

Note: Percentages may not sum to 100 percent due to rounding.

### Additional Disabilities

Twenty-one percent of KDES students were identified as having additional physical or cognitive disabilities.

#### KDES Students with Disabilities by Instructional Grouping

	All Students		ECE		Elementary		Middle School	
<b>All conditions</b>	<b>87</b>	<b>100%</b>	<b>38</b>	<b>100%</b>	<b>32</b>	<b>100%</b>	<b>17</b>	<b>100%</b>
No disabilities	69	79%	36	95%	25	78%	8	47%
Deaf students with 1 or more additional disabilities	18	21%	2	5%	7	22%	9	53%
Intellectual/Learning disability	7	8%	0	0%	2	6%	5	29%
Attention Deficit Disorder (ADD/ADHD)	3	3%	0	0%	2	6%	1	6%
Other health impairments	7	8%	2	5%	3	9%	2	12%
Other conditions (includes developmental delay and autism)	9	10%	2	5%	3	9%	4	24%

Note: Percentages may not sum to 100 percent due to rounding.

## Support Services

Seventy-eight percent of KDES students received one or more support services. At KDES, students from traditionally underserved racial/ethnic groups received higher rates of support services than other students.

### KDES Students Receiving Support Services by Instructional Grouping

	All Students (N=87)		ECE (N=38)		Elementary (N=32)		Middle School (N=17)	
No support services	19	22%	18	47%	1	3%	0	0%
1 or more support services	68	78%	20	53%	31	97%	17	100%
Audiology	13	15%	3	8%	1	3%	9	53%
Speech language	64	74%	20	53%	29	91%	15	88%
Counseling	13	15%	2	5%	9	28%	2	12%
Occupational/Physical therapy	15	17%	6	16%	8	25%	1	6%
Transition	5	6%	0	0%	0	0%	5	100%
Sign language instruction	10	12%	3	8%	6	19%	1	6%
Other services	3	3%	2	5%	1	3%	0	0%

Note: Percentages may not sum to 100 percent due to rounding.

### KDES Students Receiving Support Services by Race/Ethnicity

	All Students (N=87)		White Students (N=27)		All Traditionally Underserved Racial/ Ethnic Group Students <sup>1</sup> (N=60)	
No support services	19	22%	10	37%	9	15%
1 or more support services	68	78%	17	63%	51	85%
Audiology	13	15%	1	3%	12	20%
Speech language	64	74%	15	56%	49	82%
Counseling	13	15%	4	15%	9	15%
Occupational/Physical therapy	15	17%	4	15%	11	18%
Transition	5	6%	0	0%	5	8%
Sign language instruction	10	12%	2	7%	8	13%
Other services	3	3%	0	0%	3	5%

Note: Percentages may not sum to 100 percent due to rounding.

<sup>1</sup>Due to the small numbers of students in some racial/ethnic groups, information for the specific racial and ethnic categories is not reported.

## IX. MSSD Student Characteristics, Related Educational Services, and Outcomes

### Enrollment

MSSD serves high school students between the ages of 14 and 21 from the United States and its territories. On September 15, 2014, 165 students were enrolled at MSSD. Thirty-eight seniors graduated.

#### AY 2014-2015 MSSD Enrollment

	All Students	Grade 9	Grade 10	Grade 11	Grade 12
September 15, 2014	165	38	34	43	50
First-time enrollments	64	25	16	13	10
Left before completing program	16	3	5	3	5
Completed program	38	N/A	N/A	N/A	38

### Student Characteristics

#### Hearing levels of MSSD students

Eighty-six percent of MSSD students had hearing losses measured at the severe or profound levels. In 2014 -2015, 31 MSSD students, or 19 percent of the school population, had cochlear implants. Twenty-six of these students were currently using their implants.

#### MSSD Students by Hearing Level and Grade

	All Students <sup>1</sup>		Grade 9		Grade 10		Grade 11		Grade 12	
All levels	162	100%	37	100%	33	100%	42	100%	50	100%
Normal <sup>2</sup> (<27 dB)	1	1%	0	0%	0	0%	1	2%	0	0%
Mild (27-40 dB)	4	3%	2	5%	0	0%	0	0%	2	4%
Moderate (41-55 dB)	5	3%	1	3%	3	9%	0	0%	1	3%
Moderately severe (56-70 dB)	12	7%	1	3%	5	15%	2	5%	4	8%
Severe (71-90 dB)	37	23%	11	30%	7	21%	9	21%	10	20%
Profound (91 dB & above)	103	64%	22	60%	18	55%	30	71%	33	66%

Note: Hearing level categories are based on the Better Ear Average. Percentages may not sum to 100 percent due to rounding.

<sup>1</sup>Current test data not available for three students.

<sup>2</sup>One student had unilateral hearing loss.

## Clerc Center

### Traditionally Underserved Racial/Ethnic groups

Fifty-five percent of MSSD students were members of traditionally underserved racial/ethnic groups.

#### MSSD Students by Race/Ethnicity and Grade

	All Teams		Grade 9		Grade 10		Grade 11		Grade 12	
<b>All groups</b>	<b>165</b>	<b>100%</b>	<b>38</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>43</b>	<b>100%</b>	<b>50</b>	<b>100%</b>
White	74	45%	18	47%	16	47%	21	49%	19	38%
Traditionally underserved racial/ethnic groups	91	55%	20	53%	18	53%	22	51%	31	62%
Black/African American	46	28%	8	21%	10	29%	11	26%	17	34%
Hispanic of any race	29	18%	8	21%	3	9%	8	19%	10	20%
Asian	14	9%	4	11%	4	12%	3	7%	3	6%
Two or more and other racial/ethnic groups	2	1%	0	0%	1	3%	0	0%	1	2%

Note: Percentages may not sum to 100 percent due to rounding.

### Additional Disabilities

Sixteen percent of MSSD students were identified as having additional physical or cognitive disabilities. The most prevalent disability among MSSD students was intellectual/learning disability.

#### MSSD Students with Disabilities by Grade

	All Students		Grade 9		Grade 10		Grade 11		Grade 12	
<b>All conditions</b>	<b>165</b>	<b>100%</b>	<b>38</b>	<b>100%</b>	<b>34</b>	<b>100%</b>	<b>43</b>	<b>100%</b>	<b>50</b>	<b>100%</b>
No disabilities	139	84%	33	87%	28	82%	37	86%	41	82%
Deaf students with 1 or more additional disabilities	26	16%	5	13%	6	18%	6	14%	9	18%
Intellectual/Learning disability	15	9%	2	5%	2	6%	4	9%	7	14%
Attention Deficit Disorder (ADD/ADHD)	8	5%	1	3%	3	9%	2	5%	2	4%
Other conditions (includes other health impairments, developmental delay, and autism)	4	2%	2	5%	1	3%	1	2%	0	0%

Note: Percentages may not sum to 100 percent due to rounding.

## Clerc Center

### Support Services

Seventy-two percent of all MSSD students received one or more support services. At MSSD, 23 percent of students from traditionally underserved racial/ethnic groups received some type of support service compared to 34 percent of white students.

#### MSSD Students Receiving Support Services by Grade

	All Students (N=165)		Grade 9 (N=38)		Grade 10 (N=34)		Grade 11 (N=43)		Grade 12 (N=50)	
No support services	46	28%	7	18%	8	24%	13	30%	18	36%
1 or more support services	119	72%	31	82%	26	77%	30	70%	32	64%
Audiology	49	30%	14	37%	12	35%	14	33%	9	18%
Speech-language	91	55%	24	63%	21	62%	22	51%	24	48%
Counseling	26	16%	2	5%	7	21%	5	12%	12	24%
Other services (includes OT/PT, ASL and Transition)	4	2%	2	5%	1	3%	0	0%	1	2%

Note: Percentages may not sum to 100 percent due to rounding.

#### MSSD Students Receiving Support Services by Race/Ethnicity

	All Students (N=165)		White Students (N=74)		Traditionally Underserved Racial/Ethnic Groups							
					All Traditionally Underserved Racial/Ethnic Group Students (N=91)		Black/ African American (N=46)		Hispanic of Any Race (N=29)		Two or More and Other Racial/ Ethnic Groups (N=16)	
No support services	46	28%	25	34%	21	23%	8	17%	7	24%	6	38%
1 or more support services	119	72%	49	66%	70	77%	38	83%	22	76%	10	62%
Audiology	49	30%	25	34%	24	26%	9	20%	8	28%	7	44%
Speech-language	91	55%	28	38%	63	69%	34	74%	20	69%	9	56%
Counseling	26	16%	12	16%	14	15%	11	24%	3	10%	0	0%
Other services (includes OT/PT, ASL, and transition)	4	2%	2	3%	2	2%	2	4%	0	0%	0	0%

Note: Percentages may not sum to 100 percent due to rounding.

## Student Outcomes

### Student Reading Achievement

The reading comprehension attainment of MSSD students is measured annually using the Stanford Achievement Test (10th Edition) or the Test of Academic Skills (TASK). Thirty-eight percent of MSSD students were reading at the fourth grade level or lower. Twenty-three percent had reading grade equivalent levels between fifth and seventh grade. Forty percent had reading grade equivalents of eighth grade or higher. The freshmen had the lowest reading levels, with an average grade equivalent of 5.8. The juniors had the highest average reading grade equivalent at 7.5.

#### MSSD Graduates Reading at Different Grade Levels by Race/Ethnicity

	All Students		Grade 9		Grade 10		Grade 11		Grade 12	
All levels	150	100%	35	100%	32	100%	40	100%	43	100%
Post high school	30	20%	6	17%	5	16%	10	25%	9	21%
12.0-12.9	4	3%	2	6%	1	3%	0	0%	1	2%
11.0-11.9	2	1%	1	3%	1	3%	0	0%	0	0%
10.0-10.9	11	7%	1	3%	3	9%	5	13%	2	5%
9.0-9.9	8	5%	1	3%	1	3%	4	10%	2	5%
8.0-8.9	6	4%	2	6%	2	6%	0	0%	2	5%
7.0-7.9	2	1%	1	3%	0	0%	0	0%	1	2%
6.0-6.9	13	9%	1	3%	4	13%	4	10%	4	9%
5.0-5.9	19	13%	3	9%	4	13%	1	3%	11	26%
4.0-4.9	7	5%	0	0%	3	9%	3	8%	1	2%
3.0-3.9	25	17%	8	23%	3	9%	9	23%	5	12%
2.0-2.9	22	15%	8	23%	5	16%	4	10%	5	12%
1.0-1.9	1	1%	1	3%	0	0%	0	0%	0	0%
Mean grade equivalent level			5.8		6.5		7.5		6.5	

Note: Includes students enrolled as of September 15, 2014, who were still enrolled at the time of spring testing. Scores are based on the Reading Comprehension subtest of the Stanford Achievement Test (10th Edition) and the Test of Academic Skills (TASK). Percentages may not sum to 100 percent due to rounding.



### Reading Achievement of Graduates

According to the Gallaudet Research Institute, about half of high school-age deaf and hard of hearing students leaving special education programs read below the fourth grade level. The average grade equivalent reading level of MSSD graduates was 7.5. Sixteen percent of the graduates were reading at the fourth grade level or below; 41 percent were reading between the fifth and seventh grade levels, and 42 percent were reading at or above the eighth grade level. Graduates who were members of traditionally underserved racial/ethnic groups had an average reading level 6.0, while white students had an average grade equivalent level of 9.9.

#### MSSD Graduates Reading at Different Grade Levels by Race/Ethnicity

	All Graduates <sup>1</sup>		White Graduates		All Traditionally Underserved Racial/Ethnic Groups	
All levels	37	100%	15	100%	22	100%
Post high school	9	24%	5	33%	4	18%
12.0-12.9	1	3%	1	7%	0	0%
11.0-11.9	0	0%	0	0%	0	0%
10.0-10.9	2	5%	1	7%	1	5%
9.0-9.9	2	5%	2	13%	0	0%
8.0-8.9	2	5%	2	13%	0	0%
7.0-7.9	1	3%	0	0%	1	5%
6.0-6.9	3	8%	0	0%	3	14%
5.0-5.9	11	30%	4	27%	7	32%
4.0-4.9	1	3%	0	0%	1	5%
3.0-3.9	3	8%	0	0%	3	14%
2.0-2.9	2	5%	0	0%	2	9%
1.0-1.9	0	0%	0	0%	0	0%
Average grade equivalent	7.5		9.9		6.0	

Note: Includes students enrolled as of September 15, 2014 who were still enrolled at the time of spring testing. Scores are based on the Reading Comprehension subtest of the Stanford Achievement Test (10th Edition) and the Test of Academic Skills (TASK). Percentages may not sum to 100 percent due to rounding.

<sup>1</sup>One graduate had no SAT-10 reading comprehension test data.

### Disposition of 2014 MSSD Graduates

A one-year follow-up was conducted of the 45 students who graduated from MSSD in 2014. The response rate for this follow-up was 67 percent.

Eighty-three percent of graduates responding to the one-year survey reported that they were enrolled in a postsecondary program. Sixty percent of all the respondents enrolled in a postsecondary program were attending Gallaudet University.

### MSSD 2014 Graduates' One-Year Outcomes by Race/Ethnicity

	All Responding Graduates		White Graduates		All Traditionally Under-served Racial/Ethnic Groups	
All outcomes	30	100%	17	100%	13	100%
Entered Gallaudet University	15	50%	10	59%	5	38%
Entered RIT/NTID	7	23%	4	24%	3	23%
Entered another college or university	3	10%	2	12%	1	8%
Working	3	10%	0	0%	3	23%
Not working/not enrolled in a post-secondary program	2	7%	1	6%	1	8%

MSSD science students and teachers celebrated Earth Day 2015 with a variety of activities from planting flowers outside of the front of the main building, to making and hanging peanut butter and seed pine cones for birds, to taste-testing organic vs. non-organic foods, to creating artwork with recycled materials. Students (from left) Zachery Gill and Change Jun Hwang and science teachers Jeffrey Barnette and John Thuahnai sign "Earth Day 2015" above a display of recycled Trader Joe's grocery bag art students made with messages to encourage good stewardship of the environment.



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*KDES students (from left) Sahkira Reynoso, Benjamin Ambrose, Angelina Kivite, and Lamonte Fisher harvest fall vegetables from the House One garden with Gallaudet University First Lady Vicki Hurwitz. Throughout her time as First Lady, Hurwitz invited KDES first and second graders to the Edward Miner Gallaudet Residence twice a year—in the spring to plant flowers, herbs, and vegetables, and make bird houses, and in the autumn to harvest the vegetables and decorate and carve pumpkins.*

Photo by Zhee Chatmon



