

Math Persistence through Inquiry and Equity (MPIE): A project for characterizing change at a two-year HSI.

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Introduction

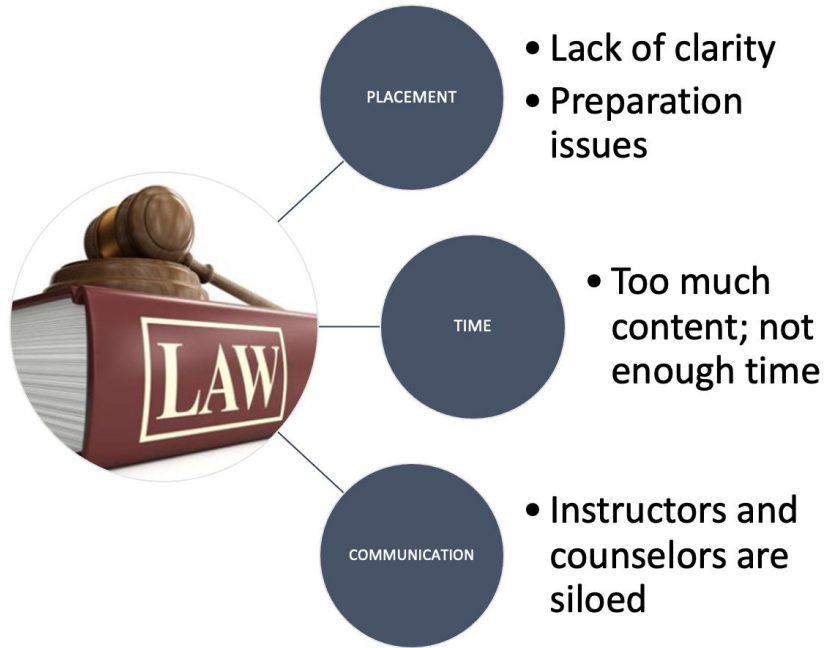


- Of the STEM-intending students at a two-year HSI who start their path at College Algebra, only about 22% pass Calculus 1.
- To combat these low pass rates, legislation in California has been passed requiring students to be placed in a transfer-level course during their first year of study.
- The MPIE project:
 - Phase 1: Conduct and analyze institutional and classroom data to inform PD
 - Phase 2: Cycles of design research and PD to promote inquiry and equity-oriented teaching practices
 - Phase 3: Study sustainability of changes

Year 1: The Data

- Interviews with students, instructors, department chairs, deans, PD developers
- Institutional data
- Classroom observations
- Surveys

Year 1: Initial Findings/Themes



Student: *“Uh, not sure. I-I just filled out the form and they gave me the class I should be in.”*

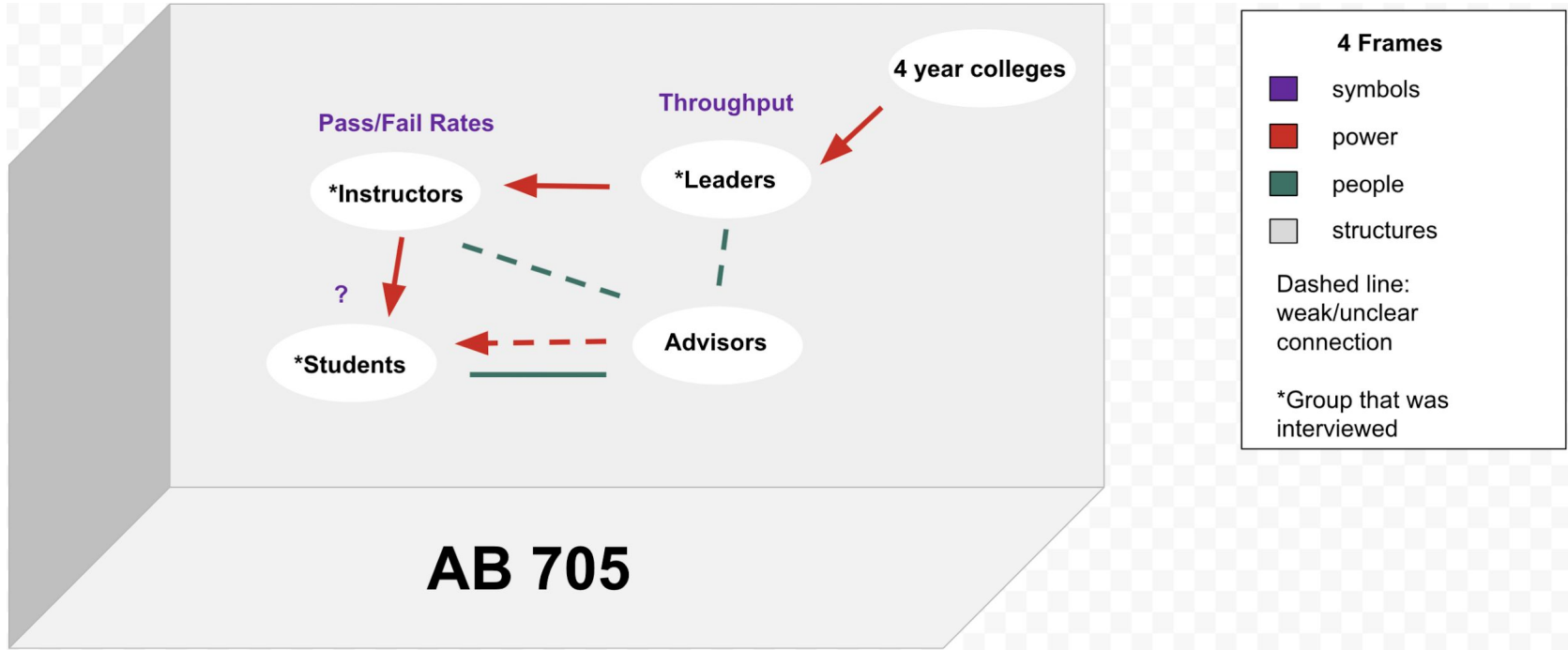
Instructor: *“They’re not coming in with the skills they need to pass.” and some feel students are not being appropriately advised.*

Instructor: *“Students are [now] coming into [the course] less prepared” and “then suddenly we’re spending more time on this prerequisite material, and then we can’t get into or as far as we need to get to for the other content for students to move on to the next course.”*

Student: *“I feel like the professor does a good job of covering the material when she does but I don’t, you know obviously if we’re covering you know 6, 7 sections a week but we’re only meeting one hour for class, it doesn’t really give us a lot of instructor time”*

Dean of Counseling: *“There’s too much silo and we’re trying to really get rid of the silo, so there’s more communication and more transparency around it.”*

Year 1: Initial Findings along the 4 Frames (Bolman & Deal, 2008)



Thank You!

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Mathematics Persistence through Inquiry & Equity: Year 1 Findings

