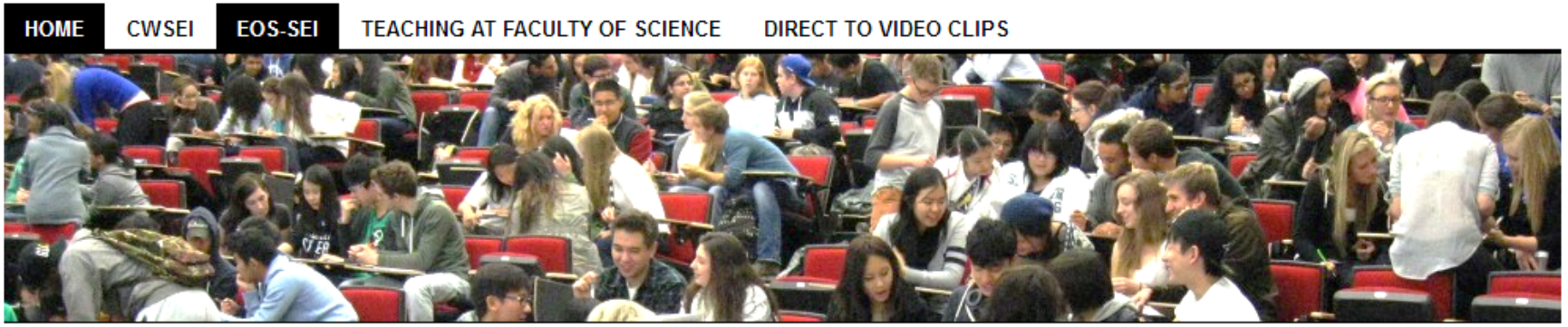

Can Videos of Active Teaching Strategies Support Faculty Adoption of Research Based Instructional Strategies?

~

FoS Education development Openhouse April 2015

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Earth, Ocean & Atmospheric sciences

CWSEI

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In answer to …

- I can’t IMAGINE teaching that way!
- There’s no time to watch OTHER teachers work.
- I wouldn’t DARE ask to observe a classroom.
- Every class is different – how can I catch the BEST one?
- Students will wonder why I’m there.
- That would never work in MY discipline.

Videos of “exemplary” practice in action

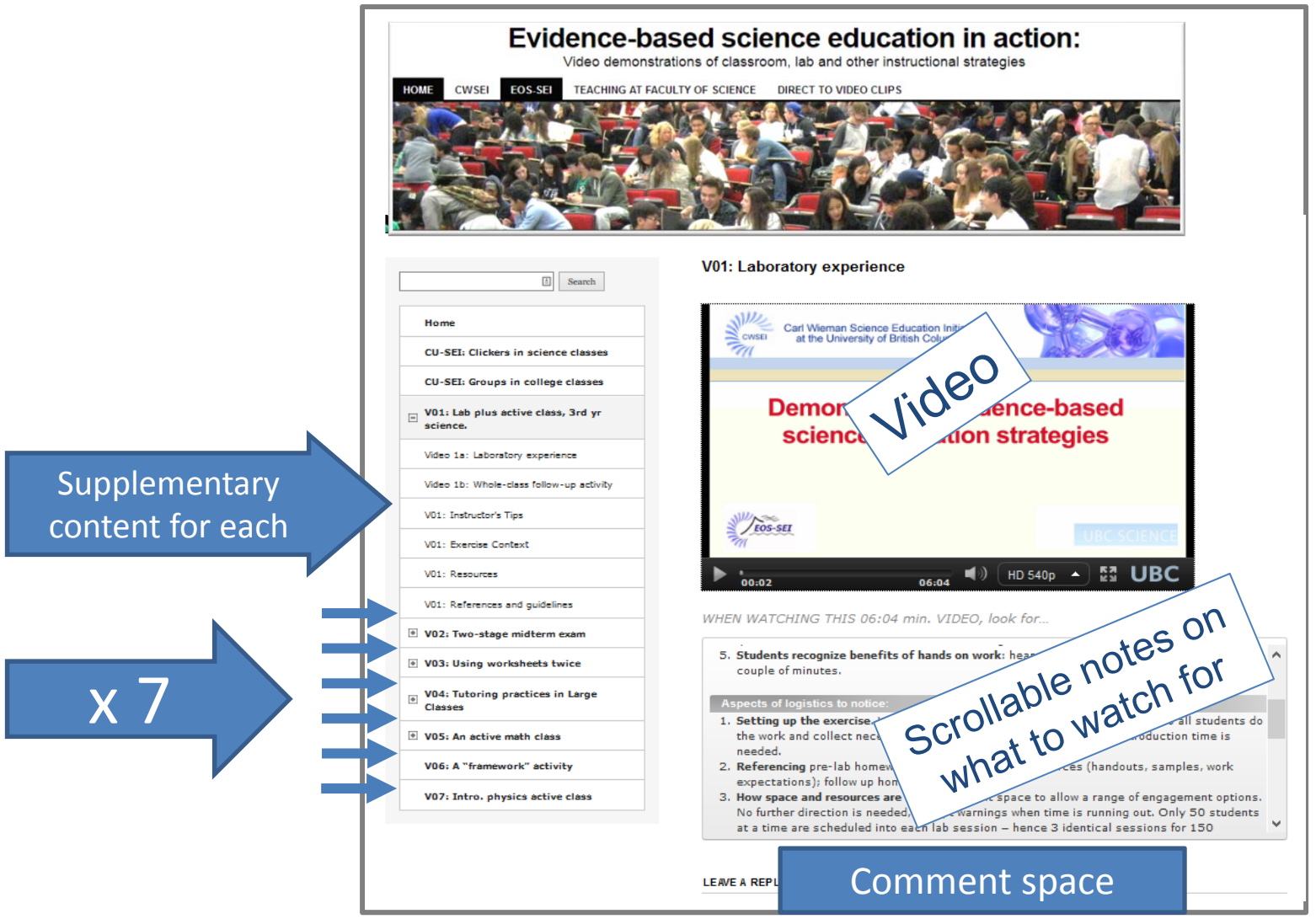
- Formal permission from instructors AND students.
- Variety of disciplines, settings & strategies.
- Whole class filmed often with two cameras.
- Careful production to emphasize keys to success.
- Accompanying resources and references.
  - What to observe in videos
  - Context and instructor’s notes
  - Resources shown
  - References

Design criteria

1. ~6 minutes each
2. Instructors' voice – but minimal talking heads.
3. Student voice – but no simple endorsements.
4. Minimal 3rd party "voice-over".
5. Visible evidence of best R.B.I.S. practices in action:
   - active students; peers interacting; "deliberate practice"; expert / novice interactions including feedback; others …
6. Help viewers to …
   - set realistic expectations for specific teaching strategies;
   - imagine themselves in these roles (students & instructors).
7. Details in accompanying written content.
8. *Variety* of settings: math, geoscience, physics, etc…)
9. Enable communication (comments & questions)

Collection "packaging" – the website

http://blogs.ubc.ca/wpvc/



1. Short lab + follow-up active class

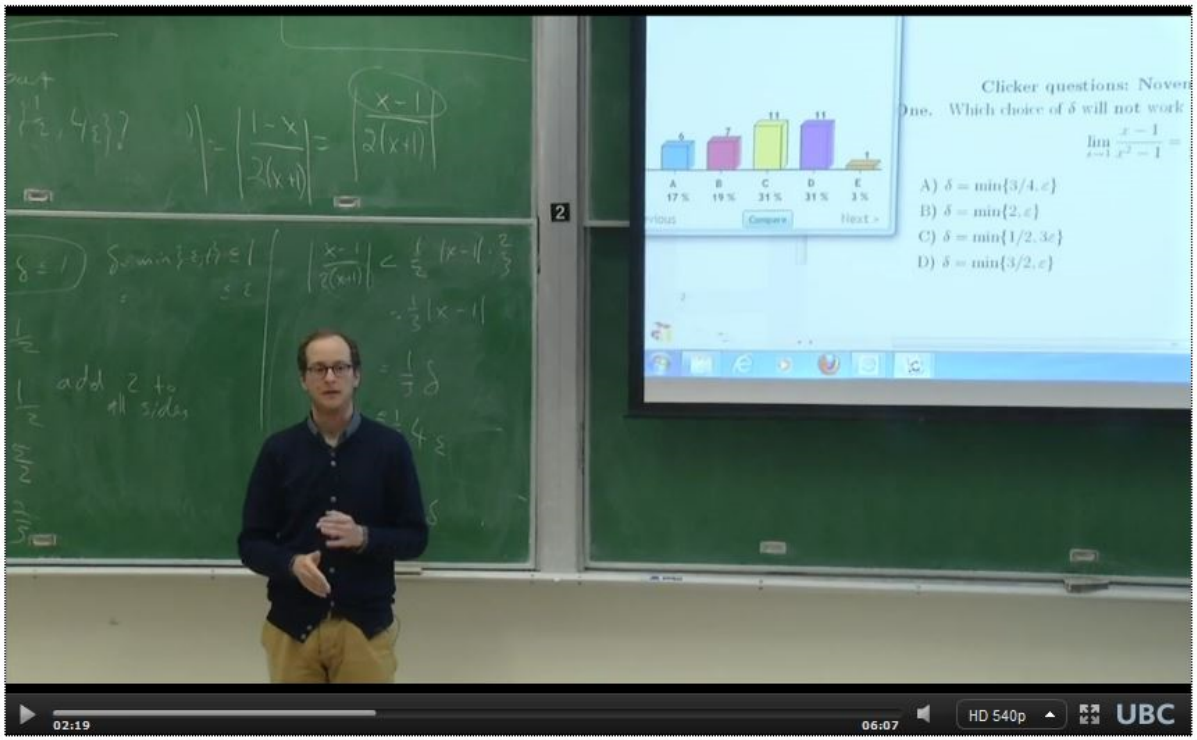
- EOSC; 3rd year science majors
- 150 students
- professional production

2. Worksheets + video, twice in one class

- EOSC; 1st year all students
- 300 students
- professional production

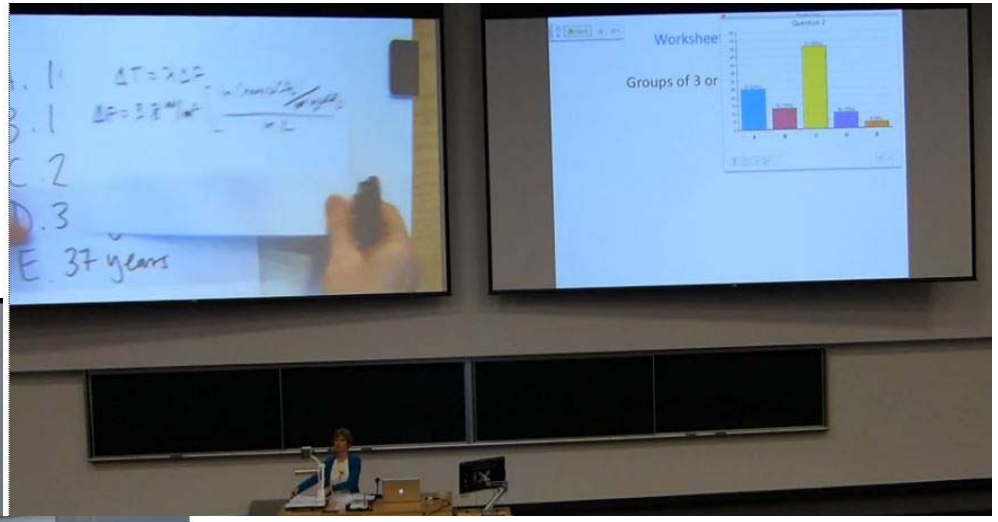
3. Clickers, group work; a math “proofs” course

- MATH; 2nd year math majors
- 60 students
- professional production



4. Real-time clicker qn's and worksheets

- EOSC; 3rd year science majors
- 150 students
- amateur production

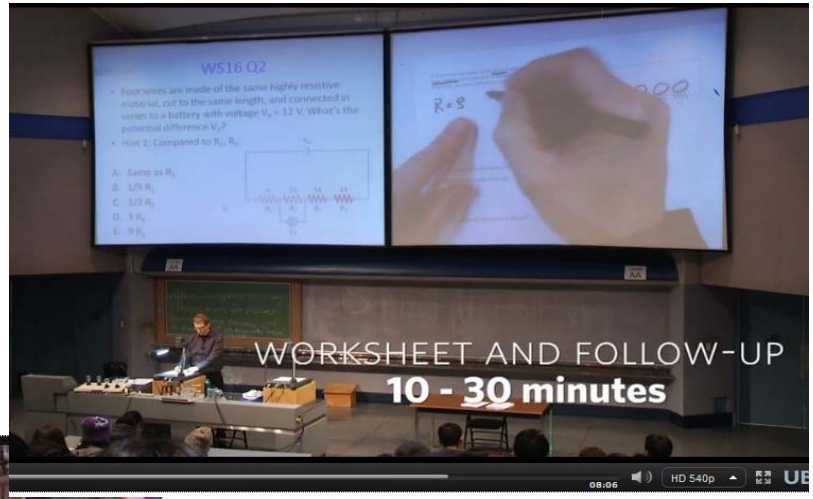


5. Two stage exams in large classes

- 1st year all students
- 350 students; lecture
- amateur production

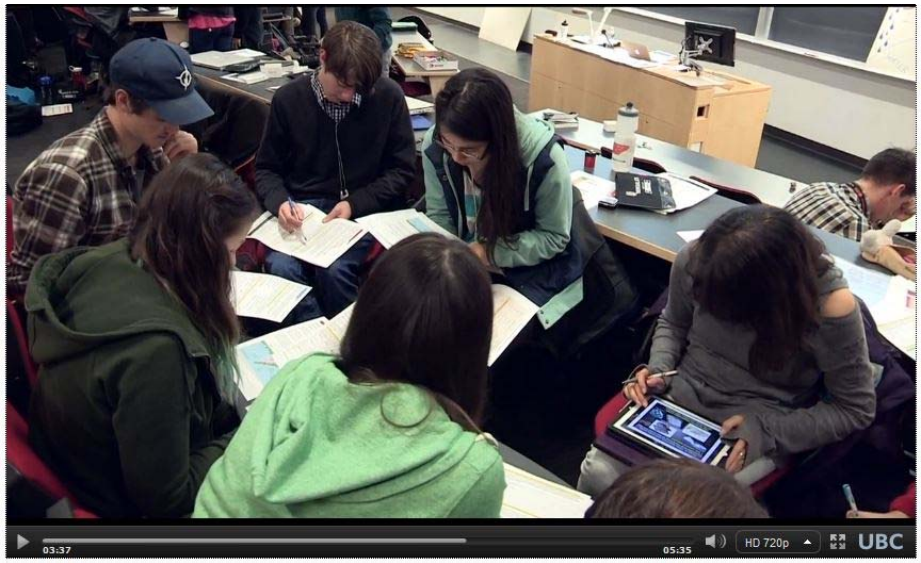
6. Clickers + group work, etc; physics 100

- PHYS; 1st year science majors
- 250 students
- professional production



7. Framework/capstone/jigsaw activity

- EOSC; 2nd year geoscience majors
- Pairs + large groups in 50 minutes
- 90 students
- Professional production



Your preferences for “useful” videos:

- Development directions depend on user’s needs.
- Your opinions can help prioritize further work.

Current video clip examples

1. Lab setting and active-class follow up strategies
   - Paleontology for 3rd year science majors
2. Basic group work strategies
   - Natural Disasters for all 1st year students
3. Math class group work and follow up
   - Mathematical proofs for 2nd year math majors
4. Tutoring with worksheets real time clicker questions
   - Climate change for 3rd year science students
5. Two stage exams in large classes
   - Natural Disasters for all 1st year students
6. Physics 100
   - Worksheets in an active class
7. A framework-concept capstone activity
   - 50-minute activity including pairs and large groups

References and resources

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