Research on university faculty member's reasoning about how departments change

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Background: Reasoning about change

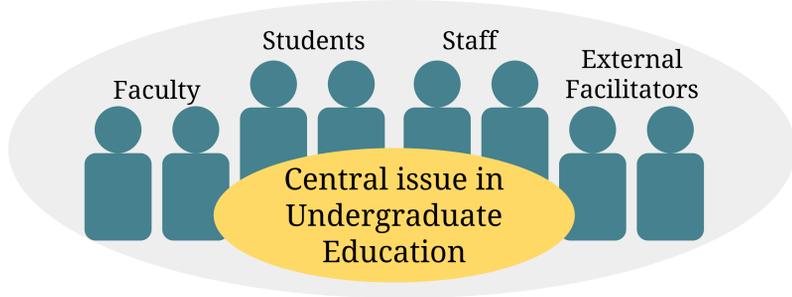Apply multiple change perspectives (Kezar, 2013)

Reason with multiple productive ideas (Hammer, 2000)

Determine the most context-appropriate perspective

Change Perspective	Underlying Mechanism
Scientific Management	Incentives and rewards
Social Cognition	Shifts in individuals' understanding
Cultural	Shifts in/alignment with culture
Evolutionary	External, unplanned factors
Political	Collective action and bargaining
Institutional	Pressures from other institutions

Departmental Action Teams (DAT)

Faculty   Students   Staff   External Facilitators

Central issue in Undergraduate Education

Analysis

Interviewed Faculty in *Potions* DAT

Identified unique change "stories"

Aligned stories with change perspectives
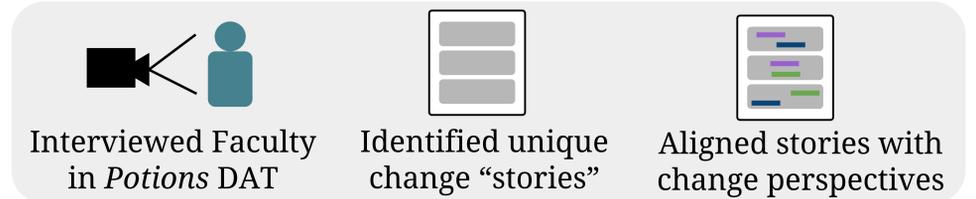
We identified two common "stories" that Potions faculty use to talk about the effectiveness of change efforts.

Story 1: Scientific Management failed because of misalignment with culture

"There was a history in [change effort]… to develop courses **that we would then be required to teach**. And… **we're not allowed to park on campus anymore as faculty members unless we pay the going rate. The last thing we can do is teach the damn class the way we want to.** When someone **makes a standard that you'll have to adhere to**…It's just a terrible idea. And yet just exactly that language was used early on in the [change effort]. Including **teeth during performance evaluation**, [and] **a substandard rating and raise.**"
Alex, Potions faculty

"When I first came there was… some number of faculty who were very resistant to the idea of being told to change the way that they teach. I remember people making comments about I'm not going to use clickers or, you know, do whatever, **just because [leader in STEM education] says that's what I should do, you know? This principle of academic freedom** and **choosing how you're going to do your research and teach your class** can become sort of a tool that people use to resist doing anything differently."
Sally, Potions faculty

Story 2: Social Cognition worked because of alignment with culture

"**[Potions] sees itself as progressive, trying to break new ground regularly**…[and] has a long **history of being concerned about what we're doing right and what we're doing wrong**…It is **confusing to wonder why**…we hover in the low teens in terms of number of our students who are female… Everybody knows that there's got to be something going on there. **But we don't honestly think we know what it is**… I think that's something that **thinking people want to understand**… We've got a committee that's going to make suggestions and **keep track of numbers [of retention data],** and if the numbers become too overwhelming, and we think there's a **path to understanding,** then things will change."
Alex, Potions faculty

"I think one thing that's made [change] happen is **people seeing how it works and seeing examples of other people doing it** and sort of imitating their colleagues, and also **becoming more familiar with the research that this can be beneficial**… **For [Potions] faculty,** seeing examples of success and **seeing data**, my impression is that **those are the things that tend to be persuasive.**"
Sally, Potions faculty

Discussion

- Understanding the common ways faculty reason about change can support facilitators in guiding discussion
- Future analyses will study how different reasoning patterns about change emerge and impact faculty members' decision-making
- We advocate for treating faculty thinking in ways that parallel consideration of student thinking

Kezar, A. (2013). *How colleges change.* Routledge.
Hammer, D. (2000). Student resources for learning introductory physics. *Am. J. Phys.*, 68(S1), S52-S59.