Maximizing Student Outcomes in Flipped Classrooms

How Do You Ensure Student Buy-in?

Project NExT
Joint Mathematics Meetings 2019
David Pengelley
(find these slides on my personal webpages)
Overview

- What makes content delivery effective?
- Can learning outside the classroom still be ‘active’?
- How do you ensure student buy-in?
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Active learning here in the workshop? (no preparation in advance)

1. Your experiences and ideas: group brainstorming and reporting
2. My experiences (also lots more to read on my personal webpages)
3. Resources
4. Questions/discussion
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(full details on my webpages)
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- Motto: ‘Never lecture on something students can read and respond to in writing’
Effective content delivery, active learning outside the classroom, buy-in
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- Part A, *due well beforehand*: Read, write questions, and respond to my questions. I read these, make notes to prepare for class. Grade for completion only: +/-/\_/

- Part B, *bring to class*: Prepare 'warmup problems'. Grade for completion in advance only: +/-/\_/

In class: Build directly on Parts A and B

- A: Discuss questions based on my notes, brief
- B: Compare/complete problems in groups (I circulate, facilitate), students present (I choose who/*what, I lead discussion). Incentives to prepare: peer and instructor pressure

Part C, *after class homework*: A very few higher level ‘…final problems’, marked carefully, may be asked to redo to perfect, use qualitative grading rubric, single letter grade per assignment, no numerical points.

Final level of achievement ABC a very large part of course grade; harmony between learning and evaluation, reduce exams

I-(We)-You

You-You-Y’ all-We-You
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Write to me!
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(Guess what! Email address on my personal webpages)