Research Questions regarding transformation and change

How does change happen, particularly in engineering education or more broadly?

What do we know and what do we not know?

Learning community models
- Know about campus level groups, how does that work and how you can make that happen
- Less is known about cross-institutional communities
- How did the engineering consortia operate, as hub and spoke model, or as a more equal collaborative model?
- Colonialism models of change – we know best, let me now tell you
- Start with hub model and then charged with developing local learning communities
- Lots of literature about residential learning communities
- What are the critical elements do start and sustain learning communities?
- Need legitimate resources, leadership and goals to sustain LC's
- Social networking as descriptions of existing networks and evaluative tools for examining effectiveness of dissemination
- What do existing social networks tell us about existing interactions of people who interact over teaching and learning issues?
- How can existing strategies be used to change the structure of the networks?
- In what ways does a teaching innovation change the structure of a social network?
- To be functional learning communities need to have an identity, shared discovery learning, and need to be the right size (within max or min bounds).
- Are functional roles necessary in learning communities?
- Comparative studies of the evolution of social networks? Comparative studies are not necessary to develop causal mechanisms.
- What role does money play in the development and sustainability of learning communities?
- How central of a role does promotion and tenure criteria play in the participation in LC’s?
- How does the locus of the ILC influence diffusion? Is this more effective in a grass roots or top down movement?
- People how seek out this community want to participate for specific reasons?
- Does a multi level LC allow for multiple entry points, and participation by those that we are trying to reach?
- How do you effect change in a community, beyond the PI, co-PI model?
- Can “stacking the deck” influence cultural change?
- The impact of the 2-year community college collaborative program influence collaborations.
• Should there be another section in NSF proposals that includes a plan for impact, more than existing requirements in broader impacts and dissemination plans.
• Be explicit about their theory or model of change
• Include resourcing towards the plan for impact
• Successful transformative awards, what are the common elements of these awards, even absent a change model in the original proposal
• What have programs produced by asking people how to prepare proposals in certain ways?
• How did the change of the focus of the CCLI/TUES program change proposals, activities, and outcomes?