

**STEM education reform
A public research university imperative!**

University of Florida



Howard Gobstein

Executive Vice President
APLU

A significant and growing portion of future U.S. jobs will require proficiency in the STEM fields – from majors and workers having knowledge and problem solving skills in related fields. State and industry leaders are demanding more from university education. A significant number of students at research universities change from their intended STEM majors, shortchanging the national human resource capacity in these vital areas. Many other students leave universities without critical broader literacy in STEM related fields. Public research universities have a significant role. We have the largest concentration of STEM students, provide most of the advanced education in STEM fields, prepare most of the future faculty, and are leaders in higher education in their states.

There is widespread change afoot. Recent studies have shown “active learning approaches definitively contribute to higher student achievement , translating to 50% greater student success in many courses. This has prompted at least one national science leader to call it a travesty for universities to continue using straight lectures in courses. The Association of American Universities recently began a STEM education reform initiative for introductory courses. Will these -- and a growing number of other national efforts -- be sufficient to change the way public universities teach STEM courses?

Tuesday, November 18, 1:55-2:45 pm in MSL 136—the VIZ Room

Introduction by Dave Richardson, Interim Dean of CLAS

Refreshments at 1:30 in Marston Science Library 136