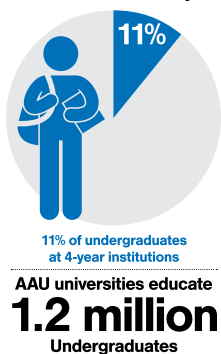

A Message from the President



AAU institutions are distinguished for their world-class research and the quality of their graduate education programs. Less recognized and valued is the role AAU universities play in undergraduate education. Yet AAU institutions educate close to 1.2 million undergraduate students every academic year. In educating these undergraduate students, AAU universities have a responsibility to promote the use of evidence-based teaching practices proven by research to be most effective at advancing student success. Additionally, they must provide their faculty members with the encouragement, training, and support to effectively employ these instructional approaches in the classroom. The AAU Undergraduate STEM Education Initiative is a significant test of the degree to which a group of prominent research universities can work collectively with their national organization to improve the quality of teaching in undergraduate STEM courses, especially large introductory and gateway courses, thereby enhancing the learning experiences of many thousands of their undergraduate students.

The results of the Initiative thus far indicate a resoundingly affirmative answer to this test. At the same time, the Initiative has helped AAU understand how it, as a major association of research universities, can help to support meaningful change at various institutional levels to improve undergraduate STEM education. While there is much work to be done to realize a 'new normal' – one characterized by personal and institutional expectations that all faculty members will both use and be rewarded for using evidence-based approaches to instruction – our Initiative suggests that progress is being made.

AAU continues its commitment to achieving widespread systemic change in this area and to promoting excellence in undergraduate education at major research universities. We are now reaching a major tipping point. We cannot condone poor teaching of introductory STEM courses because we are trying to weed out the weaker students in the class or simply because a professor, department and/or institution fails to recognize and accept that there are, in fact, more effective ways to teach. Failing to implement evidence-based teaching practices in the classroom must be viewed as irresponsible, an abrogation of fulfilling our collective mission to ensure that all students who are interested in learning and enrolled in a STEM course – not just those who will choose to major in or pursue an advanced degree in that discipline – are provided with the maximum opportunity to succeed. This change is what is needed to ensure that we have the STEM-literate workforce and general population required to propel the nation forward into the 21st century and beyond.

Mary Sue Coleman

President

Association of American Universities