Assessing Critical Thinking

January 12, 2016
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Agenda

- Frayer Model
  - Background
  - How-to
  - Practice
  - Discussion

- One-Word Summary
  - Background
  - How-to
  - Practice
  - Discussion
Frayer Model
Frayer, Frederick, & Klausmeier (1969)

- Reported on assessing concept mastery
- Noted disconnect between labeling & defining concepts and understanding relations and applications of concepts
- Wanted to measure multiple levels of concept learning
Frayer, Frederick, & Klausmeier (1969)

- Identified three criteria for developing a measure:
  - Assess verbal and nonverbal aspects of concepts
  - Permit differentiation of various levels or aspects of concepts
  - Apply to various types of concepts
What is the Frayer Model?
Sample

**Definition:**
A brown food often sweetened and used in desserts

**Characteristics:**
- Brown
- Mixes well with sugar and butter
- Has health benefits
- Can be eaten in solid or liquid form

**Examples:**
- Chocolate chips
- French silk pie
- Mocha

**Non-examples:**
- Apple
- Bread
- Almonds

Chocolate
Using Frayer for Critical Thinking

<table>
<thead>
<tr>
<th>Definition</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historical Fiction</td>
<td>What is the cutoff for “historical?”</td>
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Examples

Where does the Bible fit?
Possible practice concepts:

1. Go meta with “Frayer Model”
2. Polygons
3. Taxes
4. European Union
5. Python (the programming language)
6. Assessment
7. The digestive system
8. British literature
9. Slang
10. Ethics
Debrief

- What process did your group use to complete the Frayer Model?

- What types of discussions were you having about the concept?
Discussion

- What are the advantages and benefits of using the Frayer Model?

- How can you use the Frayer Model in one of your classes this semester?
Extension Ideas

- Provide students a completed model, but leave out the concept name. Ask students to identify the concept.

- While reading, ask students to generate a list of words that connect to the concept.
  - Divide students into groups.
  - Use the words to complete the model.
One-word Summary
ASKED FOR A SUMMARY

GOT A COMPLETE LIST OF ALL POINTS IN THE ARTICLE
One-word summary

- Two parts to this summary:
  - One word to summarize a reading or a concept
  - Rationale explaining why that is the best word
    - THIS IS THE IMPORTANT PART!
YOU KEEP USING THAT WORD

I DON'T THINK IT MEANS WHAT YOU THINK IT MEANS
Example

"Run!"
Practice

- Write a one-word summary (and rationale) for the Frayer Model.

- Join a group and discuss your summary and rationale.
Debrief

- What process did you use to complete the activity?
- What types of discussions were you having about the concept?
  - How did the one-word summary support the discussion?
Extension Ideas

- Brainstorm a list of possible words as a class and discuss the value of each word as it is named.

- Have students create hashtags for a concept
Develop a Lesson
Final Burning Thoughts or Questions

ASK ALL THE QUESTIONS