

Faculty professional development for inclusive teaching in HIPS:
Cultivating leadership and promoting sustainability

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Agenda

1. Think-pair-share

2. Inclusive teaching

Definitions

Examples

Impact

3. Strategies for Effective Faculty Development

Within HIPS

Improving follow-through, persistence

4. Cultivating Leadership and Sustainability

Going beyond the initial group

What is your change model?

Institutional priority alignment

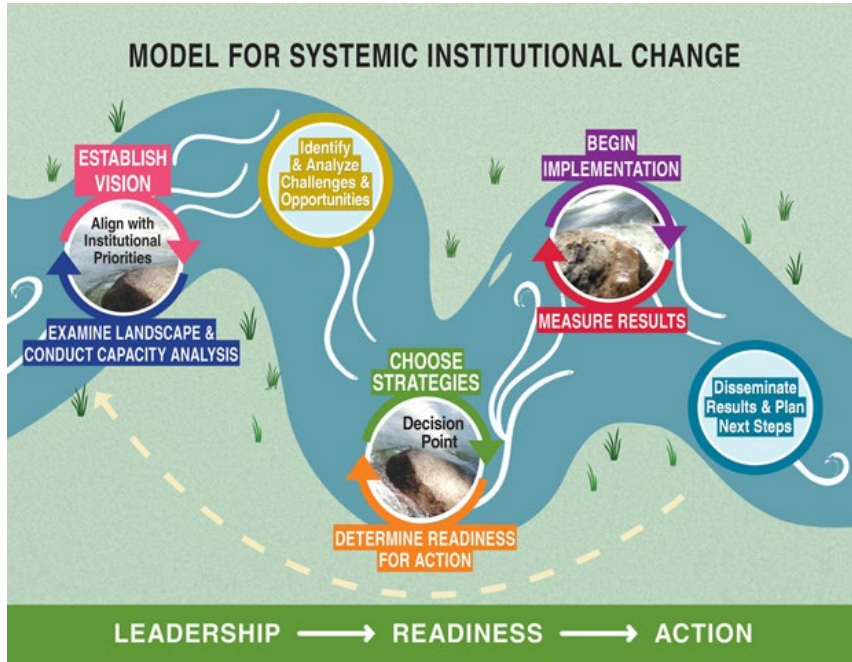
Broader infrastructure

5. Revisit think-pair-share

Concern/Barrier	Strategies to Overcome

Change Models

Elrod, S., & Kezar, A. (2016). Increasing Student Success in STEM: A Guide to Systemic Institutional Change. AAC&U publications.



Phase 1: Structural	Phase 2: Behavioral	Phase 3: Cultural
Set priorities Develop vision and direction Communicate vision Explore meaning of the change Create support systems Energize people	Build momentum Provide rewards and incentives Create opportunities for involvement Act as inspirational leader and persuader Create more systemic support systems	Focus on the meaning of the change Build consensus around values Help people sort values Resolve values conflicts Make part of on-going operations, e.g., budget and evaluation

Kezar, A. J. (2007). Tools for a time and place: Phased leadership strategies to institutionalize a diversity agenda. *The Review of Higher Education*, 30(4), 413-439.

Additional Resources

AAC&U resource on Transparent Teaching. <https://www.aacu.org/publications-research/periodicals/transparency-teaching-faculty-share-data-and-improve-students>

Learn more about this initiative as transparency is a key principle for inclusive teaching.

Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How Learning Works: Seven Research-Based Principles for Smart Teaching*. Jossey-Bass: San Francisco.

Excellent resource that explains more about learning, including ways to leverage prior knowledge and experience. Strategizes about how to draw upon a learner's assets and invite the voices of students more fully into the classroom.

Borrego, M., & Henderson, C. (2014). Increasing the use of evidence-based teaching in STEM higher education: A comparison of eight change strategies. *Journal of Engineering Education*, 103(2), 220-252.

Documents eight different change strategies that can be used to increase the use of evidence-based teaching in STEM, including faculty learning communities involving cohorts of instructors, policy-based models focused on quality assurance and the need for data on effectiveness in teaching, and diffusion featuring a multi-stage adoption process of many individual instructors. Using a combination of strategies will be more effective than any one strategy alone.

Brownell, S. E., & Tanner, K. D. (2012). Barriers to faculty pedagogical change: Lack of training, time, incentives, and...tensions with professional identity? *CBE-Life Sciences Education*, 11, 339-346.

Suggests that faculty at research-intensive universities may grapple with being professionalized as researchers and see teaching as lower status. By shifting the conversation to a barrier the discipline is facing, by dedicating journal space (e.g., Science) to education article, and examining the training provided to postdocs, we may be able to make the investment in teaching a core part of the disciplinary identity.

Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty*. Jossey Bass: San Francisco.

This model describes an investment in student consultants who are prepared to join the classroom environment and provide candid feedback about student experience.

Grimes, C. L., & White, H. B. (2015). Passing the baton: Mentoring for adoption of active learning pedagogies by research-active junior faculty. *Biochemistry and Molecular Biology Education*, 345-357.

Suggests a model of co-teaching with an experienced project-based learning teacher and a new PBL teacher because workshops can only go so far to help with questions of daily implementation. Try enlisting seasoned faculty as coaches to help scale implementation.

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.

Argues that simply making best-practice materials available to other faculty, including through one-time workshops, does not, in itself, promote change as compared to faculty seminars lasting at least one semester. Having access to sustained support was also necessary institutionally. Research was lacking that analyzed new approaches to reward teaching through new policies.

Henderson, C., Dancy, M., & Niewiadomska-Bugaj, M. (2012). Use of research-based instructional strategies in introductory physics: Where do faculty leave the innovation-decision process? *Physics Education Research*, 8 (020104), 1-15.

Researchers surveyed 722 physics instructors drawn from a sample across the United States and found approximately one-third discontinued their use of all research-based instructional strategies after one semester. Institutional type and age did not predict continued use. Large class size was not predictive of quitting but was predictive of less use of strategies.

Ladson-Billings, G.J. (1995). Toward a theory of culturally relevant pedagogy. *American Education Research Journal*, 35, 465-491.

Foundational piece that highlights key components of culturally relevant pedagogy, including a focus on the teacher's critical consciousness. The article looks closely at a teacher's cultural competence, social relationships, and investment in community as well as their viewing of students' knowledge and assets.

McShannon, J., Hynes, P., Nirmalakhandan, N., Venkataramana, G., Ricketts, C., Ulery, A., & Steiner, R. (2006). Gaining retention and achievement for students program: A faculty development program. *Journal of Professional Issues in Engineering Education and Practice*, 132(3), 204-208.

Describes a cost-effective method of having a trained observer in the class giving feedback, at about \$500 to \$900 per faculty. The research documented that faculty changed their teaching practices to involve more active learning, resulting in a 9 percent increase in retention and improved student grades.

Packard, B. W. (2018, Fall). The power of mentoring within high-impact practices: A focus on low-income students. *Diversity & Democracy*, 21(4).

Reflecting on how we identify with or come to understand the experience of our students. Emphasizing feasibility and recognition can help us to take a pro-active stance in our teaching and advising.

Pon-Barry, H., Packard, B. W., & St. John, A. (2017). Expanding capacity and promoting inclusion in introductory computer science: A focus on near-peer mentor preparation and code review. *Computer Science Education*, 27(1), 54-77.

Explains inclusive pedagogy training of peer mentors and initial data on outcomes. Curriculum at: <https://sites.google.com/mtholyoke.edu/mage-training-curriculum>

Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok—not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48(3), 731–737.

Documents what researchers call "comfort feedback" or the false reassurance that certain students (such as women in math) do not need to worry about poor skill development or performance. Well-intentioned mentors and instructors may undermine student persistence with this type of feedback.

Wieman, C., Deslauriers, L., and Gilley, B. (2013). Use of research-based instructional strategies: How to avoid faculty quitting. *Physical Education Research*, 9 (023102), 1-5.

Documents an initiative at the University of British Columbia that studied the lack of quitting among 70 faculty (only 1 in the first semester, and four out of 50 in the second semester). In this model, a subject specialist partners with a faculty member not only in the first semester but into the second semester. This helps with initial implementation and supports a departmental environment where others are implementing research based instructional strategies.