



Student Success Challenges in Three Areas: Developmental Education, Online Learning, and the Structure of the Student Experience

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Ohio's Student Success Agenda
Ohio Association of Community Colleges
December 2, 2011

DEVELOPMENTAL EDUCATION

Developmental Education Challenges

- Over 60% of entering CC students referred to developmental education
- Developmental education not very effective for students near the cutoff
- Farther below, most students do not complete the sequences to which they are referred
- Confusion about what it means to be “college ready”—no obvious cutoff point
- Most commonly-used tests are weakly predictive and not diagnostic

Example: CUNY CCs

- Grant under Bill & Melinda Gates Foundation
- Analyzed data on nearly 75,000 first-time students entering 6 CUNY CCs between fall 2004 – spring 2008, followed to fall 2009.
- Visited each CC during 2009-2010 academic year. 67 interviews with:
 - Academic & non-academic support service administrators
 - Developmental & gatekeeper instructors, typically including subject-area chairs

Emergent Framework: Opposing Forces

- System-wide consistency vs. institutional autonomy
- Efficient vs. effective assessment
- Promotion of student progression vs. enforcement of academic standards

Efficient vs. Effective Assessment

- Nationwide:
 - Almost all CCs use standardized tests due to their efficiency
 - Yet admin. efficiency goes hand-in-hand with high rates of failure & attrition
- COMPASS/ACT exams:
 - COMPASS math $R^2 = 7\%$
 - ACT writing $R^2 < 1\%$
 - HS performance better predictor

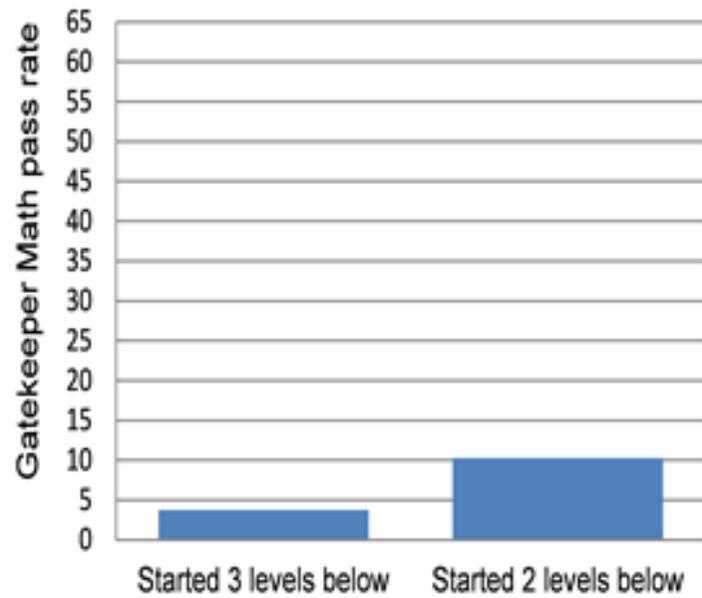
Why is Test Validity Low?

- English essay exam:
 - Students did not always understand essay assignment or its importance
 - Assignment not representative of college-level writing skill needs
- Math
 - Randomized topics = little consistency, poor coverage
 - Not aligned with skills needed in next math course

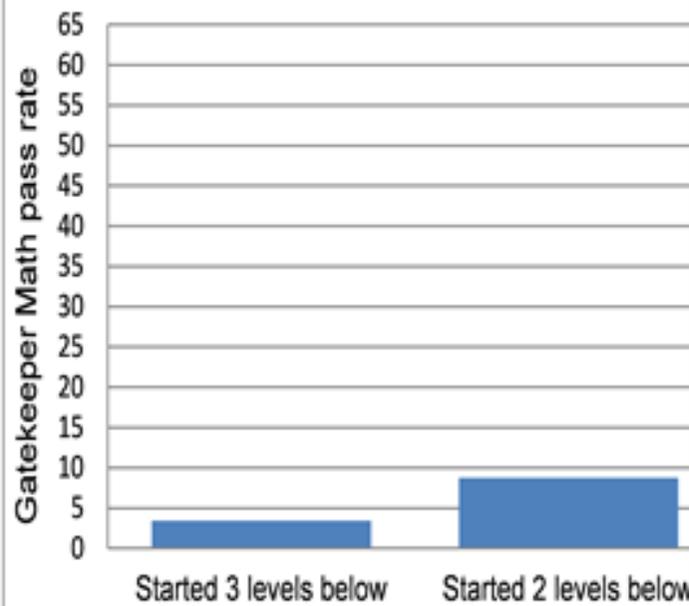
Supporting Progression vs. Enforcing Standards

- Nationwide
 - Everyone wants to support students to succeed; accelerated programs one strategy
 - But many resist possibility of less-prepared students in their courses, fearing they must “teach to bottom of class.”
- CUNY
 - Progression results similarly poor compared to other systems
 - Variation in placement allowed closer look at effect of placement alone on progression

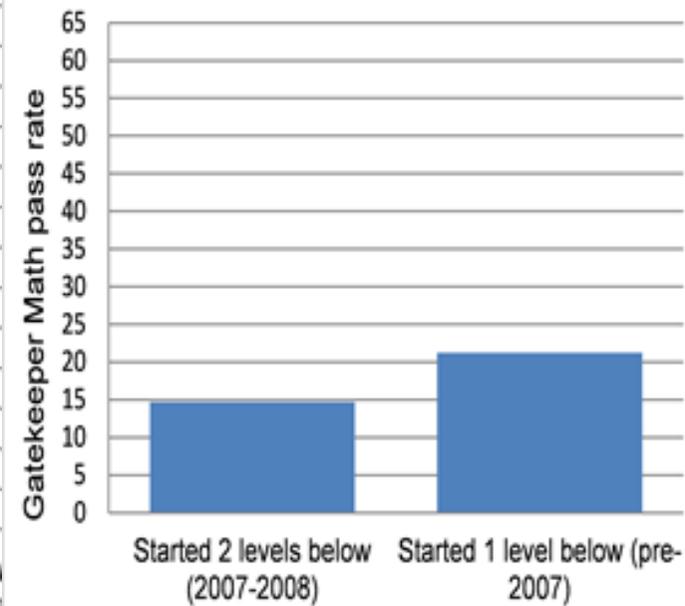
A. Students failing Pre-Algebra



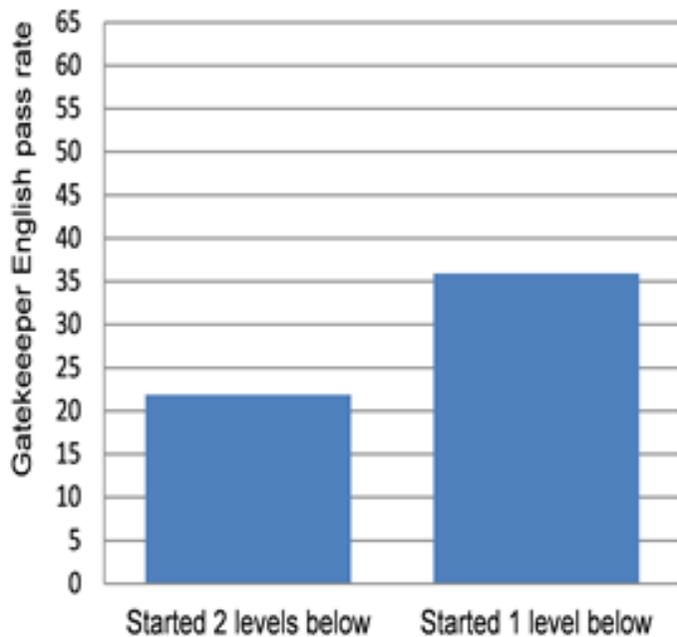
B. Students scoring ≤ 21 on Pre-Algebra



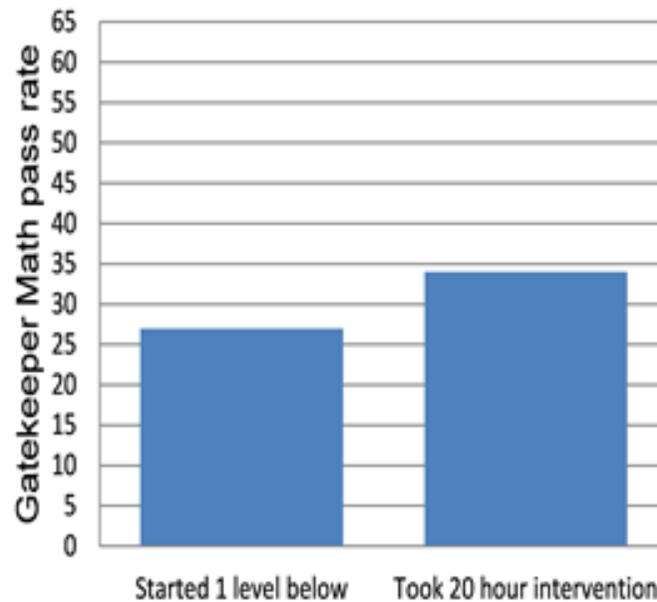
C. Students scoring 27-29 on Pre-Algebra



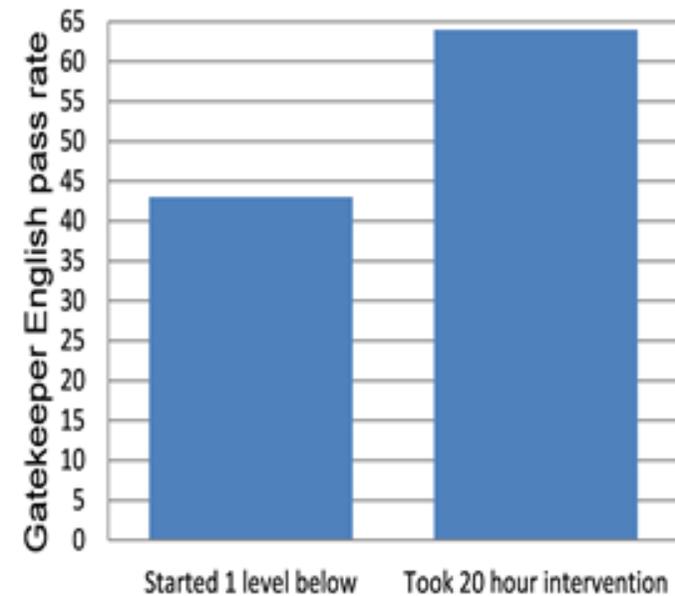
D. Students scoring ≤ 4 on Writing



E. Students passing Pre-Algebra, failing Algebra



F. Students scoring 6 on Writing



Faculty on Cut Scores

- Perceived Academic Quality:

“I am quite upset with the difference in the cut scores at the four-year and two-year institutions. . . . That [lower cutoff] denigrates my program, my college-level material. It’s the same college-level courses.”

- Instruction Difficulty:

“Right now there’s such a mix that it’s so tough to try to address all of these different needs. You don’t want to play to your strong students; on the other hand you don’t want to just play to your weak students. But what I find is that when there’s such a gap, it’s really difficult to know what happy medium to strike. And I do think it’s a matter of placement...I do wonder whether raising some of the standards a little bit might help with that.”

Internal Contradictions

- Faculty hated the exam as an exit exam... but thought it was fine for placement.
- Faculty & administrators did not believe passing the exam signaled readiness... but supported strict adherence to college's testing and cut-score policies, with little opportunity for appeal.

DEVELOPMENTAL EDUCATION RECOMMENDATIONS

Efficient Assessment that Aligns with Treatment

- Use high school info where possible
- Create exams diagnostic in manageable number of key areas
- Different requirements by field
- Link diagnostic units to modules
 - Isolated modules could result in drill-and-kill, lack of transfer
 - Could incorporate modules as additional supports for regular or accelerated courses

Supporting Progression While Maintaining Standards

- Encourage acceleration experiments while using high-quality well-aligned exit exam
 - Could thwart effective “mainstreaming” strategies
- Departments establish common learning outcomes

ONLINE LEARNING

VA & WA Quantitative Studies

- Grants under Lumina and Gates foundations
- Virginia:
 - Fall 2004 cohort: Nearly 24,000 students at 23 CCs, tracked through summer 2008
 - Fall 2008 cohort: Over 28,000 students at 23 CCs, tracked through spring 2009
- Washington State:
 - Fall 2004 cohort: Over 51,000 students at 34 CC/tech colleges, tracked through spring 2009
 - Fall 2008 cohort: Over 57,000 students at 34 CC/tech colleges, tracked through spring 2009

Who takes online courses?

- Balancing multiple life demands:
 - 25 or older
 - Have dependents
 - Employed full-time
- But also more advantaged:
 - White
 - Higher-income neighborhoods
 - Academically ready at entry
 - Fluent in English

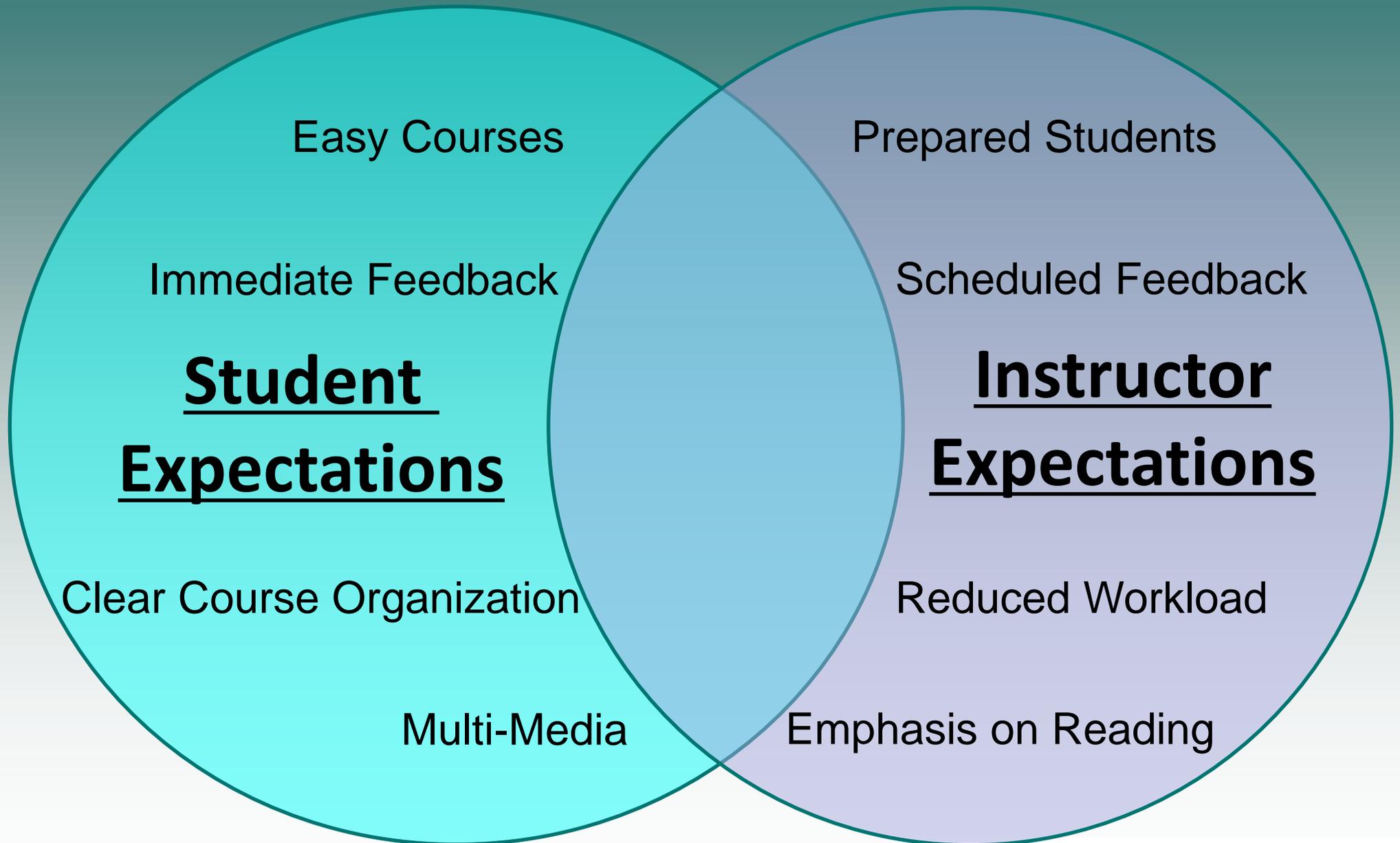
Student Success

- Online course completion rates lower
- Among completers, online grades lower
- Students taking remedial courses online less likely to move on & succeed in next course
- Students taking online courses first or second semester less likely to return next semester
- Students taking more online courses less likely to eventually transfer/graduate

VA Qualitative Study

- Grant under Bill & Melinda Gates Foundation
- Fieldwork at 2 community colleges in spring 2011
 - 46 student interviews
 - 38 faculty, administrator, and staff interviews
 - 26 “virtual” classroom observations of popular introductory courses (e.g., English, college algebra, sociology, psychology, and information technology)
 - Review of policy and planning documents pertaining to online learning
- Qualitative coding underway

Preliminary Findings: Expectations



Adapted from Bork (2011) presentation at Sloan-C conference

Preliminary Findings: Institutional Support

- Professional development for online faculty is frequently instructors' first exposure to pedagogical training
- Structured faculty training paid off -- mostly
- Most faculty struggled to optimize technology
- There is a lack of institutional knowledge about students' online outcomes

Cox, 2005

- “a consistent feature across every college was the scarcity (or more frequently, the complete absence) of assessment data for online courses. Furthermore, at nearly every college, although administrators expressed deep concern with the consistently low retention rates in online courses, none of the colleges had analyzed the problem.”

ONLINE LEARNING RECOMMENDATIONS

Improve Student Readiness

- Establish a policy requiring that students complete orientation for online courses
- Revise readiness orientations for online learning to include interactive components allowing students to practice key skills
- Integrate information about online courses into student success courses
- Build necessary skills within course itself

Professional Development

- Colleges can help instructors improve their pedagogy to make online learning courses more engaging, well-structured, interactive – and efficient to manage.
- Institutions can also ensure quality control of online courses through a more rigorous review of online courses and teaching, including peer review.

STRUCTURE OF THE STUDENT EXPERIENCE

Need to Help Students “Get with the Program”

- To earn a credential, students must first enter a coherent college-level program of study
- Many community college students enroll without clear goals for college and careers
- CCs offer lots of programs, but little guidance to help students choose and enter a program
- Often not clear whether students are actually *in* a program

Example: Completion By Design

- Grant by Bill & Melinda Gates Foundation
- Colleges in FL, NC, TX, & OH
- Goal: “Substantially increase completion rates over five years while holding down costs and maintaining access and quality”
- Planning organized around getting students *into* and *through* a program of study

Results of Initial Analyses

- Students entering a program at the CC are more likely to earn a degree in five years
- Students taking “a la carte” courses at CC have only mediocre transfer rates and low BA rates
- Outcomes tend to be better for CTE than for liberal arts

Results Raise Questions

- What can we do to help students choose an appropriate program of study?
- Are our programs, and the further education and career paths to which they are intended to lead, clearly articulated for students?
- Once students are in a program, how can that program work to support their progress?
- Do our programs indeed prepare students to successfully pursue the further education and career paths we say they will?

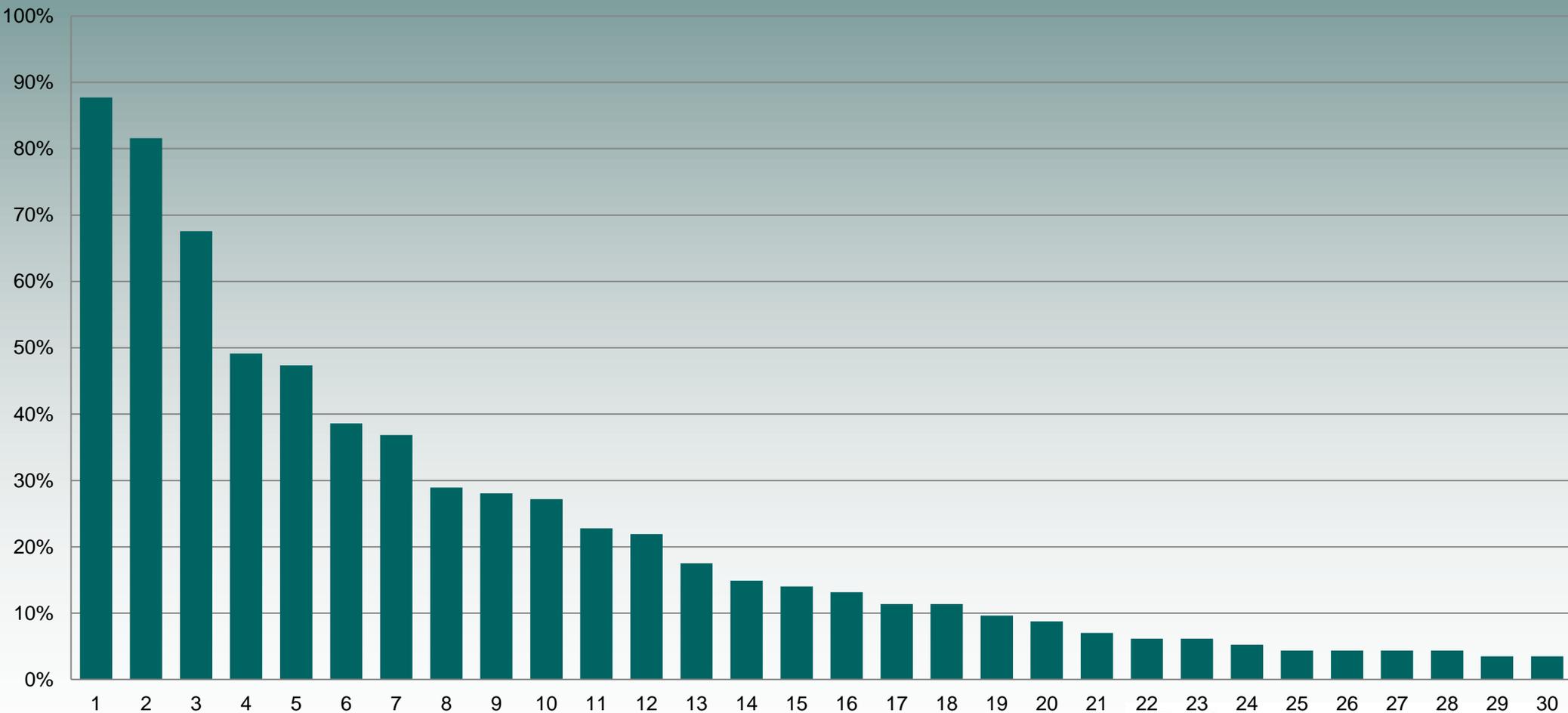
Examining Student Coursetaking

Most Common Courses Taken by Completers: Associate of Arts
(example from a CBD college)

Course Name	Enrollment Rank	Percentage of Completers Taking Course
ENGLISH COMP 2	1	91.5%
ENGLISH COMP 1	2	86.6%
COLLEGE ALGEBRA	3	83.8%
INTRO/MICRO USAGE	4	83.8%
FUND OF SPEECH COMM	5	80.1%
INTERMEDIATE ALGEBRA	6	63.9%
INTRO TO PSYCHOLOGY	7	52.2%
STATISTICAL METHODS	8	48.7%
HUMAN GROWTH & DEV	9	47.6%
HUMANITIES	10	47.3%
INTRO TO PHILOSOPHY	11	46.1%
GENERAL EDU BIOLOGY	12	45.6%
PRIN/ECONOMICS-MACRO	13	44.8%
ESENTALS OF HUM NUTR	14	39.5%
SOCIAL ENVIRONMENT	15	35.4%

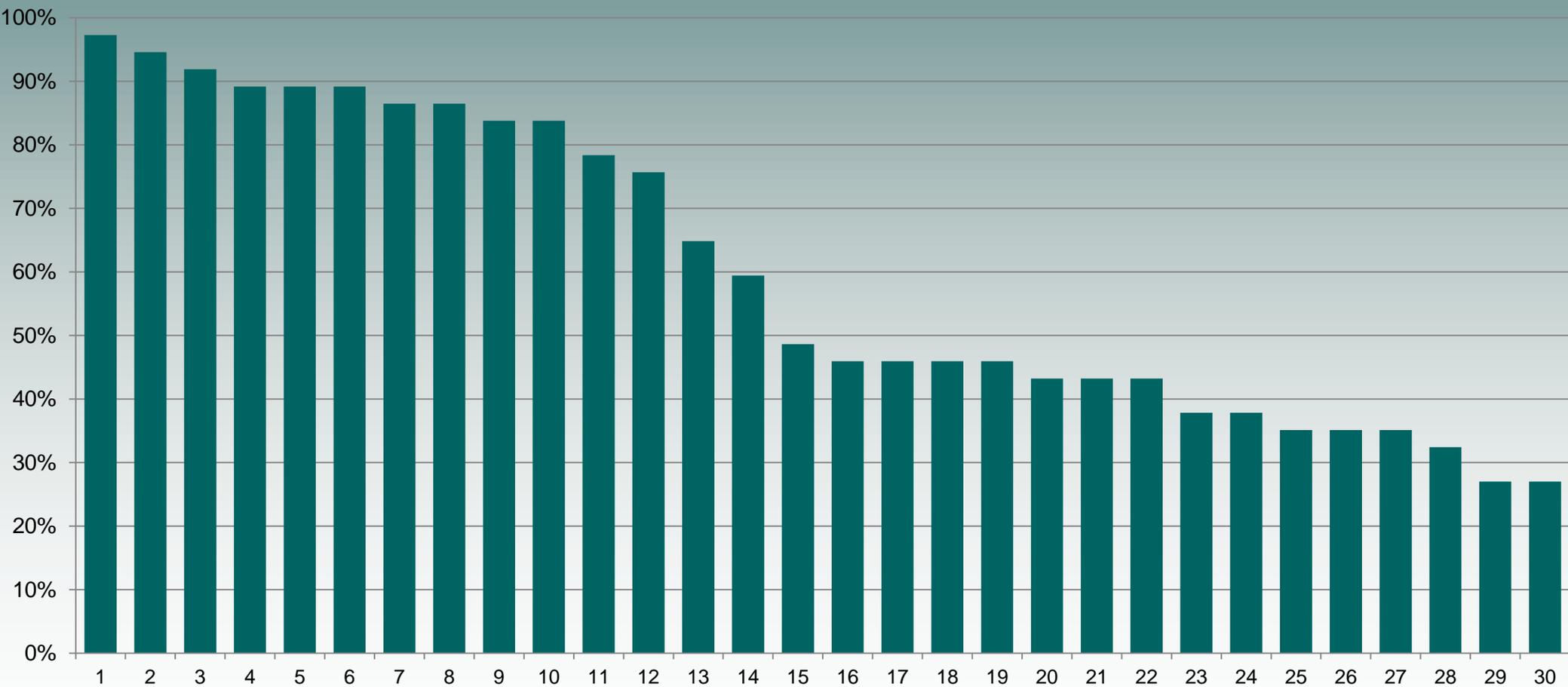
Using Coursetaking to Examine Structure

Percentage of Completers Taking Top 30 Courses: A.A. in Business (example from a CBD college)



Using Coursetaking to Examine Structure

Percentage of Completers Taking Top 30 Courses: A.A. in Business (example from another CBD college)



STRUCTURE OF THE STUDENT EXPERIENCE: RECOMMENDATIONS

The CBD Process

- 1) Engage faculty/staff to examine practices at key stages of students' experience with the college
- 2) Redesign and align practices at scale, with the goal of increasing rates at which students enter and then complete programs
- 3) Evaluate changes by comparing college's past rates of program entry and, by program, rates of completion among concentrators
- 4) Repeat these steps, rethinking professional development practices, committee structure, budgeting, and incentives to institutionalize the process

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