

Math-in-the-DTA Task Force
Recommendation to JAOG
May 15, 2009

Background. The current Direct Transfer Agreement (DTA) stipulates that associate degree transfer students “must be proficient in intermediate algebra,” a requirement added in 1998 when Intermediate Algebra was re-numbered below 100. In recent years, some community and technical colleges (CTCs) in Washington have developed alternative tracks to help students meet that proficiency. While retaining the traditional algebra/pre-calculus pathway, these colleges have typically developed a second, parallel route that prepares students for other Quantitative/Symbolic Reasoning (QSR) courses. As these practices became more widespread, some baccalaureate institutions expressed concern that “intermediate algebra” was no longer consistent across community college campuses and that some were developing courses that covered fewer content areas than was anticipated. For the University of Washington, which requires intermediate algebra proficiency for admission, the question was particularly significant.

Interim solution. In fall 2008, JAOG formed a Math-in-the-DTA Task Force to investigate the issue and hopefully bring solutions to JAOG for consideration. As the task force process got underway, the baccalaureate institutions agreed, for an interim time, to hold students harmless and to accept CTC “intermediate algebra” courses, regardless of course number or content, as meeting the DTA requirement. That short-term agreement would extend about two years after a longer term agreement, initially expected July 2009, is reached.

Process. The Math-in-the-DTA Task Force included mathematics faculty from all higher education sectors, as well as several JAOG members and representatives from other higher education offices and system groups. The group met several times over the 2008-09 year to discuss the issue, research its scope, and consider alternative resolutions. By winter, the task force had identified three possible solutions. These included aligning intermediate algebra curricula and moving from course-based to an evidence-based demonstration of proficiency. Subcommittees considered each option, reporting their findings to the full task force.

Long-term solution proposal. After thorough consideration of all these ideas, the task force chose to recommend the following:

1. Remove the current reference to “intermediate algebra proficiency” from the DTA
2. Replace the current Quantitative/Symbolic Reasoning requirement in the DTA with:

“College level math course (5 credits) intended for transfer. Excludes professional-technical math courses.”

Perhaps most significantly, this recommendation would limit the Quantitative/Symbolic Reasoning (QSR) requirement solely to MATH-prefix courses, eliminating current options in philosophy, computer science, and other non-math disciplines. However, by keeping both the under-100 prerequisites and the QSR courses within a single discipline, the arrangement assures faculty-driven alignment of both pre-college preparation and college-level expectations.

As part of this recommendation, there is a desire to locate with the DTA requirements (perhaps on the ICRC Web site) the Transition Math Project material detailing college-readiness in math. These competencies reflect the consensus opinion of mathematics faculty and, as such, provide the backdrop for pre-college and college-level curriculum alignment, going forward.

Rationale. The task force believes that the proposal:

- Reinforces the mutual acceptance of college-level coursework as demonstrating college-level proficiency.
- Puts the DTA in line with the statewide move to higher math standards.
- Acknowledges the broader array of college-level math courses available to meet the DTA requirement than when the current DTA language was developed.
- Avoids any need to align contents of intermediate algebra and high school Algebra II, allowing the CTCs to determine the most effective means to remediate adult learners.
- Provides a legitimate way to remove pre-college requirements from the DTA.

Concerns. Arguably the greatest potential downside of the proposal will fall on courses no longer fitting the requirement (e.g., symbolic logic courses). Though this concern is clearly significant, data suggest that less than 11 percent of DTA-completers satisfy the QSR requirement through coursework offered outside mathematics:

DTA students with credits at the CTC that meet quantitative reasoning requirement, 2007-08* (n = 9,170)		
Course area used to meet quantitative requirement	Students	Percent
Math	8,160	89%
Logic	750	8%
Computer Science	130	1%
Economics	80	1%
Chemistry or Physics	50	1%
* Another 3,000 students complete the DTA, but the course used to meet the quantitative requirement is not on the CTC transcript. It is likely that these students met the requirement at another university or college or met the requirement.		
Source: SBCTC data, April 2009		

In addition, other negative impacts to consider include:

- The potential for resource shifts in the CTCs towards math.
- A possible need to revise the Pre-Nursing DTA, which requires a statistics course but does not stipulate a MATH prefix.