

Peer Instruction in CS 132

Traditional Lecture Classes

- The instructor summarizes what you need to know.
- Readings are assigned, but may not actually be done!
- Dates back to before the printing press.



Lecture: The process of transferring notes from the teacher to the student without passing through the minds of either.

Limits of the Traditional Approach

- You get little or no immediate feedback
- In reality, little is actually learned from passive listening.
 - You need to actively engage with the material
- Homework provides active engagement, but ...
- After college, you'll need to continue learning on your own.
 - Should get good now at learning from a textbook or lecture.

Lectures in this Class

- Based on an approach called *peer instruction*

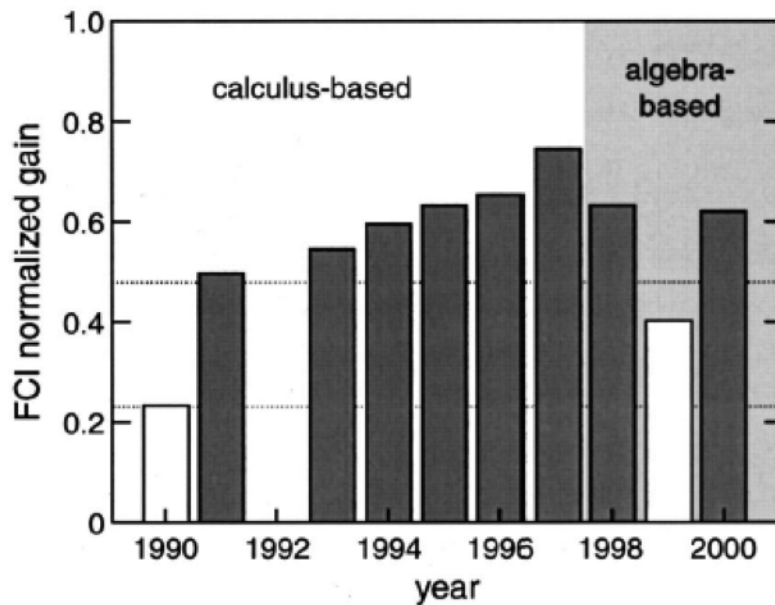
- Developed by Eric Mazur at Harvard
- Basic process:
 1. Question posed (possibly after a short intro)
 2. Solo vote (no discussion yet)
 3. Small-group discussions (in teams of 3)
 - explain your thinking to each other
 - come to a consensus
 4. Group vote
 - each person in the group enters the same answer
 5. Class-wide discussion
 - Why is the correct answer correct?
 - Why are the wrong answers wrong?
 - Possibly some clarification by me

Benefits of Peer Instruction

- It promotes active engagement.
- You get immediate feedback about your understanding.
- I get immediate feedback about your understanding!

But the real reason is:

- It promotes increased learning.
 - Explaining concepts to others benefits you!



Crouch, C., Mazur, E. *Peer Instruction: Ten years of experience and results.*

Drawback of Peer Instruction

Less time to catch up on sleep

