Investigating the Impact of Clicker-Enhanced Pedagogy in a Secondary Physics Methods Course

Part 2/2

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Sunday, January 5, 2014
AAPT 2014 Orlando, Florida
Research-Based Objectives

- Investigate the effect of Active Engagement (AE) on teacher-candidates’ (TCs’) epistemologies
- Explore a possible mechanism for AE pedagogy
- Model AE in the context of the course content
Integrating into the Classroom

Instructor modeling AE pedagogy

TCs experience developing questions
Research Project

Secondary Physics Methods Course
(+ 2-week short practicum)
13 students
13 weeks

Extended Practicum
10 weeks

Pre-Practicum Interviews (8)

Enhanced Practicum
3 weeks

Post-Practicum Interviews (7)

Focus Group (1)
Direct Impact on our Teacher-Candidates

Koeler & Mishra, 2007
Direct Impact on our Teacher-Candidates

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Pre-Interview 2, Participant 9
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Pre-Interview 2, Participant 9
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Post-Interview 2, Participant 20
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## Broad Impact for Teacher Education

### Investigate the effect of Active Engagement (AE) on teacher-candidates’ epistemologies

### Model AE with the course content

<table>
<thead>
<tr>
<th>&quot;I’m there as a teacher, (pause) but I’m also there as a student. Conversely, they’re there as a student, but they’re also there as a teacher. That doesn’t mean they’re teaching necessarily, teaching me. They’re teaching each other... You’re always a student-teacher, regardless of whether or not, what your position says. The moment you step out, and you meet someone, you now are both a teacher and a learner.&quot;</th>
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<td>Post-Interview 1, Participant 15</td>
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### Modeling impacts TCs epistemologies, regardless of successes/challenges in practicum
Explore a possible mechanism for AE pedagogy

Clicker-enhanced pedagogy works as a mechanism for AE pedagogy in a small class

“Coming into the program, we were all sort of thought that we were expected to be masters, and if the instructor puts up a clicker question, you think ‘Jeez, I don’t actually know the answer’ – immediately you think well, we’re all supposed to be masters, I’m probably the only one who doesn’t know. But uh when the responses come in, you see other people think like you, it’s definitely reassuring.”

Pre-Interview 2, Participant 9
Resources


