Engaging and Supporting Faculty to Use Project-Based Learning

Prof. Chrys Demetry
Director, Morgan Teaching and Learning Center
A shift from instructor-centered to learner-centered teaching

Credit: Karl Smith, Advancing the Practice of STEM Education Using Research on How Learning Works (2011)
Change in Instructor Roles

Sage-on-the-stage $\rightarrow$ Guide-on-the-side

Purveyor of knowledge $\rightarrow$ Interventionist
   Problem solver

Content expert $\rightarrow$ Process coach

Worcester Polytechnic Institute
Faculty Development Mechanisms for Project-Based Learning

• **One-time or annual events**
  – Workshops
  – Institutes and academies
  – Symposia and conferences

• **Peer mentoring and apprenticeships**
  – Team teaching, co-advising
  – Mentoring programs, consultations

• **Internal grants**
  – To individuals or groups

• **Community building**
  – Faculty Learning Communities
  – Communities of Practice

Worcester Polytechnic Institute
Communities of Practice

A group of people who share a common concern, a set of problems, or interest in a topic and who come together to fulfill both individual and group goals.

A group of people who share best practices and create new knowledge to advance a domain of professional practice.

Communities of Practice: Three Fundamental Elements

• **Domain:** a topic that creates and defines common ground

• **Community:** social interactions and relationships based on mutual respect and trust

• **Practice:** specific knowledge that the community develops, shares, and maintains (ideas, tools, information, styles, stories, documents)
Planning and Launching a Community of Practice

1. Define the domain and identify engaging issues

• What is particularly important to FSC?
• What are community members passionate about?
• What is a scope that is wide enough to bring in a variety of people but narrow enough that most will be interested in topics discussed?
• What knowledge needs or structures would you like to explore and develop together?
• How can you communicate and collaborate on an ongoing basis?
Developing a Community of Practice

• Evidence of value of PBL to students
• Celebrate successes – to help spread practice
• Maintain momentum – leave with a plan to get back together
• Put projects early in curriculum
• Use CTLT as venue for collaboration/share PBL
• Use WID as a model as new initiative and as course designation to point students to PB courses
What changed

• Will co-teach
• Feel validated
• Put project into EOP or ASAP
• Publicize the good things already happening
• Highlight PBL in ‘teaching innovations’ section of faculty annual report as important contribution
• Influence choice of president
2. Developing a Preliminary Design

Define the activities, technologies, group processes, and roles that will support the community’s goals:

- **Activities:** What kinds of activities will generate energy and support the emergency of community presence? What will the community’s rhythm be?

- **Communication, collaboration, interaction:** How will members communicate and collaborate on an ongoing basis to accomplish their primary purpose? What kinds of interactions will generate energy and engagement?

- **Knowledge sharing:** What are the internal and external resources (people, publications, etc.) that will support the community during its initial development?