***1/13/16 DRAFT***

**HR 477 Transitional Math Course Recommendations**

**I. Guiding Principles**

* Approximately half of Illinois high school graduates enrolling as full-time freshmen in Illinois public community colleges require remedial education. In response, Illinois should deploy a number of strategies to reduce remedial education rates, including better alignment of K-12 and postsecondary systems, targeted interventions in high school, and the use of co-requisite remediation models in postsecondary education.[[1]](#footnote-1)
* Various Illinois community colleges and their feeder school districts have demonstrated that programs that provide developmental education to 12th grade students who are not prepared for college-level instruction can dramatically reduce remediation rates.
* College placement should include more than a cut score. Multiple measures for placement are both necessary and appropriate in most instances.[[2]](#footnote-2)
* All students who can demonstrate readiness for college level work should have access to college-level instruction.
* Students should be provided math coursework aligned to their individualized postsecondary education and career objectives, and math instruction should be contextualized and emphasize real-world application whenever possible. Courses integrating math competencies with other academic and career competencies are encouraged for all students.

**II. Overview**

The majority of remedial education in Illinois is in math. 41% of recent Illinois high school graduates enrolling in public community colleges required remedial education in math, while only 16% required remediation in reading and 20% required remediation in communication.[[3]](#footnote-3) Therefore, these recommendations focus on reducing the significantly higher math remedial rates through a strategy of “transitional courses” delivered to high school seniors who are not on track to graduate from high school with mastery of math competencies aligned to their individualized college and career goals. While reducing math remedial rates is the focus, Section VII of these recommendations also addresses high schools and community colleges with unacceptably high reading and communication remedial rates.

**III. Purposes and Definition of Transitional Math Courses**

* These recommendations focus on the development and delivery of transitional math courses. The purposes of transitional math courses are to:

1. Provide the mathematical foundation that students are lacking from their previous education
2. Provide students with the mathematical knowledge and skills to meet their individualized career objectives
3. Empower students with knowledge and skills to be successful in credit-bearing math courses at the postsecondary education level

* Transitional math courses are courses delivered to students during the senior year of high school which, if successfully completed as determined based on an overall course grade of C or higher, result in transcripted credit that guarantees student placement into either an IAI transfer-level math course or a credit-bearing math course required for career and technical postsecondary education programs. All Illinois community colleges and public universities must accept transcripted credit from transitional math courses for placement into appropriate college-level math courses.
* Transitional math courses are delivered by high school faculty with community college collaboration defined through a local partnership agreement. While transitional math competencies may be delivered through a stand-alone course, integrated models are encouraged (e.g., math competencies integrated into a career and technical education course, or as part of a senior year capstone course. The term “integrated course” is hereafter used to refer to these types of models).

**IV. Statewide Panel for Transitional Math**

* Subject to the availability of public or private resources for its administration, ISBE, ICCB, and IBHE will jointly establish a statewide panel to recommend competencies and other requirements for transitional math courses that lead to various postsecondary education math pathways. ISBE, ICCB, and IBHE will consult with the Illinois Mathematics Association of Community Colleges (IMACC) on the establishment and administration of the panels. The panel must include high school educators and community college and university faculty, including broad representation from general education teaching faculty, CTE teaching faculty, and administrators. The panel must also include math faculty that have taught math within an integrated course. The panel must consult with business on the definition of competencies for postsecondary education math pathways, and consider math utilized in pre-employment screenings for entry-level careers. Following the delivery of the panel’s recommendations, ISBE, ICCB, and IBHE will, in consultation with IMACC and the panel, jointly adopt competencies and requirements for transitional math courses and related pathways.
* The panel must define transitional math competencies and requirements associated with, at minimum, the following postsecondary education math pathways:
  1. STEM Pathway: Math for students with career goals involving occupations that require the application of calculus or advanced algebraic skills, such as careers requiring degrees in mathematics, engineering, computer science, natural science, and business. Successful attainment of transitional math competencies in the STEM Pathway guarantees student placement into an IAI general education core curriculum math education course in a calculus-based math course sequence (e.g., College Algebra, Trigonometry, Precalculus).
  2. Technical Pathway: Math for students with career goals involving occupations in technical fields that do not require the application of calculus, advanced algebraic, or advanced statistical skills. Math in the Technical Pathway emphasizes the application of math within career settings. Successful attainment of transitional math competencies in the Technical Pathway guarantees student placement into a credit-bearing postsecondary education math course required for a community college career and technical education program.
  3. Quantitative Literacy and Statistics Pathway: Math focused on student attainment of competency in general statistics, data analysis, quantitative literacy, and problem solving. The Quantitative Literacy and Statistics Pathway is intended for students whose career goals do not involve occupations relating to either the STEM or Technical Pathway, or those who have not yet selected a career goal. Successful attainment of transitional math competencies in the Quantitative Literacy and Statistics Pathway guarantees student placement into an IAI general education core curriculum math education course not in a calculus-based course sequence (e.g., General Education Statistics, General Education Math, Quantitative Literacy, or Elementary Mathematical Modeling). The panel will make recommendations on whether separate transitional math competencies should be defined for students with career goals involving occupations that require the application of advanced statistics, such as occupations in certain social science fields.
* The panel will provide recommendations for methods to incorporate transitional math competencies into an integrated course.
* All transitional math competencies must align to Illinois Learning Standards and meet the competencies set for a General Education Core Curriculum approved Freshmen level math course.
* All transitional math courses must have an appropriate approval code demonstrating that they meet the standards set forth by the transition panel.

**V. Placement Into Transitional Math Courses**

* School districts delivering transitional math courses will make placement determinations based on statewide multiple measures criteria established jointly by ISBE, ICCB, and IBHE, in consultation with the statewide transitional math panel. The criteria must account for:
  1. Standardized assessment results
  2. GPA
  3. Course completions
* School districts will make a pre-determination for placement into transitional math courses at the end of 1st semester junior year for scheduling and planning purposes. School districts may adjust placement determinations at the end of junior year.
* The school district will use the placement criteria to determine whether each student has demonstrated an adequate level of readiness for that student’s particular postsecondary education math pathway.
  1. *Students Not Demonstrating Readiness:* Students not demonstrating an adequate level of readiness must enroll in a senior year transitional math course that relates to the student’s postsecondary education math pathway. However, students not prepared for entrance into a transitional math course based on the statewide placement criteria *may* be placed by the school district into senior year courses addressing foundational competencies in arithmetic, geometry, and algebra with an emphasis on the connection between math and real-world and life skill applications. These “foundational competency” courses must enable students to enroll in a co-requisite remedial education math course at the community college level.
  2. *Students Demonstrating Readiness:* Students demonstrating an adequate level of readiness must have access to (but need not take) rigorous math coursework during the senior year that provides early college credit whenever feasible, such as dual credit options or AP. Such students who take a rigorous math course in the senior year and earn a grade of “C” or better are guaranteed placement into an appropriate credit-bearing course in the student’s postsecondary education math pathway. Students who do not take a rigorous math course (or any math course) in the senior year, or who do not earn a grade of “C” or better in a rigorous math course, will be subject to general postsecondary education math placement processes.
* Course requirements for a student with an IEP are subject to the individualized goals within the IEP.
* Guaranteed placement determinations are valid for 18 months after high school graduation, provided a postsecondary institution may require a short-term skill-based review or a co-requisite remediation course for a student that does not enroll as a full-time freshman in the fall after high school graduation.

**VI. Local Partnership Agreements**

* School districts serving grades 9-12 must enter into a local partnership agreement with at least one community college that has coterminous territory with the school district for transitional math courses. Community colleges must enter into local partnership agreements, but may require standardized terms for all of its partner school districts. The local partnership agreement must address:
  1. The co-development (or adaptation of state model) transitional courses that align to the statewide competencies for particular postsecondary education math pathways, including designing local performance indicators and evidence associated with those indicators.
  2. The community college courses for which the transitional math courses will guarantee placement.
  3. The availability of dual enrollment and dual credit courses for high school students demonstrating an adequate level of math readiness.
  4. Training and professional development to be provided to instructors of transitional math courses.
  5. Methods for incorporating transitional math competencies into both math and integrated courses.
* The community college and high school partnerships may seek review from the statewide transitional math panel (similar to the IAI process) to ensure that a transitional course meets the statewide competencies and college readiness standards.

**VII. Reducing Reading and Communications Remedial Rates**

Subject to the availability of public or private resources for its administration, ISBE, ICCB, and IBHE will jointly establish a statewide panel to recommend developmental competencies for reading and communication, aligned to the Illinois Learning Standards. Successful attainment of these competencies should guarantee student placement into appropriate IAI general education core curriculum communications courses. If a school district’s reading and communications remedial rates are in the bottom quartile statewide *or* are significantly higher than comparison high schools with similar performance levels,[[4]](#footnote-4) ISBE and ICCB may require the local partnership agreement to include strategies to embed the reading and communications developmental competencies in appropriate high school coursework.

**VIII. State Supports**

* ICCB will allow transitional math courses to be claimed for reimbursement for community college funding purposes (provided the course must be transcripted by the community college).
* Subject to the availability of public or private resources, the state, in collaboration with IMACC, will support at least two secondary/postsecondary collaborations to develop model transitional math course materials.[[5]](#footnote-5)
  + All state-supported models must include real-world application projects that can be delivered to particular students based on career interests.
  + At least one of the State-supported transitional math course models must be highly modularized for blended-learning delivery, with:
    - A pre-assessment system to ensure that completion of modules is required only where the competencies have not been sufficiently mastered
    - The ability for students to complete coursework in areas of need at their own pace
    - The ability for transitional math modules to be included within integrated courses
    - The ability for students to complete dual credit modules upon completion of the developmental education modules
* Subject to the availability of public or private resources, the State will implement a communications plan for transitional math courses.
* The State will use an open technology platform[[6]](#footnote-6) to enable sharing of real-world application projects and other course materials.
* The State will utilize webinars, the open technology platform, and appropriate state convenings to highlight best practice models for delivery of transitional math competencies through integrated courses.
* The State will provide a model partnership agreement for school districts and community colleges.
* ISBE, ICCB, and IBHE will provide standardized reports to school districts, community colleges, and public universities, including, but not limited to:
  + Reports that school districts and community colleges can use for junior year placement determinations
  + Reports that compare participating students’ postsecondary outcomes with other students (particularly, those in “traditional” developmental education courses)

**IX. Scaling and Timing of Implementation**

* + 16 – 17 SY:  Statewide competency determination and model course development.
  + 17-18 SY:
    - Leading cohort implementation of transitional math courses.
    - All school districts and community colleges must enter into a partnership agreement defining implementation plan.
  + 18-19 SY:  Expanded cohort implementation of transitional math courses by community colleges and school districts. This cohort will include high schools with math remedial rates in the bottom quartile statewide *or* that are significantly higher than comparison high schools with similar student performance levels.[[7]](#footnote-7)
  + 19-20 SY:  Full statewide implementation of transitional math courses.

1. Nothing in these recommendations applies to developmental education courses taught at the community college. Other state advisory bodies are reviewing reforms to developmental education courses taught at the community college, with a focus on co-requisite remediation models. [↑](#footnote-ref-1)
2. Common placement scores, as part of a multiple measures system, create a level playing field for high school students by providing consistent, statewide guidance on college-readiness levels. The higher education system should agree upon and develop guidance for common placement scores benchmarked to ACT college readiness benchmarks, PARCC scores, and College Board (SAT) measures of readiness. [↑](#footnote-ref-2)
3. Illinois Report Card State Profile: <http://illinoisreportcard.com/State.aspx?source=Trends&source2=PostSecondaryRemediation&Stateid=IL> [↑](#footnote-ref-3)
4. ISBE and ICCB will make this determination based on available data. [↑](#footnote-ref-4)
5. The Northern Illinois Regional P-20 Network has estimated approximately 80 hours of work by subject teams to produce a scope and sequence document, daily pacing guide, assessments, and collection of classroom activities and real-world applications. [↑](#footnote-ref-5)
6. For example, the Illinois Open Educational Resources platform: <http://ioer.ilsharedlearning.org/> [↑](#footnote-ref-6)
7. ISBE and ICCB will make this determination based on available data. [↑](#footnote-ref-7)