MA Board of Higher Education Votes to Improve Math Remediation, Create New Math “Pathways” of Study

Trustees Encourage Campuses to Align Math Instruction With Students’ Career Goals

Contact: Katy Abel, External Affairs
Mass. Department of Higher Education
617-994-6932
kabel@bhe.mass.edu

Haverhill, MA – December 10, 2013 – With 38% of public college and university students enrolled in non-credit remedial coursework during their first semester in college, the Massachusetts Board of Higher Education has voted to encourage campus efforts to improve remedial math education, create new academic pathways for math instruction, and increase the number of students who are prepared to finish college and enter the workforce, the Department of Higher Education announced today.

The Board approved a series of pilot initiatives, part of the Board’s Vision Project strategic agenda for public higher education, aimed at helping students advance more quickly to credit-bearing courses while obtaining the skills needed for college-level work. A task force convened by Higher Education Commissioner Richard M. Freeland reported in October that of the 11,000 community college students who took remedial math in fall 2010, 9,000 have yet to pass a credit-bearing math course. In Massachusetts, 60% of community college students, 22% of state university students, and 10% of UMass students take at least one remedial course, with the need for math remediation significantly outpacing that in writing and reading. Research indicates that students who are enrolled in remedial courses are much less likely to graduate from college.

“Nationally, fewer than 25% of those who begin post-secondary education in developmental coursework ever acquire a degree”, the Task Force report noted.

“This is indeed a national problem and Massachusetts is in the vanguard of states who are moving to improve remedial math instruction”, said Commissioner Freeland. “Our research indicates that students who take math that is appropriate for their interests and career goals are more successful in their courses and more likely to complete college. This should matter to everyone, given the Commonwealth’s growing need for high-skilled college graduates in the coming years.”
At Tuesday’s meeting, the BHE voted to:

- Set the 2014-15 academic year as a “pilot study year” during which campuses are strongly encouraged to revise the content, sequencing, and timeframe of their developmental math offerings;
- Urge campuses to design general “academic pathways” for all students, including math sequences consistent with the academic requirements of each pathway or “meta-major”, such as social sciences, liberal arts, and STEM (science, technology, engineering and math);
- Set an intermediate goal of increasing by 20% the rate of students completing a first gateway-level course within two years of enrollment;
- Authorize the Commissioner to convene an implementation team to promote best practices by campuses during the 2014-15 academic year. The team will report progress and results towards the goal of increased gateway course completion to the Board by March 2015.

In October, the BHE voted to allow campuses to use high school GPA as a measure of a student’s readiness for college-level math, in lieu of a placement exam. National research has shown GPA to be a better predictor of college success than placement exams.

In creating new math pathways, campuses will look beyond the traditional algebra-to-calculus sequence and create new, academically rigorous math course sequences that align with different areas of study. For example, a liberal arts student might pursue quantitative reasoning; a social sciences major might study statistics. Students will be able to easily switch from one pathway to another.

“A recent New York Times editorial noted that 90 percent of American high school graduates say they are not interested in pursuing degrees in science, technology, engineering or math”, said Carlos Santiago, Senior Deputy Commissioner of Academic Affairs for the Department of Higher Education. “We not only need Massachusetts students to become more interested in STEM fields; we need them to be highly competent as well. Today’s Board vote encourages our campuses to take new approaches to math education, both remedial and credit bearing, with the potential of increasing the numbers of students that successfully traverse these important academic pathways.”

Across the Commonwealth, community colleges have already begun working through the Vision Project and the Transformation Agenda, a $20 million Department of Labor workforce development grant, to revamp remedial math coursework. Many are seeing early, promising results. More about the work at individual campuses can be found in the Fall 2013 Vision Project report, Within Our Sights: Inside Campus Efforts to Achieve National Leadership in Public Higher Education. A copy is the report is available here.

A copy of the final report by the Commissioner's Task Force to Transform Developmental Math Education in available here.

###