

Forming communities of practice – Room D

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1. Nature of problem

We had lots of discussion about this. The closest we came to an answer was:

This meeting is about bringing together 3 communities who don't usually talk— STEM faculty, faculty developers and social science researchers. How can we foster formation of other such communities that blend these domains of knowledge and make use of it (on our own campuses or in other national and regional forums) to help solve the hard problem of improving undergraduate STEM education?

2. Goal - what we want to achieve

Lower barriers to forming problem-solving communities of practice (as above). Greater awareness among all groups that we need each of these types of expertise to address STEM education effectively. Ways to help change agents in any of these groups go recruit such help.

3. Action items

- Join POD or form a new listserv that likewise encourages cross-disciplinary conversation of this type and provides resources
- Attend or create interdisciplinary meetings like ISSOTL, where such conversations already take place to some extent
- Form interdisciplinary reading groups on the issue of STEM education and use them as seeds for action groups. We noted that intellectual community is an attractor to bring people in (e.g. long-term stability of reading groups in teaching/learning centers, area studies, etc.) – how can we use this "pull" on STEM education issues?
- Organize groups to do this around a campus or system problem – such as bottleneck courses
- Identify publications that cross these boundaries and share knowledge from one group with the others (e.g. publications that help "translate" fields to each other—not to substitute for deep knowledge, but to help raise awareness that other fields know stuff we need to know) . Gather in an annotated bibliography or web site.
- Figure out what translational needs we still have (need an article that explains org change to physicists... this now begins to cross into the change agent toolkit task, maybe) – and initiate collaborations to write and publish them