

Developing Common Competencies for Entry into Postsecondary Credit-Bearing Coursework in Mathematics

The Challenge:

Too many high school students are currently admitted into Wisconsin public and private colleges and universities and end up having to take remedial coursework. Students who have taken the courses required for admission may not have the knowledge and skill needed to be successful in credit-bearing coursework. Admission is based on credit for seat time (Carnegie unit) rather than on outcomes or competencies. The moment of truth comes when students receive the results of a placement exam.

The challenge is to identify what students need to know and be able to do in order to enter credit-bearing coursework at the postsecondary level and then to accurately assess their achievement of these competencies. Developing a common set of expectations and a timely feedback system will help students know their progress toward being ready to enter postsecondary study, teachers identify the focus for their instruction; and schools or systems identify the preparation of their students for a next level of study. Such a proactive approach will directly address the large percentage of students currently requiring some remedial coursework.

Already Accomplished:

1. The UW System's Competency-Based Admissions Project (1998) identified competencies in English, mathematics, science, social studies, and world languages on which students would be evaluated for postsecondary admission (<http://www.uwsa.edu/acss/cba/index.htm>)
2. Wisconsin's Department of Public Instruction used resources of the American Diploma Project and the Partnership for 21st Century Skills to revise Wisconsin's K-12 model academic standards in mathematics and English language arts, to reflect rigorous and relevant high school standards designed to represent adequate preparation for entry into postsecondary study and work
3. The Wisconsin Technical College System has taken the following steps:
 - a. Standardized systemwide requirements for degrees
 - b. Established 52 general education courses to be consistent across all campuses
 - c. Began the Prepared Learner Initiative by identifying competencies required for admission to entry-level credit-bearing written communications, mathematics, and other subject area courses
4. The UW System currently is piloting more extensively the Early Math Placement Test in grade 11, and providing follow up to check on students' placements at Wisconsin Technical College and University of Wisconsin campuses
5. Wisconsin Technical College System's Tech Prep initiative provides a way to focus teachers' discussions PK-16 on the common elements of their curriculum

What is Needed Now:

Charge: Identify a common set of expectations across Wisconsin's postsecondary institutions for entry into postsecondary credit-bearing coursework. Form the basis for the development of an agreement that students demonstrating this knowledge and skill will enter credit-bearing courses. The initial target will be to identify these expectations for mathematics.

Process:

1. Examine documents already in place
 - Wisconsin Model Academic Standards – identify the expectations in the high school standards; discuss with the ADP/P21 mathematics writing team how these expectations for entering college credit-bearing coursework correlate with high school graduation standards
 - Wisconsin Technical College System (WTCS) – examine the course competencies listed in the entry-level course sequences
 - UW System Competency-Based Admission – use the mathematics competencies established for admission purposes, representing the 3-year admission requirement
 - Wisconsin Association of Independent Colleges and Universities (WAICU) – collect representative samples of syllabi from the first credit-bearing courses in mathematics
2. Examine the content of the beginning entry-level mathematics courses at WTCS, UW, and WAICU institutions
3. Examine existing measures for assessing students' preparation to enter college credit-bearing coursework, to inform the setting of the common expectations
 - Examine various assessment measures to help inform the common competencies, including the UW System placement exam, ACT or SAT scores
 - Also examine related measures, such as the UW Early Math Placement Test, ACT's Compass and College Board's Accuplacer, Test of Adult Basic Education, and Wisconsin Knowledge and Concepts Examination (Grade 10 mathematics assessment)
4. Develop draft set of common competencies for entering postsecondary mathematics courses
5. Revise with feedback from the PK-16 Leadership Council and PK-16 faculty

Task Force:

Four representatives for the UW System, representation from 2- and 4-year campuses

Four representatives for WTCS

Four representatives for WAICU institutions

Two representatives from high schools

Convener: Department of Public Instruction (to provide a link with the ADP/P21

Mathematics Writing Team, to bring high school standards and college expectations to closer alignment)

Timeline:

October 2008: Name the task force

November 2008: First meeting of task force (documents ready to share; identify tasks)

January through April 2009: Monthly meetings

May 2009: Present final report