

Investigating a Paired Teaching Model for Transfer of Evidence-Based Teaching Practices

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Abstract

Multiple courses in the EOAS department at the University of British Columbia have been "transformed" over the last 7 years through the Carl Wieman Science Education Initiative (CWSEI) to incorporate best practices in instruction strategies; however, it is unclear to what degree these practices are transferred to instructors who were not a part of the course transformation team. This research investigates the potential of a paired teaching model (where an instructor who actively uses evidence-based practices is paired with either a new instructor, or one who has had limited exposure to such teaching practices) to achieve this dissemination.

Preliminary findings reported here are based on semi-structured, in-depth interviews conducted before and after a semester-long paired teaching experience, with eight instructors from three paired teaching teams. Recommendations for how to develop a successful paired teaching team are presented. This is a three-year project in its first year; novice instructors will continue to be observed as their teaching develops over the next two years.

From Co-Teaching to Paired Teaching

- Differing levels of shared involvement in the class by the instructors.
- Paired teaching has been used to:

- Model and develop collaborative skills for learners
- Provide doctoral candidates with experiential training in teaching
- Disseminate effective instructional strategies between instructors

Paired Teaching* in EOAS:

Courses in 2014/15

Course (Semester)	# of Instructors
EOAS 220 Introductory Mineralogy (F 2014)	3
ENVR 200 Introduction to Environmental Science (F 2014)	2
ENVR 300 Introduction to Research in Environmental Science (W 2015)	3

*Two or more instructors sharing the planning, organization, delivery and assessment of instruction, as well as the physical space in the classroom (Bacharach *et al.*, 2008)

Data Collection and Analysis

- Semi-structured interviews with instructors: pre-term and post-term (n=8 instructors; 16 interviews)
- Interviews recorded with permission, transcribed & coded into themes:

Advantages & Challenges of paired teaching as a means of transferring teaching practices

Preliminary Findings

Advantages:

- ❖ Shared experience sparks conversations that can highlight personal values about teaching & learning
- ❖ Allows for fostering of specific teaching skills
- ❖ Paired teaching in an already transformed course gives additional time & energy to reflect on teaching practice
- ❖ Gives insight into mechanics & logistics of instructional strategies (timing, choreography, etc.)

Challenges:

- ❖ Additional planning time required for coordination with other instructor(s)
- ❖ Power imbalances between the instructors can hinder open communication
- ❖ Novice instructors may feel pressure to emulate experienced instructor's teaching style
- ❖ Success of pairing is perceived as being dependent on personalities

Recommendations for a Successful Paired Teaching Team

Before the course begins, potential co-instructors should have a broad discussion of beliefs about teaching & learning, and a discussion of time management styles and respective roles

Each instructor should, if possible, attend every class period

Ongoing debriefing and shared reflection are essential – schedule regular meetings (at least once/week)

Teaching time should be divided roughly evenly, and alternated throughout the semester (i.e., not "serial teaching")

"Novice" instructor should actively observe & consider teaching techniques partner is using; "Expert" should explain what techniques they are using and the rationale

Novice should participate in the design of and lead some class activities; Expert (or an outside observer) should provide feedback

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