

Summary of Mathematics Briefs

Institution Sizes:

Single campus 519 (tribal college) – 28,000, average size 6,000 – 8,000
Multi-campus – largest is 60,000

Programs:

Degree, certificate, adult and continuing education, workplace skills

Where housed:

- Centralized Developmental Education Department 15
(sometimes includes separate Developmental Mathematics Dept.)

- Developmental Mathematics housed in Mathematics Department 27

In both cases, faculty indicated that every effort is made to align developmental mathematics and college level mathematics course curricula.

In most cases, faculty may teach both developmental and college-level courses.

Strategies for improving student performance in Developmental Mathematics courses or programs:

Common to most colleges:

Some sort of **Academic Resource Center** with:

- Student advisement
- Tutoring
 - Student tutors
 - Peer tutoring
 - Faculty tutors
- Preparation for standardized testing (COMPASS, state assessments)
- Math study groups
- Web-based tutorials
- Computer lab – Many colleges use MyMathLab
- Web-based supplements
- Video – small number of colleges reported they were available

Students can get assistance with homework, note-taking, reading mathematics, skill-building, math anxiety, test taking strategies

Most strategies fell into the following categories:

Supplemental Instruction

Course redesign

- Adding a one-hour lab component (MyMathLab; ALEKS)

- Accelerated developmental mathematics sequence

- Allowing students to take 3 DM courses in one semester

- Breaking a 3-hour course into three 1-hour courses/modules

- Spreading one course over two semesters

- Fast track

Paired courses and Learning communities

- Learning Communities

 - In some cases, communities are created for targeted groups (allied health)

- Linked courses

 - Two DM courses (e.g. pre-algebra/intro algebra, each for 8 weeks vs 16 with increased meeting time per class session)

 - One DM course and a Study Skills course (mathematics focus)

Other strategies:

Retesting

Online courses

- Distance learning

- Hybrid courses-classroom instruction and distance learning

Creating individualized learning plans for students based on placement results

Summer bridge programs to help students accelerate progress through DM program

Workshops – math anxiety, math study skills

Late start courses

Dual enrollment especially College Algebra for HS students

Mentoring