# Chabot College Determining Capacity and Demand for Basic Skills and College-level Courses

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## Chabot Strategic Plan Goal

- Increase the number of students who achieve their educational goal in a reasonable time
  - Educational goals of most Chabot students:
     AA/AS degrees and/or transfer to four-year colleges
  - Goal coincides with pressure from federal and state agencies to increase completion

### Major Questions

- Our completion rates of degrees, certificates, and transfers are always at the state average
  - 14,000 students, 3,000 new students each year
  - 700 degrees, 200 certificates, 900 transfers/year
- Why aren't more students completing?
- How can we increase that number?

### Preliminary Answers

- Found bottlenecks in courses that students need
- Bottlenecks cause continuing students to stay
- Students who stay start swirling to other courses
- Swirling blocks access to other students
- Courses that new students need are already filled when they start to register
- What could we do about this?

### What do our students need to complete?

- To complete degrees or transfer
  - 60 college-level units
  - Courses in a major
  - General Education distribution requirements
    - Including College-level English and Math
  - But first:
    - 85% of new students need Basic Skills

### What do our students need?

- 11,000+ Continuing students need:
  - College-level courses
    - General Education and in their major
- 3,000 New students need:
  - Basic Skills English and Math
  - Survey courses across curriculum

### What is our capacity?

General Education Areas: students per year

Communication: 1,200

College English: 1,600

Second College English: 1,200

Life Science Lecture: 900

Science Lab (non-majors) 700

Arts and Humanities: 2,400

Social Sciences: 4,100

- All classes fill and have wait lists (11,000)
- Bottlenecks: classes with longest wait lists

## What is our capacity?

Basic Skills English and Math: students/year

Basic Skills English 1,900

Basic Math/pre-Algebra: 700

Beginning Algebra: 1,100

Intermediate Algebra: 1,300

- Serving 3,000 new students would fill seats
- Estimated 5,000 students need these courses

#### Bottlenecks

- Single-course bottlenecks
  - Comm Studies 1, History 7, Lab course
  - Can take them any semester
- Multi-course sequence bottlenecks
  - Long sequence in Math, short in English
  - Delaying the first course delays completion
  - More time at Chabot --> swirling

# Swirling

- Required course(s) not open
- Need or want to accumulate units
- Take courses not needed
- Fills seats in courses other students need
- Other students start swirling
- New students have last choice of courses

# Proposed solution to swirling

- Help most advanced students complete
  - Make room for newer students
- Completion as the new Access
- Students with 48+ units
  - Close to completing 60 units for degree/transfer
  - High number of them: 5,900

#### Needs of advanced students

- 5,900 Students with 48+ units
  - 3,000 (half) had not taken College English
  - 3,900 (>half) had not taken Pre-coll Math

# Needs of advanced students: English

- Of 5,900 Students with 48+ units
- 3,000 still needed College English
  - 1,000 ready for College English
    - Have 1,600 seats
  - 2,000 still needed Basic Skills English
    - Have 1,900 seats

# Needs of advanced students: Math

- Of 5,900 Students with 48+ units
- 3,900 had not taken Inter. Algebra
  - 1,400 ready for Intermediate Algebra
    - Have 1,300 seats
  - 1,000 needed Beginning Algebra
    - Have 1,100 seats
  - 1,000 needed Basic Math/pre-Algebra
    - Have 700 seats

#### What was learned

- Even high unit students have not yet taken
   Basic Skills English and Math
- We barely have seats for high-unit students to take needed courses
  - They also need seats in next courses in their sequences
- Seats needed for other continuing students
- Seats needed for new students

### How to allocate faculty time

- More Basic Skills English and Math?
- More College-level General Education?
- More science lab courses?

One more consideration.....

# Generating our funding base

- State funds based on number of students
- English, Math, labs have small class sizes
  - English: 25 students
  - Math: 35 students
  - Labs: 25 students
- Need to offer courses with high class sizes to balance courses with small sizes

# How we balanced all this Example 1

- Chabot Enrollment Management Committee
- Proposed faculty allocations of:
  - 50% low class-size bottleneck courses
  - 30% medium class-size bottleneck courses
    - General Education courses of 44 students
  - 20% high class-size courses
    - Large lecture, PE classes

# How we balanced all this Example 2

- Chabot English Faculty
  - Examined student demand for English courses
  - Allocated faculty time equally
    - Basic Skills English
    - College English
      - First course (1A)
      - Second course (4 and 7)

# How we balanced all this Example 3

- Chabot Faculty with General Ed Courses
  - Examined course wait lists to identify:
    - Classes that closed earliest
    - Classes that had longest waiting lists
  - Allocated faculty time to most needed courses

### Conclusion

- We can't completely meet the demand
- Most of our students need both Basic Skills and College-level courses
- We can alleviate some of the bottlenecks at each level
- We can meet our funding base

#### If we balance all that

More of our students will complete their goals