Maximizing Student Learning When Lecturing

Lecture can be an effective mode for learning, especially for novice learners. For instructors who choose to lecture, consider the following reminders for maximizing student learning. A checklist is provided on the reverse to help you evaluate whether your lecture contains components that support learning.

1. Use Pre-work to Prepare Sutdents

- *Assign pre-work that will be used/built upon during session*
- *Provide prep-level rating (1 or 2) to guide student preparation*
- *Assign an action related to pre-work to ensure sutdent participation(answer a question, make a list, etc)*

2. Activate Prior Knowledge

- Ask students - What do you remember?
  - o *No notes - what did you learn from xx?*
  - o *Look at notes - fill in gaps*
- Quick Quizzes, Polls
- Link to pre-work

3. Capture Attention & Emphasize Important Points

- Novices vs. Experts
  - o *Novices focus on the details instead of the big picture*
  - o *Experts make more inferences*
  - o *Prior knowledge increases accurate inferences*
  - o *Novices need help attending to important points*
- Summarize/identify of key points (or solicit from students)

4. Break up Lecture every 15 min

- *Give students a chance to apply what they are learning*
- *Capitalize on natural attention span*
- *Reinforce Learning Objectives*

5. Have Students Apply Knowledge

- *By constructing generalizations*
- *By thinking of personal examples*
- *By responding to text on personal levels*
- *By generating an explanation for why an explicitly states fact or concept is true*

6. Use Multimedia Effectively

- *ALL students are visual learners*
- *Use only necessary images*
- *Lavel images that aren't self-explanatory; avoid repeating text*
- *Use slides with light background, dark text*

7. Provide Opportunities for Formative Assessment

- *One Minute Papers*
- *Turn and Talk or Think Pair Share*
- *Compare Notes*
- *Written Summaries*
- *Shout Outs*
- *Dusting off the Cobwebs (without notes, write down...)*
- *Polling*
- *Quizzes*

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Lecture for Learning Checklist

Pre-work is assigned and used during the session.

Learning Objectives are outcome-based, simply stated, and limited in number.

Prior knowledge is activated. Students are involved in activating their own knowledge.

Learners understand why content is important (e.g. via Interesting Content/Activities, Compelling Statistics, Voice modultaion, Gestures, Emotions, Relevant Examples/stories.)

Learners are appropriately engaged (engagement strategies are targeted to the right level, e.g. novice vs. expert)

Multimedia is used effectively.

    Balance of words/images is appropriate

    Slide backgroun conducive to viewing AND taking notes - light backgroun with dark text

    Images are labelled when necessary

Lecture content is broken up every 15 minutes with a specific engagement technique (more than "Are there any questions?")

    Students are provided the opportunity to elaborate and/or identify examples and explanations.

    Students are provided opportunities for formative assessment.

Periodic summaries (instructor or student-generated) are provided.

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