A Paired Teaching Model for Instructor Development: Lessons from the EAOS Department

Tara Holland

Department of Earth, Ocean & Atmospheric Sciences (EOAS)

Rationale:
Multiple courses in the EOAS department have been “transformed” through CWSEI to incorporate best practices in instruction strategies. We are investigating the potential of a paired teaching model to achieve transfer of these practices to instructors who have not been a part of a course transformation team.
Co-Teaching  ➔ 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

Bacharach et al., 2008; Chanmugam & Gerlach, 2013; Crow & Smith, 2005; Henderson et al., 2009; Walters & Misra, 2013
## Paired Teaching* in EOAS (2014-2016)

<table>
<thead>
<tr>
<th>Course (Semester)</th>
<th># of Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOAS 220 Introductory Mineralogy (F 2014)</td>
<td>3</td>
</tr>
<tr>
<td>ENVR 200 Introduction to Environmental Science (F 2014)</td>
<td>2</td>
</tr>
<tr>
<td>ENVR 300 Introduction to Research in Environmental Science (W 2015)</td>
<td>3</td>
</tr>
<tr>
<td>EOSC 516 Teaching and Learning in EOAS (F 2015)</td>
<td>2</td>
</tr>
<tr>
<td>EOSC 112 The Fluid Earth: Atmosphere &amp; Ocean (F 2015)</td>
<td>2</td>
</tr>
<tr>
<td>ENVR 200 Introduction to Environmental Science (Spring 2016)</td>
<td>2</td>
</tr>
</tbody>
</table>

*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 & Analysis

• Semi-structured interviews with instructors: pre-term and post-term
• Classroom observations
• Weekly reflections from both Instructors
• Interviews recorded with permission, transcribed & coded into themes
• Focus here is on effective roles Instructors can play

Roles that Instructors play in a paired teaching arrangement that facilitates Instructor development
Effective roles as identified by teaching pairs:

**Experienced Instructor**

- Model teaching practices
- Explain subtleties of teaching (choreography, timing of activities, monitoring group work)
- Ask for input from New Instructor
- Activity/lecture development: model, then guide, then consult

**New Instructor**

"By the end, he got the idea and then subbed out an activity in class. He came up with it, and ran it, and then we debriefed about it afterward."

"I learned, by example, effective ways to do adaptive teaching, like react to questions posed by students."

Experienced Instructor

New Instructor
Effective roles as identified by teaching pairs:

New Instructor

- Start as active observer. Reflect on class and ask questions of experienced instructor
- Take equal ownership of class; don’t be the “TA++”
- Develop some materials/activities independently, ask for feedback

“At the beginning, I always just followed her lead, or asked for help.”
New Instructor

“I needed to do a whole class, with an activity, on my own to realize how hard it is. It’s different than just using someone else’s materials.”
New Instructor
Example evidence of teaching practices “transfer” in one course: Experienced Instructor followed one week later by New Instructor.
Next Steps...Continue Data Collection on Teaching Practices

• The new instructors of the pair will fill in the Teaching Practices Inventory for subsequent (different) courses they teach.

• I will observe their teaching to collect data on what is happening in their classes.

• This cycle will continue with new pairs of instructors.
References


