LaGuardia New Math Sequence to Accelerate Student Completion at Scale

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S006 AMATYC 2018
Our Profile

19K Students Credit Enrolled in Fall 2017

58% Female
42% Male

About 67% with Family Income Less than $25,000

Asian 21%
Black 18%
Hispanic 49%
White 11%
Other 1%

96 different countries

About 53% students are younger than 23
The Developmental Math Challenge

Nation-wide

60-70% of community college students need at least one developmental math course before enrolling in college-credit courses

80% of those students never get out of the developmental math pathway

LaGuardia

70% of incoming LaGuardia students in the last 5 years were placed in basic skills math.
MAT 119 Elementary Statistics with Algebra

MAT 117 College Algebra and Trigonometry

MAT 099 Fundamentals of Algebra

MAT 123 QR
Co-Requisite Implementation Planning

• What are the sequences of mathematics courses in your institution?
• Identify points where your mathematics sequences could be adapted to include co-requisite model courses.
• How many sections would you like to offer of the co-requisite courses identified in 2?
• What challenges do you anticipate in a full-scale implementation of co-requisite courses?
Co-Requisite Algebra + Statistics at Scale

Challenges

- Bringing the whole system together
- New Pedagogy
- Professional Development
- Full-Scale

Student Support

- Engagement
- Use of Technology
- Scheduling
- Faculty + Load
Co-Requisite Algebra + Trig at Scale

Challenges

Course Design  Student Support

Transfer and Articulation

Professional Development

Use of Technology

Scheduling

Content Volume
Fundamentals of Algebra
Challenges

Streamlining the course content

Computer Platform
Reinforce student learning

Professional Development
Co-Requisite Algebra + Trig
Faculty Development

College Policies
Community of Practice
Curriculum
Technology
Pedagogy

Mini-Seminar
Start of Term Orientation
Blackboard Organization
Fundamentals of Algebra
Faculty Development

Start of Term
Orientation
PASS RATE – ELEMENTARY ALGEBRA PLACEMENT - STEM

MAT 096

MAT 115

MAT 117
PASS RATE – PRE-ALGEBRA PLACEMENT

- MAT 095
- MAT 096
- MAT 099
PASS RATE COMPARISON TRADITIONAL VS ACCELERATED - STEM

- Aggregate
- MAT 117

Fall 1, 13  Spring 1, 14  Fall 1, 14  Spring 1, 15  Fall 1, 15  Spring 1, 16  Fall 1, 16  Spring 1, 17  Fall 1, 2017
PASS RATE COMPARISON TRADITIONAL VS ACCELERATED BASIC SKILLS

Aggregate (MAT96+095)

MAT 099

Fall 1, 13  Spring 1, 14  Fall 1, 14  Spring 1, 15  Fall 1, 15  Spring 1, 16  Fall 1, 16  Spring 1, 17  Fall 1, 2017

29.8  27.8  28.2  21.2  33.2  29.0  27.1  27.8  29.5

58.7  59.1  57.7  54.6
Equity Across Subgroups
Co-requisite Algebra + Trig.
Equity Across Subgroups
Co-requisite Algebra + Statistics
Equity Across Subgroups Accelerated Fundamentals of Algebra
Future Plans

• Additional Option For Acceleration: MAT 123
  “Quantitative Reasoning for Modern Problem Solving”

• Open Resources Initiative
• Assessment
Questions?

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1. What are the sequences of mathematics courses in your institution?

2. Identify points where your mathematics sequences could be adapted to include co-requisite model courses.

3. How many sections would you like to offer of the co-requisite courses identified in 2?

4. What challenges do you anticipate in a full-scale implementation of co-requisite courses?