

Why the need for the “Two-Tier” Strategy?

Only one third of students tested in September 2011 for math placement at NH Community Colleges were ready for college-level mathematics courses. (MLC Research, 2012)

Over half of all high school graduates taking the American College Test (ACT) fail to meet the Mathematics benchmark score for college readiness. (ACT, 2010)

Only one third of New Hampshire high school students taking the Fall 2011 NECAP exams tested as “Proficient in Mathematics.” (NHDOE, 2012)

Having to take remedial math courses increases the time required to complete college, increases the cost, and results in discouragement and lost opportunities. Nationally, two-thirds of students who require remedial math courses fail to earn college degrees. (NCES, 2004)



About the CCSNH Mathematics Learning Communities:

Created in 2009, the Mathematics Learning Communities (MLC) is a statewide partnership between NH High Schools and the Community College System of New Hampshire with the mission of preparing high school students for work and college without remediation.

For more information on how your high school can become a MLC Partner and participate in the achievement of this mission, contact:

Bob Condon
rcondon@ccsnh.edu

Beth Doiron
bdoiron@ccsnh.edu

Bill Wheeler
wwheeler@ccsnh.edu

Reference materials relating to this project can be found at:

www.ccsnh.edu/specialproj.html

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The “Two-Tier” Strategy for Strengthening Math Preparedness

A proven approach to increasing the mathematics readiness of NH High School Students for College, the Workplace, and Life

A CCSNH Mathematics Learning Communities Project





What is the “Two-Tier” Strategy?

The “Two-Tier” Strategy consists of two innovative and integrated math courses:

Senior Math is offered in high school and is based on the 14 math competencies required to successfully enroll in the first college-level math course at the New Hampshire Community Colleges.

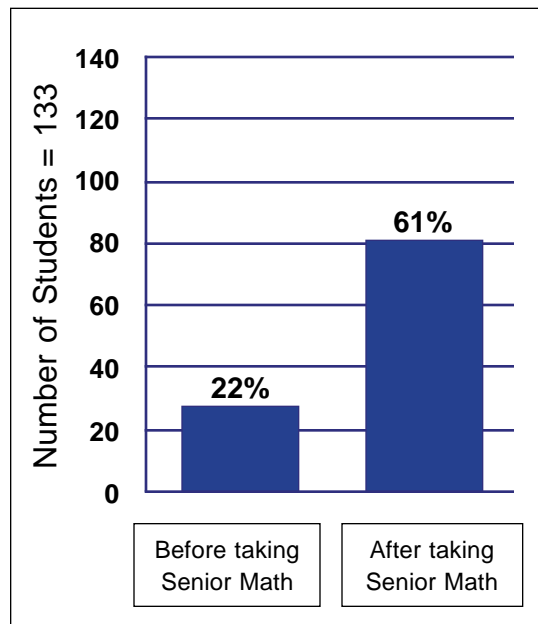
TAC.Math (Topics in Applied College Mathematics) has been developed as the common threshold (first for degree-credit) math course at the NH Community Colleges. It is widely transferable to four-year colleges and universities. **TAC.Math** is also offered in high schools through the **Running Start Program**.

Senior Math and **TAC.Math** incorporate proven best teaching practices that include Habits of Mind (Costa, 2000) and highly motivating Applied Problem Solving (Boaler, 2009).

What does the “Two-Tier” Strategy achieve?

Initial data show that when middle-achieving, non-STEM, high school seniors take **Senior Math**, they show a dramatic increase in readiness for college-level mathematics.

The graph below shows the number and percentage of students scoring at or above 63* on the ACCUPLACER Elementary Algebra Exam before and after taking **Senior Math**.



*The minimum score required for waiver admission to college-level math courses within the Community College System of New Hampshire.

Additional Benefits of the “Two-Tier” Strategy

Students:

Avoid the time, cost, and discouragement of **required** enrollment in remedial math courses

Are eligible to apply to a wider range of college programs and majors

Transfer TAC.Math to many four-year colleges and universities

Partner High Schools are provided:

Free ACCUPLACER testing

TAC.Math textbook purchasing assistance

TAC.Math Running Start Scholarships

Senior Math and TAC.Math Instructor Guides with full-semester lesson plans

Advisor Handbooks for guidance counselors and math faculty

Professional development events and onsite technical assistance in best teaching practices

There are currently fifteen MLC High School Partners. To explore becoming an MLC HS Partner, please contact:

Bob Condon rcondon@ccsnh.edu