

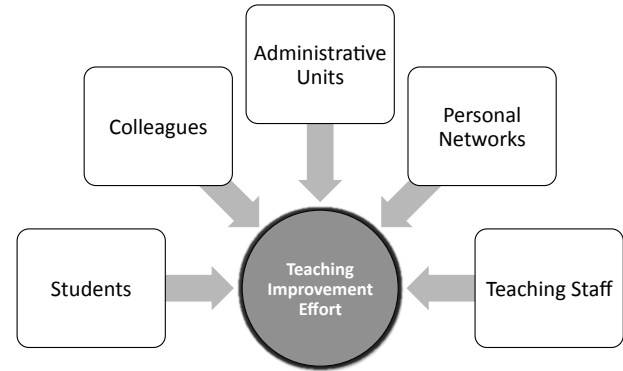
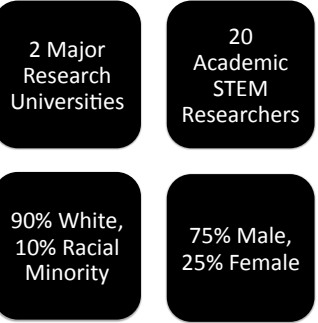
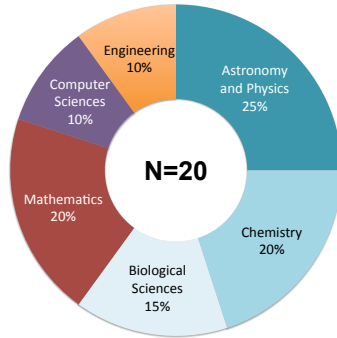


# Academic Researchers' Joint Ventures Toward Introductory STEM Teaching Improvement at Major Research Universities

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**Research Question:** What mechanisms are involved in academic STEM researchers' introductory teaching improvement efforts at major research universities?

Sample Characteristics



**Main Finding:** 100% of academic STEM researchers in this study reported or were observed working with at least one other entity in their efforts to improve their introductory STEM teaching.

**Proposition:** Joint work is a mechanism driving academic STEM researchers' teaching improvement efforts at major research universities.

**Data Claim 1:** Joint work, inclusive of a wide array of individuals and/or entities, some related to and others outside a researcher's academic discipline, may be a viable mechanism for driving introductory undergraduate STEM teaching improvement at major research universities.

**Data Claim 2:** Academic STEM researchers appear to learn about introductory teaching, students, and subject matter through their joint ventures toward pedagogical improvement.

**Data Claim 3:** Academic STEM researchers derive specific gains through joint work on teaching improvement. This includes time-saving strategies that create spaces within their crowded career roles.

**Data Claim 4:** Specific institutional policies, such as hiring dedicated personnel to work with individual faculty on teaching improvement, may promote pedagogical enhancement among academic STEM researchers at major research universities.

Data Sources	Number
Verbatim, In-depth Interview Transcripts	40 (2 per participant)
Observations of STEM Researchers' Classroom Teaching	36
Post-Observational Interviews	36
Field Notes	130
Hard Copy and Digital Documents	200+
Verbatim Interview Transcripts from Study Informants	6

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