

Summary of findings across institutions types

Characteristics	PhD	MA	BA	AS
Student supports	X	X	X	X
Staffing (at PhD this is different, and absorbed into supporting transient instructors)	X	X	X	X
Placement	X		X	X
Coordinated Independence (blend of support and faculty autonomy)	X		X	
Instructional/ instructor support (PhD includes GTA training)	X		X	
Innovative approach to <u>calc</u> (student centered instruction and/ or technology use)	X		X	
Local Data	X			X
Transfer policies				X
Rigorous Courses	X			

What to do with these findings?

Henderson, C., Beach, A., & Finkelstein, N. (2011). Facilitating change in undergraduate STEM instructional practices: An analytic review of the literature. *Journal of Research in Science Teaching*, 48(8), 952-984.

Less effective change strategies:

- Developing and testing “best practice” curricular materials and then making these materials available to other faculty
- “Top-down” policy-making meant to influence instructional practices

More effective change strategies:

- are aligned with or seek to change the beliefs of the individuals involved;
- involve long-term interventions, lasting more than one semester;
- require understanding a college or university as a complex system and designing a strategy that is compatible with this system