Coalition for Reform of Undergraduate STEM Education









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Coalition for Reform of Undergraduate STEM Education Releases Sourcebook on Achieving Systemic Change

Sourcebook Highlights Recommendations and Resources Developed Through
Project Supported by the Alfred P. Sloan Foundation and the Research
Corporation for Science Advancement

Washington, DC— November 4, 2014—The Coalition for Reform of Undergraduate STEM Education today announced the release of <u>Achieving Systemic Change: A Sourcebook for Advancing and Funding Undergraduate STEM Education</u>. The sourcebook examines why systemic reform is urgently needed in undergraduate STEM education and offers practical advice on ways to achieve widespread and sustained transformation of teaching in STEM disciplines.

The publication, edited by Catherine L. Fry, features findings developed in <u>a workshop</u> held at the American Association for the Advancement of Science that brought together representatives from foundations and STEM education experts and members of higher education associations.

Achieving Systemic Change is intended to serve as a resource for those who have a stake in reforming STEM education. Among the publication's recommendations are suggestions for building institutional capacity for systemic change and for overcoming barriers to faculty adopting effective teaching and learning practices in STEM classes and programs.

"Decades of national investment in research on learning have yielded a rich array of evidence-based, high-impact teaching practices," the four organizations' leaders wrote in an introduction to the document. "Yet research also shows disappointingly little implementation of these practices in undergraduate classrooms...Campus leaders need to set clear goals to make effective practice pervasive – goals for institutional leadership and goals for departmental progress."

The sourcebook is designed to support such coordinated action on campuses.

About the Coalition for Reform of Undergraduate STEM Education

Coalition members share the belief that the culture of undergraduate STEM education must shift from reliance on lecturing to activities inside and outside the classroom that engage students directly, and that draw in a student body that is fully representative of the diversity of our population. Our common experience is that initiatives that support change at the individual faculty, course, or curriculum level have not been enough to bring about this cultural shift. We also believe that forces are now aligned that could effect a cultural shift to evidence-based practice. The Coalition is composed of a group of action leaders within organizations working toward these changes. These leaders work to coordinate their respective initiatives, as appropriate, in order to

provide greater collective leverage to transform undergraduate STEM education. The Coalition's ongoing activities have been supported by the Alfred P. Sloan Foundation.

Present coalition members include staff from:

American Association for the Advancement of Science (AAAS) Association of American Colleges & Universities (AAC&U) Association of American Universities (AAU) Association of Public and Land-grant Universities (APLU) National Research Council (NRC)