Classroom Assessment Techniques

"CATs"

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Classroom evaluation methods that serve two important purposes:

1. Assess the degree that our students understand course content
2. Assess the effectiveness of our teaching methods

“Standard” Classroom Format

- Class sessions 1-2 hours long
- Lecturing in front of classroom
- Asking quick response questions
- Quizzes
- Exams
- End of semester evaluation
“Standard” Classroom Complications!!!

• **Attention time ~ 30 minutes!**
• **Variable learning styles**
• **Self-directed learning**
• **Usefulness (or not) of evaluations**
**CATs** Classroom Format

- Review last lecture content
- Lecture on new material for ~30 minutes
- Input a "CAT"
- Repeat cycle, but mix it up!
- Ongoing evaluations???
“CATs” in the Classroom...

• **Muddiest Point**
  - Ask students after concept or lecture what was the most misunderstood topic

• **One-Minute Paper**
  - Write for one minute about what was most important concept and least clear concept ...
    ...then review!
**“CATs” in the Classroom...**

- **Direct Paraphrasing**
  - Ask student to paraphrase what you just said after concept is covered

- **Memory Matrix**
  - After 30 min lecture, have students complete a matrix box based on concepts

<table>
<thead>
<tr>
<th>Cell Type</th>
<th>Outer Cell Covering</th>
<th>Cell Energy Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>decomposer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eukaryotic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plasma membrane</td>
<td></td>
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</tbody>
</table>
“CATs” in the Classroom...

- **Transfer-n-Apply**
  - Apply the concept just covered to a real life example or application

- **Student Quiz**
  - Have each student write three quiz questions and give them to another student...grade and discuss with peers
“CATs” in the Classroom...

• **Assessment Forms**
  - Distribute every 3-4 weeks throughout semester to customize teaching methods for that student group

**Classroom Assessment Form**

1. What activities in this course are helping you learn?
2. What activities in this course are not?
3. What could be added/removed from this course to make it ideal for you?
4. On a scale from 1-10, what is your honest effort in the course at this point?
“CATs” in your Classroom...

- Slow transitions
- Monitor student response
- Break old habits
- Long-term memory
  - enthusiasm
  - repetition
  - connections