

Chabot College

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

Carolyn Arnold, Ph.D

Chabot College Office of Institutional Research
Planning, Review, and Budget Council (PRBC)

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