

## **“Rethinking the Lecture” Learning Community**

*Academic Year 2018-2019*

### **Purpose**

The purpose of this Learning Community is to provide instructors with guidance, support and collaborative insights to rethink their lecture courses into active “learn by doing” experiences and to improve their students’ learning.

### **Overview**

Higher education’s paradigm has been shifting from the traditional “talking is teaching/listening is learning” format to models emphasizing active learning, reflection and collaborative problem-solving. How is that supposed to work in lecture halls? The very structure of lecture halls – in which the instructor is placed at the center of attention, seating arrangements that restricts student-student interaction, few capabilities for student-faculty exchanges – reflect the embedded assumptions of the old paradigm of teaching and learning. Add to that students’ deep socialization in the “sage on the stage” tradition and the reasons to avoid change are significant.

Some educators, however, have found ways to embrace active learning even in content heavy lecture courses. Scholars in many different fields have made significant progress testing and documenting instructional approaches that may have seemed to some impractical in lecture halls but turn out to be quite doable and effective. These accumulating findings provide a foundation for rethinking the traditional college lecture and transform them into dynamic, engaging and effective arenas for learning. Applying these findings to the design and implementation of lecture courses will result in instruction that is far more consistent with Cal Poly’s “Learn By Doing” pedagogical promise.

Another important aspect of effective instruction is to focus on how students learn. Even a perfectly executed active learning environment is no guarantee for student success if students are not actively engaged in the whole learning process. Recent research has demonstrated that awareness of efficient learning strategies, mindset, motivation and metacognition can have a significant impact on students’ performance and success. Can an instructor help students to become independent learners while teaching content-heavy courses? The answer is yes, and we will explore the different ways instructors can guide students to become independent learners without sacrificing content.

This learning community is designed to support instructors facing the challenges of creating powerful “learn by doing” experiences in lecture hall settings while also boost student learning in- and outside of the classroom. In addition, membership in this community of colleagues can help overcome the effects of academic isolation by creating space and time for supportive collaborations with dedicated colleagues.

### **Objectives**

As members of this Learning Community, our objectives are to:

- Strengthen our grounding in “scholarly teaching” by exploring the research literature on effective active learning approaches and improve student learning in- and outside of the classroom.
- Select and pilot test new approaches to lecture instruction and examine how they affect student learning; share results with community colleagues for feedback and collaborative support for refinement.
- Support each other’s work and capacities by providing rich and honest discussion, resources and insight into the craft of teaching.

## **Outcomes**

1. A reflection regarding rethinking your lecture(s) based on the assigned reading and workshop presentations/discussions.
2. Introduction of activities, materials, strategies, technology, etc., relevant to your lecture(s) that apply ideas gained from the literature and insights generated in exchanges with learning community colleagues.
3. Investigating the impact your implemented changes have on student learning.
4. An analysis of your course changes that (1) details the original questions or issues that prompted participation, (2) documents the key insights that prompted changes, (3) results on how the changes affect students' learning, and (4) a narrative about how the learning community experiences has affected your perspectives on the purpose and practice of teaching lectures.
5. A brief presentation of your analysis presented to your learning community colleagues.

## **Community Logistics**

We will meet alternate Thursdays for two hours (9:10am-11:00am) starting in early October (see calendar below). Thursdays were selected to provide the fewest schedule conflicts for the most people (although some conflicts are inevitable). In addition, participants will be allocating 1-2 hours between each session to process and apply ideas from each session as well as to prepare for the next session. In total, participants should expect to allocate approximately 40-45 hours over the academic year (13-15 hours/quarter).

## **Stipends**

Learning Community members who meet a minimum level of engagement will earn a \$500 stipend to recognize the investment of time and effort invested in the community and specific projects. Providing stipends also reflects Cal Poly's encouragement to faculty to engage in sustained professional growth opportunities. Stipend eligibility is determined by campus policies.

"Minimum level of engagement" includes:

- Participation in at least 10 of 12 meetings during the academic year
- Regular contributions to the community's online exchanges (discussions, contributing resources and work products).
- Completing and sharing with community colleagues the outcomes described above.

Please note that your participation is welcome even at levels that are not stipend-eligible. This is in recognition of the many demands that faculty have on work schedules. Join us when you can for as long as you can as your schedule and real-world demands allow. You are always welcome!

## **Facilitators**

Solina Lindahl is an Economics instructor in the Orfalea College of Business. She has been teaching at the university level for 20 years, including substantial numbers of large lecture courses at Cal Poly. She was Cal Poly's first "Lead Faculty" in the CSU-sponsored Course Redesign with Technology grant program, mentoring faculty from other CSU campuses to enhance student learning in their economics courses. She also serves as an Educational Technology Consultant.

Steffen Peuker holds the James L. Bartlett, Jr. Assistant Professor position in the Mechanical Engineering Department at Cal Poly. He has taught lecture courses at the University of Illinois at Urbana-Champaign, the University of Alaska

Anchorage and at Cal Poly. Steffen's educational research focuses on developing students into self-regulated learners to increasing student retention and success in engineering.

## Calendar

The tentative calendar lays out the academic year dates and topics for this Learning Community, subject to revision based on the interests and the needs of community members. All sessions are on Thursdays 9:10am-11:00am in 35-319b (except January 17, which meets in 209) in Kennedy Library. Please block these dates and times on your calendar.

Fall Quarter:			
How Learning Works: The Basics of Learning Science, Assessment and Metacognition			
<b>Meeting 1</b>	Thursday Oct. 18	Overview: How Learning Happens (chs 1-2)	9:10am-11am
<b>Meeting 2</b>	Thursday Nov. 1	Assessments: Good Student Assessment Design and Introduction to the IRB Process	9:10am-11am
<b>Meeting 3</b>	Thursday Nov. 15	Metacognition: Why 'thinking about thinking' matters for student success (chs 3-5)	9:10am-11am
<b>Meeting 4</b>	Thursday Nov. 29	Team-Based Learning: The Ultimate Active Learning Experience for Students (With Jennifer Mott, TBL trainer and ME professor)	9:10am-11am
Winter Quarter:			
Technology, Motivation, and Discussion			
<b>Meeting 5</b>	Thursday Jan. 17	Mindset: Fixed vs. Growth Mindsets and our Students (ch 6)	
<b>Meeting 6</b>	Thursday Jan. 31	The Technology of Active Learning: Tools for Assessment and Delivery of Content (NOTE: meets in 35-209)	9:10am-11am
<b>Meeting 7</b>	Thursday Feb. 14	Pre-Knowledge and Conceptual Change: How and Why to Try Uncovering Student Preconceptions	9:10am-11am
<b>Meeting 8</b>	Thursday Feb. 28	Motivation: How to Help Students build their Engagement (ch 7-9)	9:10am-11am
Spring Quarter:			
Assorted Topics and Project Showcases			
<b>Meeting 9</b>	Thursday Apr. 11	How to Lead Better Discussions in the Classroom	9:10am-11am

<b>Meeting 10</b>	Thursday Apr. 25	Topics (to be decided together)	9:10am-11am
<b>Meeting 11</b>	Thursday May 9	Topics (to be decided together)	9:10am-11am
<b>Meeting 12</b>	Thursday May 23	Project Showcase	9:10am-11am