

Stop it! You're Killing Me! Retooling Your Lecture

How many times have you stood at the front of a lecture theater half way through a critical section only to be greeted by the silent scream: Stop it! You're killing me! How do you keep your students heads from doing the nod and snap as they barely remain conscious?

EOS-SEI has been developing a classroom observation protocol, which aims to:

- Quantify student engagement in a large lecture class
- Determine which teaching practices result in an increase or decrease in student engagement
- Reveal the effects of course innovations on student classroom engagement

Method

In EOSC 112 and 220 we observe students throughout the 50 min lecture. Approximately every 5 mins we estimate the percentage of the class that is "paying attention" and link it to what the instructor is doing. We also closely observe a subset of 10-20 students and try to determine what puts them to sleep and what wakes them up.

What do our data show so far for EOSC 112?

The bad news:

- Engagement can drop as low as 35% of the class paying attention at given points during a lecture!
- Over half the students who bring their computers to class are **not** following the notes 75% of the time! (Facebook, YouTube, checking sports scores, and doing an assignment for another class are the most popular things to do during class).
- iPhones and text messaging seem to be a major problem in class!!

The good news:

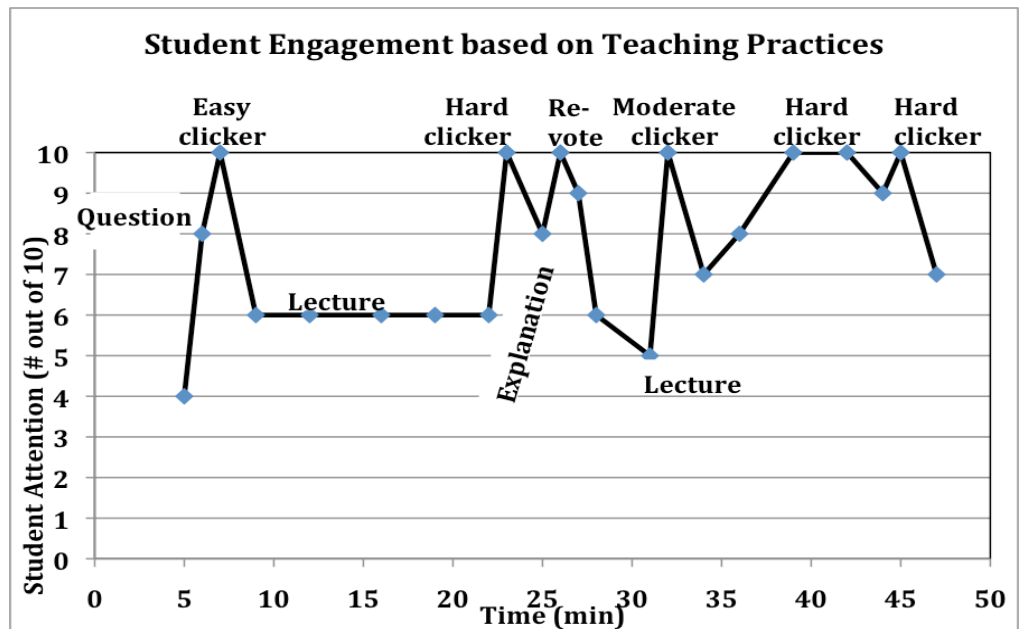
- It is not you- we're all human and the maximum attention span for an adult is around 20 minutes
- There are teaching practices you can use to keep your students interested and engaged for 50 minutes!
- Observations of three instructors with different teaching expertise showed the same trends

What GETS their attention?

- When a student asks a well articulated question
- Clicker questions
- 5 min group activities
- The instructor walking around the class
- In-class demonstrations
- Presenting or discussing real world connections and applications

What KEEPS their attention?

- Although a clicker question will get their attention for a couple of minutes, if the clicker question is too easy and the majority of the class gets the right answer their attention drops during the explanation of the answer.
- Moderate to difficult clicker questions prompt in-class discussion, questions and keeps their attention well into the next section of class.
- For more information on using clickers, writing challenging clicker questions, and engaging your class with clickers please come to our Brown Bag seminar on Dec. 11th



Seven Principles of Good Practice in Undergraduate Education

By Arthur W. Chickering and Zelda F. Gamson

From The American Association for Higher Education Bulletin, March 1987- Reprinted with permission.

Get the full text at <http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/7princip.htm>.

We think this brief summary well worth passing along, even though it's older than most students.

1. Encourages Contact Between Students and Faculty

Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement. Knowing a few faculty members well enhances students' intellectual commitment and encourages them to think about their own values and future plans.

2. Develops Reciprocity and Cooperation Among Students

Learning is enhanced when it is more like a team effort than a solo race. Good learning, like good work, is collaborative and social, not competitive and isolated.

3. Encourages Active Learning

Learning is not a spectator sport. Students must talk about what they are learning, write about it, relate it to past experiences and apply it to their daily lives. They must make what they learn part of themselves.

4. Gives Prompt Feedback

Knowing what you know and don't know focuses learning. Students need appropriate feedback on performance to benefit from courses. Students need chances to reflect on what they have learned, what they still need to know, and how to assess themselves.

5. Emphasizes Time on Task

Time plus energy equals learning. There is no substitute for time on task. Learning to use one's time well is critical for students and professionals alike. Students need help in learning effective time management.

6. Communicates High Expectations

Expect more and you will get more. High expectations are important for everyone -- for the poorly prepared, for those unwilling to exert themselves, and for the bright and well motivated.

7. Respects Diverse Talents and Ways of Learning

People bring different talents and styles of learning to college. Students need the opportunity to show their talents and learn in ways that work for them. Then they can be pushed to learn in new ways that do not come so easily.

EOS-SEI: What's happening...

Upcoming Brown Bag Seminars: These are informal opportunities to discuss issues related to teaching and learning

November 25th: Brett Gilley will lead a discussion sharing strategies for final exams

December 11th: Watch videos of clickers in action. Talk about your successes, failures and questions

Classroom observations: Erin Lane will share all her data about engagement in EOS classes

Metacognition: Francis Jones is headed to a workshop about metacognition sponsored by the Science Education Research Center at Carleton College and will share information on "What do your students think about their own thinking?"

If you would like a classroom observation conducted for your class, contact elane@eos.ubc.ca.

Contact EOS-SEI: If you're interested in talking about your course(s) or teaching and learning in general, feel free to drop by EOS-South 361 or contact Francis Jones (fjones@eos.ubc.ca), Brett Gilley (bgilley@eos.ubc.ca), Ben Kennedy (bkennedy@eos.ubc.ca), Erin Lane (elane@eos.ubc.ca) or Sara Harris (sharris@eos.ubc.ca).

For more faculty resources and information, see <http://www.eos.ubc.ca/research/cwsei/>.