



Transition Math Proposal



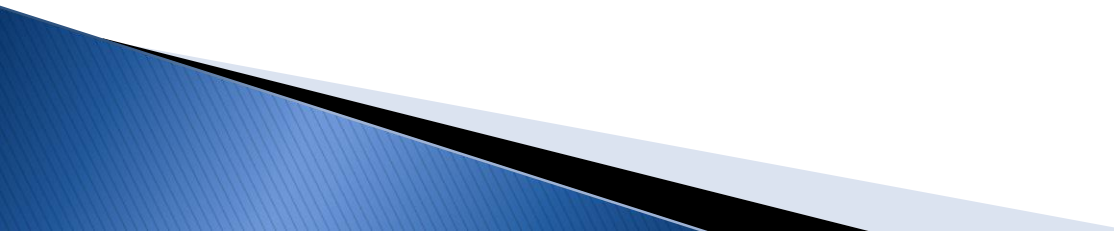
Presenter:

- ▶ Amy Ingente, Math Coordinator



Purpose

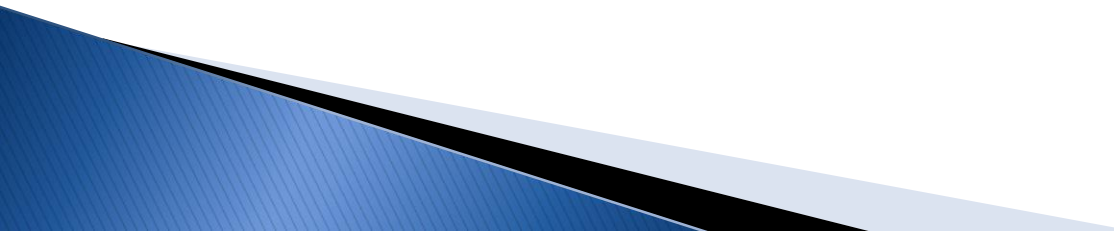
The purpose of this presentation is to recommend the adoption of three High School Mathematics courses:

- Transition to College Algebra
 - Transition to Quantitative Literacy and Statistics
 - Transition to Technical Math
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Purpose

- ▶ Transitional Math is part of the Postsecondary and Workforce Readiness Act
 - Designed for high school seniors who are lacking a mathematical foundation
 - Provides students with mathematical knowledge and skills to meet their college and career goals and to be successful in college-level math courses

Rationale

- ▶ 65% of students enrolling at Elgin Community College are placed into remedial courses.
 - Lacking a mathematical foundation from their previous education
 - Bridge the gap for students who often opt out of math in their senior year
 - ▶ The use of transitional math courses will reduce the remediation rates for our students.
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Rationale

- ▶ Transitional math courses are designed to address gaps in understanding by:
 - working on bigger problems
 - emphasizing problem-based learning and projects
 - developing mathematical communication
 - integrating concepts
 - not just skill acquisition
 - ▶ Contexts will be authentic, and whenever possible, apply to the student's college or career path.
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Rationale

- ▶ Upon successful completion of a transitional math course, students will receive guaranteed placement into a credit bearing math course at any Illinois community college.

Aligned to the

UI46 STRATEGIC PLAN



Description of Recommendation


- ▶ The PWR Act defines benchmarks for projected readiness in college-level math.
 - Juniors who successfully completed math graduation requirements
 - Meets at least two of the following criteria
 - B or better in Algebra 2
 - C or better in a course higher than Algebra 2
 - $\text{GPA} \geq 3.0$
 - Standardized Assessment: Math SAT or PSAT ≥ 530 or Math ACT > 22

Description of Recommendation

- ▶ Students who are projected ready
 - Advised to enroll in the next course of their chosen pathway during the senior year
- ▶ Students who successfully completed math graduation requirements but are projected as NOT ready for college-level math
 - Given transitional math opportunities in relation to their current math achievement and career interests

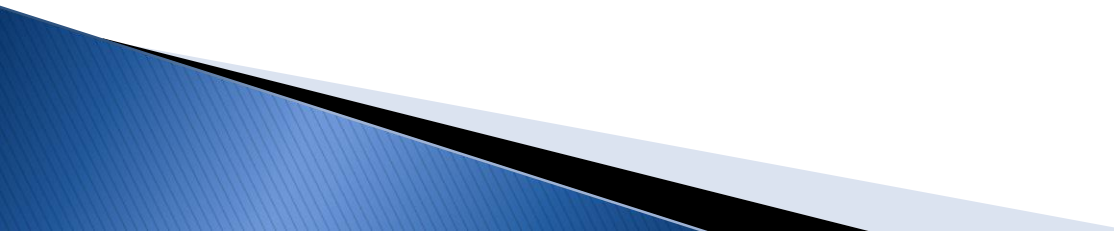
Transition to College Algebra

Course Overview

- ▶ For students with career goals that require the application of calculus or advanced algebraic skills.
 - ▶ Essential algebraic topics are worked on deeply, allowing students to address any deficits.
 - ▶ Simplify expressions, solve equations, and graph functions in the following function families: Linear; Polynomial; Rational; Radical; Exponential.
 - ▶ Successful completion guarantees placement into a College Algebra community college mathematics course.
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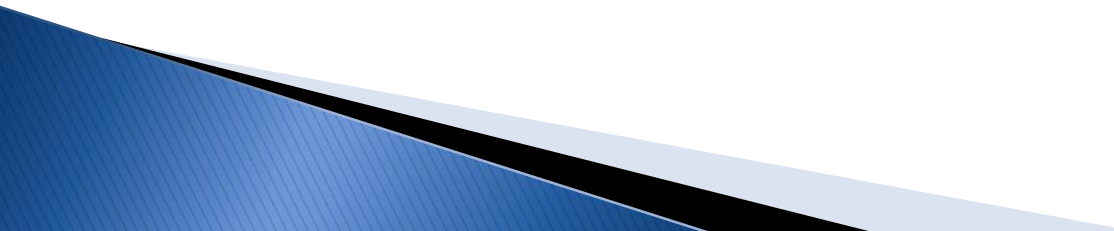
Transition to Quantitative Literacy & Statistics

Course Overview

- ▶ For students whose career goals do not involve occupations relating to College Algebra or Technical Math, as well as those students who have not yet selected a career goal.
 - ▶ Focused on attaining competency in general statistics, data analysis, quantitative literacy, and problem solving.
 - ▶ Successful completion guarantees student placement into a credit-bearing general education community college mathematics course.
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Transition to Technical Math

Course Overview

- ▶ For students enrolled in a Technical course during their senior year and career goals in technical fields that do not require calculus, advanced algebraic, or advanced statistical skills.
 - ▶ The mathematics in this course emphasizes the application of mathematics within career settings.
 - ▶ Successful completion guarantees placement into a credit-bearing mathematics course required for a community college career and technical education program.
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Recommendation for Implementation

▶ 2018–2019

- Continue collaboration with Elgin Community College and surrounding High School Districts to develop
 - common assessments
 - select resources
- January 2019 – Registration for the three transitional math courses
- Summer 2019 – Provide professional development for teachers in the new curriculum

▶ 2019–2020

- Full Implementation
- Ongoing professional development

Evaluation of Change

- ▶ Data will be reviewed from indicators such as:
 - STAR Math to monitor students' growth
 - District Common Assessment Data to ensure proficiency in course competencies
 - Long term cohort data to monitor performance in subsequent math courses at Elgin Community College.

