Crossing the Finish Line: Completing College at America’s Public Universities

Bianca Boyd, Molly Bunton, Rebecca Neal, Laura Welch, and Travis White

Missouri State University
Educational Attainment
- Attainment – generally equated to earning a degree
- The percentage of Americans attaining degrees in higher education grew rapidly from 1876 to 1976, but has since slowed dramatically to an almost flattened state
- Educational attainment has continued to increase in almost every other developed country
- Statistics are even worse for America in the STEM fields
- Economic incentives to attain a degree have greatly increased, yet educational attainment remains sluggish
- While many theories are given, the main culprit mentioned is the lack of preparedness many families have for beginning college
  - Financial restraints
  - Aversion to borrowing money
  - Lack of knowledge on how to obtain scholarships, grants, etc.
- A larger number of graduates from U.S. institutions are foreign born, including half of all doctorate recipients in the STEM fields

Educational Disparities and Why They Matter
- Large racial disparity in degree attainment, especially among women
- Large disparity in degree attainment between income quartiles
- Educational attainment is considered to be even lower in the future because of the increasing percentage of Hispanic citizens, who are less likely to attend and graduate college than their non-Hispanic counterparts
- If a failure to reduce the current disparities in educational attainment among races and income classes occurs, then attainment rates will decrease greatly as non-white populations continue to grow.
- Besides the decreased income that this would bring for institutions, the educational value in classrooms would decrease, as demonstrated in the University of Michigan affirmative action case.

The Flagships: Trends in Selectivity and Other Characteristics
- Approximately two-thirds of all full-time students pursuing bachelor’s degrees at four-year colleges and universities attend public universities
• Flagship public institutions are more selective than other state-run institutions, and attract a student population that is more prepared for college work, which leads to higher graduation rates
• Flagship institutions have become more selective over time, as demonstrated by increase in admissions standards and test scores
• Whether they mean to or not, flagship institutions are also increasing their acceptance of students from more privileged backgrounds, which has many debating that they are becoming too selective and are aiding in the increase in disparity in college classrooms.
• There are some reasons that flagships give for their increased selectivity, as outlined by Eugene Tobin in the text, including:
  o Flagships are major contributors to the states they are located and should be allowed to be more selective based on their research emphasis
  o Many states have opted for greater specialization in their state systems and feel that only students that are interested in research and graduate education should go to flagship institutions
  o The greater selectivity is more of a demographic trend than a conscious policy decision

CHAPTER 2: Bachelor’s Degree Attainment on a National Level (by Travis White)

• This chapter provides context by looking more broadly at bachelor’s degree attainment at the national level.
• The overall level of educational attainment is discussed, including high school graduation rates, college enrollment rates, and college graduation rates.
• This data is also discussed in terms of race/ethnicity, gender, and SES and whether disparities have changed over the past 25 years.

Degree Completion and Socioeconomic Status
• There is a strong correlation between socioeconomic status and degree attainment.
• The lowest socioeconomic class sees only a 9% degree attainment, while the highest socioeconomic class sees 68%
• The higher the socioeconomic class, the more likely a student is to graduate high school, enroll in college, and complete college
• Students from the top income bracket are 5x more likely to earn a bachelor’s degree than students from the bottom income bracket.
• Students from lower income brackets are also more likely to take more than 4 years to complete their degree than students from higher income brackets
• The main difference among socioeconomic groups is pre-college preparation. Students from higher income brackets often have parents who can afford to live in better public school districts or pay for private education, they can pay for college prep classes and standardized test prep classes, and can also afford to pay college costs so their student doesn’t have to work.

Trends
• College graduation rates have changed little over the last 40 years
• Moderate growth in graduation among students from families in the top half on the income
distribution, as well as college enrollment over the last 20 years
• The opposite is true of the bottom half, where college graduation and enrollment dropped

Race/Ethnicity and Gender
• Both race and gender of student populations show distinct differences among college
graduation rates
• Both white males and females graduate at a higher percentage than their black and Hispanic
counterparts
• For men, Hispanic men graduate at a rate roughly 6% higher than black men, but 25% less
than white men
• For women, black women graduate at a rate 10% higher than Hispanic women, but 15% lower
than white women
• Women graduate at a higher rate than men in all races

Chapter 3: Finishing College at Public Universities (by Rebecca Neal)
In the next two chapters, the book examines the college outcome of 124,522 students 1999 who
matriculated as first time and full time student from 57 four year public universities. Out of
these universities, there are 21 flagship universities and four complete state systems of public
four year colleges and universities.

Flagship Universities and Four Year State Systems
• “Nationally representative data indicate that there are substantial disparities in educational
outcomes by socioeconomic status (SES) and race/ethnicity at every stage along the path
toward a bachelor’s degree: high school graduation, college enrollment, and college
completion” (p.32)
• The first outcome is graduation with the focus of six year graduation rates where the students
originally matriculated.
• Of the flagship universities represented, 49 percent of student graduated in four years, 24
percent in five years, and 4 percent in six years.
• Of the state system represented, 38 percent graduated in four years, 38 percent graduated in
five years, and 4 percent graduated in 4 years.
• Very few bachelors’ recipients complete their degree at their original institution more than six
years after initially entering.
• Of the study conducted, figures show that six year graduation rate vary clearly and consistently
by selectivity.
  o Selective flagship had an 86% graduation rate while least selective state systems had 51%
  graduation rate.
• There are differences in graduation rates amongst the four state systems.
  o The clusters found in Figure 3.1b are used for “determining the extent to which
  disparities in graduation rates, by SES, race/ethnicity, and gender, vary at different types
  of universities” (p. 33).
• The timing of dropouts or student persistence is also a concern in this chapter.
At the beginning of the third semester in flagship universities, 4.6% of students had withdrawn and 3.5% had transferred to other four year universities.

If students transfer to other universities, they do so early in their college career within the first four semesters.

Withdrawals from Universities continue well after four semesters, in some cases almost till students have almost completed their degrees.

44% of all withdrawals happened after the second year of college in the flagship schools. This shows that the first two years of college are not always breaking point for students to leave their institution.

This reminds us that we need to promote retention not just through the first two years, but all the way through.

Withdrawals happen steadily over time in state system institutions with the cumulative withdrawal rate being almost twice as much as the flagships.

“The higher overall withdrawal rates at the less selective institutions are exactly what we would expect given their lower graduation rates, but we also find that withdrawals are concentrated more heavily in the earlier semesters at the less selective universities (p. 36).

The state system pattern is similar; this was not expected in the study’s findings.

Socioeconomic Status

According to the book, in public universities, there is a strong relationship between a student’s socioeconomic background (SES) and their chances of graduating. SES students are divided into three groups:

- low-SES students: bottom half of income distribution and neither parent has a college degree
- high-SES students: top half of income distribution and at least one parent has a college degree
- middle-SES students: this group does not fall into either low-SES or high-SES groups

At the flagships, 83% of students that were in the high-SES group graduated within six years and only 68% of low-SES students were able to accomplish this.

At the state systems, 74% of students that were in the high-SES group graduated within six years and only 55% of low-SES students were able to graduate within six years.

With parental education being a factor, the outcome is very similar to the SES group’s outcome.

- At flagships “students whose parents obtained a college degree are about 8 percentage points more likely to graduate within the six years than those whose parents attended college but never graduated” (p. 38).

Family incomes indicate that the higher the income families make more income have students graduate more quickly than students who come from a low income family.

There is still debate on whether the connection between SES and graduation rates is because of the inability of being able to pay for college or academic preparation.

A simple multivariate regression analysis is used in order to unravel the effects of multiple student characteristics on graduation rates. “Specifically, we include controls for high school GPA, SAT/ACT scores, state residency status, race/ethnicity and gender, university attended” (p.40).

The analysis was given when examining the parental education and family income.

- Both parental education and family income are strongly connected with graduation rates.
This raises the question of is this connection happening at every individual institution?

- When looking at every semester for cumulative withdrawal the proportion is always higher for low-SES students than for high SES students.
- Looking at academic preparation and demographic characteristics does not change the findings.
- As a conclusion, “disparities in educational attainment be SES are pervasive in American public higher education and cannot be explained away by associated differences in academic preparation” (p.45).

Race/Ethnicity and Gender

- Taking a closer look at relationships between graduation rates and the connection of race/ethnicity and gender.
- The outcome focus is on white and black students and when sufficient data is given, Hispanic and Asian students are also given.
- With the eight race/ethnicity-gender groups at flagships, the results are as follows for most likely to graduate:
  - Asian females (85% within six years)
  - White females (79% within six years)
  - White males, Hispanic females, and black females (76% within six years)
  - Hispanic males (66% within 6 years)
  - Black males (59% within 6 years)
- Academic preparation and background characteristics are used to see if there are any changes in the above findings.
- Results show, “even after controlling for background characteristics and the university attended, there is still a strong relationship between a student’s probability of graduating and his or her race/ethnicity and gender, family income, and parental education” (p.54).

The Predictive Power of First-Year Grades

- Academic performance in the first year is an important tool and study for many people.
- Graduation rates increase with stridently with first year grades and plateau for students who have a 3.0 GPA or better.
- Only around half of the students in the study that had a GPA of C- to C ultimately graduate.
- It is shown that students who are in more selective universities have higher GPAs than students in low selective universities.
- The results of the study show that first year grades do have an influential effect on graduation results.

Chapter 4: Fields of Study, Time-to-Degree, and College Grades (by Rebecca Neal)

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<tr>
<th>Fields of Study, Time-to-Degree, and College Grades</th>
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<tbody>
<tr>
<td>- This chapter discusses the disparities in time-to-degree and grades earned are a serious concern.</td>
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<td>- To what extent does time-to-degree vary across these same groups?</td>
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<td>- Do college grades correlate with race/ethnicity, gender, and SES—both before and after adjusting for differences in academic preparedness?</td>
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Choice of Major

- Study exposes the myth that low-SES and minority students do not pursue majors such as engineering as much. Instead, “black graduates are generally more like than comparable white graduates to choose engineering, math, and science majors” (p. 58).

- The study shows that in flagships:
  - 22% Social Sciences
  - 20% Engineering, Math, and Physical Sciences
  - 14% Business
  - 12% Humanities and Professional and Other
  - 11% Communications and Education
  - 8% Life Sciences

- In both flagships and state systems, less selective universities tend to have students awarded more professional and vocational degrees.

- Detailed examination of patterns in choice of major by SES, race/ethnicity, and gender show that there is not a clear pattern in choosing various fields of study.
  - Low-SES students are more likely to major in a professional and other degree than high-SES
  - Low-SES students are more likely to major in social sciences and less likely to major in the humanities and engineering, math, and physical sciences.
  - Reasons for choice of majors may come from income base decisions.
  - High-SES students majoring in engineering, math, and physical sciences is explained by university attended and student characteristics.
  - High-SES students are less likely to major in the social sciences and more likely to major in business
  - Students majoring in business correlates with high income families or families who are have a higher standing in the business community.
  - There is still debate on whether the connection between SES and graduation rates of the inability of being able to pay for college or academic preparation.
  - “Men are much more likely than women to major in engineering, math, and physical sciences. Among men, black men are the least likely (20 percent) and Asian men are most likely (41 percent)” (p. 63).
  - There is still debate on whether the connection between SES and graduation rates of the inability of being able to pay for college or academic preparation.

- There is very little evidence that the choice of majors connects to the SES and underrepresented minorities of both genders are more likely to choose engineering, math, and science majors than white students.

Time-to-Degree

- Time-to-degree should be a concern institutions, students, and society as a whole.
- While universities may receive more tuition money from students who stay longer, the cost providing the education outweighs the tuition money.
- Normality has changed in recent years because most students do not seem to think they can finish college in four years anymore.
- It is not taking students longer to graduate because they are leaving school for a semester to do anything worthwhile, instead it is because failing courses.
Five year degrees are more prevalent in engineering even with 44% finishing in four year in flagships.

In socioeconomic status, high-SES students are more likely to graduate in four year than low-SES students.

In parental education and family income, “data strongly suggest that family income, not parental education, is primarily responsible for the overall relationship between SES and time-to-degree” (p.71).

In all racial groups, more women graduate in four years than men did.

White men earned their more quickly than black men.

**Academic Performance**

On average low-SES students earn significantly lower grades than high-SES graduates. “The average low-SES graduate at the flagship universities earns grades that place him or her in the 43rd percentile, whereas the average high SES graduate ranks in the 53rd percentile” (p.75).

A difference in entering characteristics can explain the academic performance between SES.

Differences in rank-in-class that are related to race/ethnicity and gender are not explained by a difference in entering characteristics. None of the studies found a consistent pattern.

**Summary of Outcomes by SES, Race/Ethnicity, and Gender**

All three outcomes are strongly tied to SES, race/ethnicity, and gender but choice of major not as much as the other two.

The purpose of this summary was pull together all three outcomes and rank-order them to understand the extent of disparities in college outcomes related to SES, race/ethnicity, and gender. To accomplish the objective, four composite outcomes were created:

- Best Outcome (graduate in four years at top half of class)
- Second-Best Outcome (graduate at four years at bottom half of class or graduate in six years at top half of class)
- Third-Best Outcome (graduate in six years at bottom half of class)
- Disappointing Outcome (no bachelor degree)

College students from high-SES backgrounds are almost twice as like to end up in the Best Outcomes category that low-SES at the flagships and state system SEL As and similarly with the SEL Bs.

Females do consistently better than males

White students do consistently better than black students

A large percentage of black men at 39% are in the Disappointing Outcome compared to 21 percent of white men.

About 50% of the differences in outcomes by race/ethnicity at these universities can be attributed to the weaker scores and grades of black students.
Chapter 5: High School and Undermatching (by Bianca Boyd)

- Secondary schools are one force that shape educational attainment in the United States.
- There is a considerable body of research analyzing the connections between the high school experiences of students and their later educational outcomes.
- 2008 and 2009 Chicago Consortium study emphasizes that high schools must not only prepare their students for college but also provide the information and support their students need if they are to successfully navigate the college application and admission process.
- This chapter seeks to discover some factors influencing high school success and college readiness.

Types of High Schools and College Graduation Rates at the National Level
- Bowen, Chingos, McPherson, College Board and the ACT used a newly created national database describing all U.S. high schools both to describe the kinds of high schools attended by the students at public universities and to examine relationships between graduation rates at these universities and the characteristics of the high school they attended.
- Table 5.1 presents a snapshot of the distribution of all high school students by basic characteristics of the high school attended. For example, size of senior class, racial ethnic mix, urban/suburban/rural location, neighborhood wealth, and academic standing (as measured by SAT/ACT test-taking behavior or seniors, average SAT/ACT scores for those who took one of the tests and percentages of students taking at least one Advance Placement [AP] test)
- Flagship and Selectivity cluster (SEL A)
- Other universities (SEL B)
- Students at the more selective universities (the flagship and SES A’s) came from high schools that were at least somewhat “above average” in academic standing and wealth. For example:
  - Only 18% of students at these universities graduated from high schools in which fewer than half of the seniors took either the SAT of the ACT
  - In contrast, twice as high a percentage (37%) of all high school seniors attended high schools where a minority of students took the SAT or ACT
  - Only 25% of students at the flagship (SEL A’s) attended high schools where the mean SAT/ACT score was under 1000. In contrast, nearly half of all seniors nationwide (49%) attended high schools with mean test scores in this range.
- Neighborhood and Wealth
  - Only 29% of students at the flagship/SEL A came from high school in which the median family income in the surrounding neighborhood was under 50,000
  - Nationally 48% of all seniors attended high schools in these lower-income neighborhoods. As the data in the table indicate, there were also some differences in the typical racial/ethnic mix of the high schools attended (with students at the flagship (SEL A’s) less likely to come from high schools with predominantly non-white student bodies) and in the size and location of the high schools (with students at the flagships (SEL A’s) less likely to come from small high schools and from high schools in towns and rural areas.
  - Students at the SEL B’s came from somewhat less academic high schools than did student at the more selective institutions. They also came from high schools in neighborhoods where the family was higher than the national norm for high schools but
lower than the family income in the neighborhoods that sent more of their graduates to
the flagships (SEL A’s)
- Students at the SEL B’s were less likely to come from very large high schools and from
  predominately minority high schools. Like all students nationally, the SEL B’s students
  were more likely than students at the flagship/SEL A universities to come from towns
  and rural areas
- There is an association between graduation rates and neighborhood wealth, especially
  within the cluster of flagship (SEL A’s)
- Students from high-SES backgrounds graduate at higher rates than students from lower-
  SES backgrounds.

- Rank 1 – high school had to have a mean SAT/ACT score of at least 1100 and 66% or more
  of its students taking either SAT or the ACT. Students from Rank 1 schools who attended
  flagship (SEL A’s) had a six-year graduation rate that was 11 point higher than the comparable
  graduation rate for students from the Rank 3 schools and 5 point higher than the comparable
  graduation rate for students from the Rank 2 schools.
- Rank 2 – middle scores
- Rank 3 – schools were those with mean SAT/ACT scores under 1000 and fewer than half of
  their students taking one of these tests.
- Academic characteristics of high schools do affect college graduation rates, though by a
  modest amount after we account for differences in other variables especially student
  characteristics.

Evidence From North Carolina
- In addition to the national study the North Carolina (NC) study allowed the authors to exam
  the educational paths of well-defined groups of students all the way from high school
  graduation to enrolment in college (or not) and on to college graduation.
- Eighth-Grade Test Scores
  - NC database includes end-of-eight-grade math and reading scores for more than 70% of
    the ’99 cohort of high school seniors.
  - Eighth grade test scores proved to be powerful predictors of many of the educational
    outcomes we observe in NC especially college enrollment rates for students of all
    races/ethnicities and both genders. For example,
    - 11% of students in the bottom quartile of the distribution of 8th grade scores
      enrolled at four-year colleges compared with 72% of those in the top quartile.
    - Very large black-white differences in eighth-grade test scores explain the entirety of
      the substantial black-white gap in enrollment rates.
    - 8th grade scores also proved to be highly correlated with SAT scores.
  - Characteristics of the NC high school do matter, even after we take into account differences in
    prior academic achievements of students and differences in family background of students
    attending various high schools and that they matter more for some groups of students than
    for others.
- Other factors, such as incoming student profiles also have tremendous consequences to
  college enrollment patterns.
- High School Characteristics in General
Location: doesn’t really matter. Students at big-cities go either to four-year colleges or to no colleges at all. Students at high schools outside of big cities are more likely than others to go to two-year colleges. But no evidence linked location to graduation rates.

High schools in relatively wealthy neighborhoods have somewhat higher college student rates than do other schools. Students from these high schools also graduate at modestly higher rates than do students from other schools. We believe that these relationships are due mainly to the association between neighborhood wealth and both family income and parental education.

There is not consistent relationship between the racial mix and student enrollment or graduation rates.

### Academic Levels of High Schools and Enrollment and Graduation Rates

- 54% of seniors from Level I high schools went to four year colleges versus just 27% from Level III schools. Students from Level III high school who attended four-year institutions then had a six-year college graduation rate that was 12% lower than the rate among the far larger population of college-going students from Level I high schools.
- 34% of all seniors who attended Level I high schools earned bachelor’s degrees within six years compared with just 14% of the seniors who attended the Level III high schools.
- Factors that affect college entrance and graduation rates are eight grade test scores and family backgrounds.
- Six year graduation rates were 5-6% points higher among students who came from Level I high schools than among students from Level III high schools.
- Student from Level I high schools who had GPAs above 4.0 and attended a SEL A had a graduation rate advantage of 8 percentage points over students with comparable grades who attended a Level II high school.
- Most highly talented students benefit the most from going to an academically strong institution because they are able to take the fullest advantage of the educational resources that are offered.
- The evidence from North Carolina shows that the academic level of the high schools does matter, but that it matters much less than is suggested by looking only at the unadjusted data and much less than most people seem to assume it does.
- Chicago Consortium study of Chicago showed that overall high schools provide few students with the skills, content and credentials needed to access to 4 year colleges and for success once enrolled.

### Undermatches: The Basic Concept

- High schools have a dual role. They have a responsibility not only to provide their students with strong preparation for success in college (some high school are better than others) but also to provide information and support that students and their families need if they are to translate “preparedness” into enrollment at those colleges and universities that will allow them to take full advantage of their talents.
- Match – whether a student enrolled in a college with a selectivity level that matched the kind of colleges the student would likely have been accepted to, given his or her college qualifications.
  - Less than half of students from these academically advanced programs ended up enrolling in colleges that match their qualifications.
- Undermatches – mis-alignments in the matching process.
• Issues of unequal access to the most promising educational opportunities. Also how well society at large succeeds in building as much human capital at the college level as it could build based on the secondary school achievements.

• Every student should not attend the most selective institution for which he or she might qualify.

• Match is just one component of finding the right college fit.

• Each student needs to find a college that meets a student’s educational and social needs and that will best support his or her intellectual development.

• There may be good reason for choosing a college that has a selectivity level below the student’s qualifications.

• Students should be made aware of the full range of higher educational opportunities available to someone with his or her credentials and then encouraged to reach for most challenging opportunity that is a realistic option for student.

• There may be good reasons for choosing safer or more comfortable option but decision should be made deliberately after weighing all pros and cons.

• Presumptive Eligibility:
  o The first step in analyzing matches is to decide what qualifications presumptively qualify a student for admission to a selective institution.
  o SAT scores and High School GPA are indicators used because these are objective measures and commonly used admissions criteria.
  o If more than 90% of students with a particular combination of SAT scores and high school GPA who applied to NC State were admitted to either NC State or UNC Chapel Hill (these universities account for over 90% of all SEL A enrolments).
  o Students with somewhat weaker qualification can be assumed to have had a strong chance of attending a SEL A.

• The Extent of Undermatches:
  o How frequently did undermatches occur?
  o Highly qualified students more than 40% percent did not attend SEL A universities but 30% enrolled in SEL B, HBCU (1%) two–year colleges (3%) or no college at all (9%).
  o Characteristics of student who are undermatched:
    ▪ Undermatches appear to have been more common among black student (especially black students).
    ▪ Undermatching is a serious problem within the Latino population in Chicago.
    ▪ Family income and parental education are both strongly correlated with college choices and drive many undermatches.
    ▪ Those from more affluent and better-educated families were more likely than their less privileged peers to attend one of the most selective universities.
    ▪ Undermatching was less likely to occur from families from top income (27%).
    ▪ Undermatching was more likely to occur from families in the bottom income (59%).
    ▪ Family income and parental education have strong effects on enrollment pattern.

• Forces leading to such high undermatch rates were a combination of lack of information, lack of forward planning for college and lack of encouragement.
• Comfort at prestigious university
• The key is to find ever more effective ways of informing high-achieving students and their parents of the educational opportunities that are open to them.
• Reshuffling might also lead to improvements in overall educational outcomes if the most highly qualified of these undermatched students did better than the students they displaced
• Undermatch problem for students who were presumptively eligible to attend these two selective universities but failed to do so was concentrated at the application stage of the application and enrollment process
  o Of the students who were undermatched 64% were lost at the application process (they did not apply)
  o 28% were lost at the enrollment stage (selecting course etc)
• Student who excelled in high school (1200 better and 3.5 better) had an undermatch rate of 35%
• The academic level of the high schools does not affect undermatch rates once family, income, parental education, other high school characteristics and test scores and grades.
• Schools such as size and location also had little effect on undermatch rates.
• Family income, parental education, and academic high school in determining whether a high-achieving student attends one of the most selective universities.
• Implications of Undermatching
  o How did students who were undermatched compare with other students?
  o Students who were presumptively eligible to attend SEL A but attended SEL B had a 6-year graduation rate that was 15 point lower than 6-year graduation from SEL A students.
  o Time-to-degree were also faster for the matched students than for the undermatched group
    • 73% graduated in four years
    • 67% from those who were undermatched
  o Undermatched student paid a considerable price in term of the time it took them to complete their programs of studies and in the reduced probability that they would finish all.
  o Overall, 11% of student in the top quartile went to two-year colleges and another 18% went to no college at all.
  o Students at Level 1 high schools, 5% of the top students went to two-year colleges and 15% went to no college.
  o Students at Level 3 high school, 15% went to two-year colleges and 23% went to no college
  o There appears to be a real opportunity to increase educational attainment by encouraging more students with excellent 8th grade test scores to enroll in four year colleges
  o Graduating from college, graduating from a more selective institution and graduating in a relatively short time confer to lasting benefits.
  o Undermatching has can impose real penalty both on individual students and on society in general.
• The high degree of undermatching among students from modest family backgrounds is noteworthy and worrying.
• Numbers of students with top-quartile test scores who did not attend any for-year college are substantial
• Undermatching is especially troubling in light of the evidence of differences in educational outcomes. Low graduation rates and longer time-to-degree associated with failing to take full advantage of the educational opportunities for which students were presumptively qualified.

Chapter 6: Test Scores and High School Grades as Predictors (by Bianca Boyd)

- Standardized testing and its proper role in matching students to suitable educational programs.
- How test scores and high school grades relate to the outcomes of graduation rates and how they affect disparities in outcomes that are related to socioeconomic status (SES) and to race.
- SAT nor the ACT was designed to predict graduation rates.
- Research converted ACT scores to SAT so they can work with a single measure.

High School Grades Are a Much Better Incremental Predictor of Graduation Rates than are SAT/ACT Test Scores
• High school grades are far better predictor of both four-year and six year graduation rates than are SAT/ACT test
• Both test scores and high school grades are stronger predictors of four-year graduation rates than of six-year graduation rates.
• Importance of test scores vs. high school grades varies by institutional selectivity.
• Relationship between SAT/ACT scores and graduation rates was flat for student at SEL I flagship.
• SEL II flagship: the relationship between SAT/ACT and graduation rates was flat.
• At SEL III graduation rates increased when GPA increased from 3.0 to 4.0 and above
• SAT/ACT scores had almost no power to predict graduation rate at SEL B schools.

• Concerns about varying and erratic grading standards are of course entirely understandable.
• How much weight to give to an excellent academic record earned at poor high school
• High school GPA is very positively and very consistently associated with six-year graduation rates whatever the level of the high school that the student attended. Grade earned by students in high school are extremely strong predictors of graduation rates even when we cannot take account the characteristics of the high school the students attended.
• High school grades are such a powerful predictor of graduation rates in part because they reveal mastery of course content.
• They reveal qualities of motivation and perseverance as well as the presence of good study habits and time management skills.

Evidence from Chicago
• Research carried out by the Chicago Consortium on School Research
Students who graduated from high school with a GPA less than 3.0 were very unlikely to graduate from college.

More than 60% of students who graduated from high school with an A average completed a 4 year college degree within six years.

Grades are a measure of whether students have mastered the materials in their classes and they indicate to colleges a different kind of college readiness—whether they have demonstrated the work effort and the study skills needed to meet demands of a college environment.

RACE and SES

- Race and SES interact with SAT scores. There may be some equity issues.

Predicting College Grades

- SAT/ACT have a greater incremental power to predict college than to predict graduation rates.
- SAT/ACT scores are stronger predictors at the more selective universities than elsewhere.
- High school GPA is an even more powerful incremental predictor than SAT/ACT.
- Scores on achievement test (AP) are better predictors of outcomes than SAT scores for all students.
- AP test are usually good predictors of high school graduation rates.
- Usefulness of AP test scores is reduced somewhat because African American students are still much less likely to take AP test than other students.

Conclusion

- Students and Parents should make sure that their students can write and have a background in mathematics is important.
- Tailoring test to compliment high school grades.
- Devise test that will not further disadvantage students who are already disadvantaged. Test should send the right message that it is about mastering content and just about being a good test taker.

Chapter 7: Transfer Students and the Path from Two-Year to Four-Year Colleges (by Molly Bunton)

- Are there significant differences in outcomes between students who begin at a Two-Year and transfer and students who begin at a Four-Year institution?
- Do students who start out in two-year programs pay a significant “price” for that decision in terms of the likelihood that they will eventually earn bachelor’s degrees?
- Could we enhance the overall effectiveness of the higher education system by improving the alignment between two-year college programs and academic expectations in four-year programs?

Two-Year Vs. Four-Year

- Beginning at a two-year college can yield substantial financial savings:
  - In 2006-07: average in-state yearly tuition at four-year public universities was $5,685; two-years had an average tuition of $2,016.
• Using nationally representative data and controlling for differences in the characteristics of entering students, Reynolds estimates that beginning at a two-year college decreases bachelor’s degree attainment rates by approximately 30%.

The Student Perspective: Starting at a Two- Versus Four-Year College
• Used data from North Carolina to examine whether students who started at a two-year college were more or less likely to ultimately earn a bachelor’s degree than they would have been if they had started at a four-year college.
• Divided students into 10 “propensity” groups based upon background characteristics and academic preparedness, and separated the white and black students to help account for student differences and to enable a comparison between black students who attended HBCUs and PWIs.
• Results:
  o White students who attended a 4-year institution achieved 26 – 26% more bachelor’s degrees than their peers who began at 2-year institutions.
  o Black students who started at PWIs were 17-50% more likely to earn a bachelor’s degree than their 2-year starting peers; those who began at HBCUs were about 32% more likely than the 2-year students.
  o In sum, students in North Carolina who wish to earn a bachelor’s degree are much more likely to do so if they begin their studies at a four-year institution rather than at a two-year college.

The Institutional Perspective: Characteristics and Outcomes of Transfer Students
• Transfer students from two-year colleges are much more likely to come from low-income families than are both first-time freshmen and transfers from four-year colleges.
• Additionally, transfer students arrive with weaker academic credentials, as measured by high school GPA and test scores.
• Results:
  o Given these large differences in entering credentials, it is certainly noteworthy that transfers graduate at the same rate as the freshmen enrollees at the flagships and state system SEL As and at a higher rate at the state system SEL Bs.
  o Compared to freshmen with similar high school GPAs and SAT/ACT scores, transfer students are much more likely to graduate.
  o The graduation rate differences between transfers and freshmen enrollees are most pronounced among students from low-income families and those with weaker high school grades and test scores.
  o Transfer graduates earned modestly lower grades than the graduates who enrolled as freshmen, but these differences are reversed when high school grades and test scores are taken into account.
• Factors:
  o The superior graduation rates among transfers reflect strong selection effects. Transfers’ subsequent success at four-year institutions reflects differences in aspirations, maturity, social capital, and coping skills.
  o The two-year colleges are likely acting as a “sorting mechanism” that works to the benefit of the four-year institutions to which students transfer.
• Implications:
A better measure of transfer’s academic preparedness is the GPA they earned at their previous college. [At the eight flagships for which transfer GPA data are available, transfer GPA is a much stronger predictor of both graduation and rank-in-class than high school records.]

HBCUs & state system SEL Bs might improve their overall graduation rates by enrolling more transfers if they have the option.

Institutions could enroll and graduate more low-SES students by enrolling more transfers.

Flagship & State System SEL As could also increase graduation rates by admitting more transfers and fewer freshmen with weak high school credentials.

A System-Wide View

- The typical high school senior is more likely to earn a bachelor’s degree if he or she starts at a four-year school rather than a two-year.
- The typical four-year institution in the study could increase its socioeconomic diversity without decreasing its graduation rate by enrolling more transfers from two-year colleges.

Considerations:

- Any large-scale policy changes need to be considered very carefully.
- How can four-year institutions encourage transfer enrollment without discouraging freshmen enrollment?
- Does a lack of openings at four-year institutions for transfer students factor into their decreased likelihood to achieve a bachelor’s degree?
- The number of transfer applications rejected by the average four-year public university was 1,719 in California, 1,092 in Florida, and an average of 405 in each of the other 48 states and Washington D.C.
- How do the potential cost savings of encouraging greater numbers of students to start at a two-year and transfer compare to the potential for decreased overall bachelor’s attainment?

Implications:

- Further research is needed on how to balance the demands of resources and encourage the highest amount of students to attain their bachelor’s degrees.
- As such, this must be conducted with a system-wide view to take into account how a policy change might influence the entire higher education system.

Chapter 8: Financial Aid and Pricing on a National Level (by Molly Bunton)

- Methodological problems are formidable, and data limitations have made it especially difficult to study the effects of job commitments.
- Insufficient and overly complicated financial aid, especially grant aid, slows progress toward degrees and reduces the overall educational attainment of needy students.

Overview of National Trends

- The process of determining the actual bottom-line cost a family will face in sending a family member to a particular university or college is surprisingly complicated.
• The proper role of financial aid lies in enabling students not simply to attend school but to finish their degrees.
• In recent years prices at four-year public institutions have risen much more rapidly than prices at private institutions.
  o This reflects the increasing demands on tight state government budgets.
  o The economic downturn of recent years will continue to add to the upward pressure on public university prices.
• Responding to the pressures of rising prices, both governments and institutions have expanded their own student aid programs.
• The “discount” given to offset “sticker price” has not always increased alongside the tuition increases; this reflects in part the complex and often political decisions that determine public university tuition and grant aid.
• From 1998-99 to 2008-09, the net price at public four-year institutions grew by about 32% compared to a 50% growth in sticker price.
• Meanwhile, at private four-year institutions, the growth was 22% net compared with 27% gross.
• Because family incomes have grown so slowly since the beginning of the 1990’s, it is also the case that college costs consume a larger share of family income than was the case in earlier times.
• 1965: the federal government began the guarantee program to encourage banks to make loans to students; they took on the risk on the loans, capped interest rates, and paid interest during enrollment.
• Between 1997-98 and 2007-08, the number of borrowers grew by more than 50% in a decade during which enrollments grew by about 25%.
• A big issue with student and parent loans has been the amount of loan permitted to borrow. Calculated on the cost of institution and family income, loan limits have left students turning to private loans to make up a deficit.
• While most colleges perform the same calculations to determine aid packages year-to-year, for a variety of reasons students often face progressively higher net prices as they proceed through school.
• The design of the system inhibits students from developing a strategy in advance for getting through their undergraduate education.
• Typically:
  o Private institutions invest more in “discounts” and direct the majority to need-based aid.
  o Public institutions split their institutionally controlled grant aid more evenly between need-based and merit-based funding.

Behavioral Effects of Student Aid Grants and Tuition Price Changes
• Does all the financial aid money make any difference in what students do?
  o It is very difficult to establish any clear causal link between the introduction of the Pell Grant program and enrollment in college.
  o Why? Complexity and difficulty understanding how the Bell awards changed families’ opportunities.
• If complexity and inadequate information are explanations for the failure to observe an effect of the principal federal student aid grant program, we should be able to detect effects of programs that are simpler and better understood. Susan Dynarski did:
  o Georgia HOPE scholarship program = increases in enrollment
  o Arkansas’ tuition payment program = increases in enrollment
  o End of Social Security “survivor program” = decreased enrollment and attainment
  o The direct costs of college are not the only (or even the central) impediment to degree completion.
  o **Lower prices or greater aid induce more students to enter college**—when the offer is easy for families to understand.

• The combination of monetary incentives for achievement and support services was most effective at increasing persistence in college.

• **Lessons Learned:**
  o Money does matter when it comes to both college entry and persistence.
  o It is not only the amount of aid that matters; how simply and clearly aid is delivered makes a big difference in whether and how students respond.

The Role of Credit in Student Finance
• The introduction of federally guaranteed student loans in 1965 relieved the “credit constraints” facing many needy students.
• An important consideration noted recently: loan limits in the federal programs have not kept pace with rises in college expenses over time.
• Students’ attitudes towards loans and debit and delayed gratification affect their financial situation significantly.
  o Some students display “loan aversion”; this is a reluctance to borrow even for reasonably safe and profitable investments. Instead, some students try to work many hours which can interfere with their academic progress.
  o Some students are unwilling to reduce their consumption or delay the acquisition of a high standard of living. They borrow or work for extra money to buy “stuff.”
• In the field of economics there is a growing awareness that choices people make about complex financial matters are very much influenced by incomplete information.

Conclusion
• In the absence of federal and state subsidies, many fewer people would begin and complete college than do now.
• Policies that encourage attendance also independently promote college completion.
• Bigger grants or lower tuition promotes college attendance and completion—provided that the terms of the grant programs are simple enough and well enough know to inspire action.
• The existence of a system of federally guaranteed loans has had a positive effect on college attendance and completion and simplifying that system and making it more reliable would magnify its effects.
Chapter 9: Financial Aid at Public Universities (by Molly Bunton)

- Does need-based grant aid affect graduation rates?
- To what extent does the provision of grant aid affect the graduation rates of students from high-income as well as low-income families?
- What are the implications of this analysis for merit aid programs and debates over tuition policy?

Overview of Pricing and Aid

- The net cost to students of attending college has a measurable impact on students’ initial enrollment and likelihood of graduation.
- In this study:
  - Attention is focused on students who attend college full-time in their home state, are classified as “dependent” on their parents for purposes of determining their financial aid status, and entered one of the colleges in our study as freshmen.
  - Other student populations were excluded due to significant differences in the pricing and process and to keep the analysis reasonably simple.
  - The Flagship/SEL A group: 16 state flagship universities and four more selective (SEL A) universities in the Virginia state system.
  - Also compared with SEL B institutions in Virginia and North Carolina.
- The likelihood of receiving grants and the average amount of grant aid per recipient vary by income quartile among freshmen at flagship/SEL A institutions.
- The net price facing freshmen at these two groups of institutions is quite similar for students in the top two income quartiles, but for students in the bottom half, especially students in the bottom income quartile, net prices are actually higher at the less selective institutions.
- Black and Hispanic students received higher grant aid than white students at the flagship/SEL A institutions.
  - This difference likely reflects the strong efforts made by these more selective institutions to increase their representation of students from underrepresented groups.
- 60% of families from the bottom income quartile with students at the flagship/SEL A institutions borrow an average of $3,302 for their students’ freshman year; while only 23% of families in the top two income quartiles borrowed, the average amount borrowed was higher.
- For SEL B institutions, these borrowing patterns continue with somewhat higher rates of borrowing and somewhat smaller amounts borrowed among loan recipients.
- To address lack of funds students and families turn to a variety of “gap-filling” techniques: other types of loans, student employment, etc.
  - There is evidence that working long hours while in school is associated with less study time, lower grades, and lower college completion rates—and probably has a negative influence on other parts of the college experience as well.
  - It is highly plausible that excessive term-time work is one of the factors that make lower-income students less likely to graduate, but this is difficult to document.

Sources of Aid

- **Federal Grants** [Pell and Supplemental Educational Opportunity Grant (SEOG) programs] are heavily targeted at students from the bottom half of the income distribution as intended by laws.
• **State Grant Aid** is much more widely distributed. 44% of students from the top half of the distribution receive some support from these grants. This is due to some states awarding part of this aid on the basis of academic merit as well as financial need.

• **Private Grants** come from many sources, but often provide support only for the first year of attendance.

• **Stafford Loans**: almost 50% of students in the bottom half of the income distribution take out these loans.

• **PLUS (Parent Loan for Undergraduate Students)** are taken by relatively small numbers of families, and are not constrained by need.

• **Non-federal Loans** now account for nearly 25% of the volume of total lending. These loans are often more expensive than other borrowing options. Unfortunately, students sometimes turn to these loans before exhausting their options for loans with better terms.

**Financing Over a College Career**

• An important factor influencing staying in college is how the financing picture changes as students move through their college years.

• Public universities continue to rely heavily on state appropriations and state tax revenues are highly cyclically sensitive.

• During the time between this study’s students’ freshman and senior years, tuition and fees at public four-year colleges rose nationally by 12.8 percent after inflation. The following year, students who were still completing their degree saw tuition and fees increase another 9.9%.

• With the cost of attendance rising, students and parents increased their annual borrowing of the four years by almost half.

• In all but the bottom quartile, there was a significant drop in average grant aid after the first year.

• Students in all four income quartiles received on average smaller real amounts of grant assistance as seniors than as freshmen.

**How Pricing and Aid Policies Affect College Completion**

• Tuition levels and policies toward student aid vary substantially among the universities in our sample, with the result that students with similar SES backgrounds and qualifications will face very different net prices at their in-state flagship public university depending on the state in which they reside.
  o State grant policies differ widely
  o Large variations in “Sticker Price”
  o As the studies reported in Chapter 8 suggest, the net price differences of this magnitude should yield substantial differences in graduation rates, other things equal.
  o Due to these variations, there is not a “level playing field” in college-shopping across state borders, as there is within a single state like North Carolina.

• The study compared average levels of net price received by freshmen in different income quartiles with the adjusted graduation probabilities at those institutions.

• Expectation: institutions with lower net prices will have higher graduation rates, if all else is equal.

• Findings:
Higher net prices are associated with lower adjusted graduation rates at both the four-year and the six-year graduation levels.

The relationship between net price and graduation probability is much stronger (about 50%) for the four-year than for the six-year graduation.

Estimates state: an increase in annual net price of $1,000 is associated with a decline of 3 percentage points in the six-year graduation rate and a decline of 4.5 percentage points in the four-year graduation rate for students in the lowest income group.

- These differences are certainly large enough to indicate that policy choices about pricing and aid can make a material difference in students’ likelihood of completing college.
- Price and aid matter to student success in completing college and in shortening time-to-degree, and they matter much more for lower-income students than for others.

**Conclusion**

- There is every reason to think that the complexity of the funding of higher education, in and of itself, poses problems for students and families as well as those studying this subject.
- Reliable, simple, and predictable provision of financial aid is important not just to initial access to college but to success in graduating.
- Universities generally respond to cuts in appropriations by raising tuitions and sometimes by cutting back on aid at just the wrong time in terms of families’ ability to pay.
- Some states (North Carolina & Virginia for example) have developed simpler aid programs for low-income students.
  - These programs help address the need for clear, understandable programs and assistance.
  - They may also be quite vulnerable to economic downturns that threaten their funding.
  - A key condition for being able to offer such a promise is having high enough admission standards that relatively few low-income students enroll.
- Money matters: low- and moderate-income students who reside in a state where the flagship university is more expensive are less likely to graduate than are comparable students from states where they face a lower net price.
- **Financial aid policy must be a consideration in any concerted effort to raise graduation rates.**
- Lower net prices matter much more to students from low- and moderate-income backgrounds.
- Many of the universities in the study provide substantial amounts of grant aid to students whose family incomes place them in the top half of the income distribution.
- There is no evidence in the data here that grants to more affluent students actually influence the likelihood that these students will graduate—nor is it easy to find such evidence in other studies.
- Universities award students for merit, to attract high-quality students to their campus. While this no doubt adds to a university’s prestige and reputation, and may improve the quality of the education of students in general by raising expectations, investing in a merit-aid strategy leaves fewer dollars available for the alternative strategy of providing better grant support to lower-income students for whom the graduation improvement is clear.
- There is good reason to think that providing key actors in a university with a meaningful amount of discretionary fund can make a real difference to the effectiveness of aid.
Institutional Effects Among Public Universities

- There is a high correlation between level of selectivity and graduation rates: the higher the selectivity of an institution, the higher the graduation rates
- After adjusting for ACT/SAT scores and high school GPA, correlation becomes flatter, but is still positive; test scores and grades have some kind of relationship with graduation rates
- There are other factors that lead to high levels of graduation rates; test scores and GPA do not ultimately decide who will graduate; factors could also be peer effects and the role of norms and expectations at a university

The “Dipping-Too-Low” Hypothesis

- The idea that graduation rates will go up if a university simply becomes more selective and rejects applicants who do not live up to standards
- Writers took students in study who did not have a high school GPA of 3.0 and above and cut them out of the sample; when running graduation rates and controlling for GPA, it was found to have small effects, if any, on graduation rates; gains were only made in those schools that are less selective and need students in order to stay open
- Students from all levels of academic success are prone to dropping out, which means there are other factors effecting graduation rates

The “Overmatch” Hypothesis and Other Factors to Consider

- “Overmatch” Hypothesis: students who are weak academically will find highly selective institutions to be too demanding; therefore, these students drop out; used by opponents of affirmative action practices
  - Research has found that “attending a more selective institution increases students’ graduation probabilities regardless of the high school GPA group to which they belong” (p. 198); students with lower GPAs may actually benefit more from attending a more selective institution than students with higher GPAs
- Researchers also found that “campus-like” institutions are more successful at graduating their students” (p. 199); this means that either living on campus or attending an institution where a majority of students live on campus has a positive effect on graduation rates
  - Students who do not live on campus are more likely to have off-campus jobs, which could lower their rates of graduating
- Tough to examine institutional resources as a whole, because they are different and measured differently at each institution
- Speculation: institutions that are not as selective may have lower graduation rates in part because they cannot attract faculty and graduate students who are talented in research
Public-Private Comparisons

- When comparing graduation rates of public and private universities, 6-year graduation rates are extremely close, whereas private universities have much higher 4-year graduation rates, even when controlling for variables such as SAT/ACT scores, race/ethnicity, and gender
- Possible reasons why:
  - Higher tuition at private institutions is a strong incentive to finish more quickly; supported by authors’ research
  - More financial aid for low-income students at private institutions
  - Psychological: students have a graduating class and want to finish with their peers
  - “smaller, more intimate learning environment” (p. 204); when looking at honors colleges within public institutions, the graduation rate was consistently higher than students who were not in an honors college; private institutions run with an almost automatic honors college due to class and institution size
  - Family income does not have as large of an effect on graduation rates of private institutions when compared with students at public institutions who are not in an honors college

Historically Black Colleges and Universities

- Graduation rates of black students who begin at a predominantly white institution are higher, but barely higher than students who begin at a historically black institution

Chap. 11: Target Populations (by Laura Welch)

Two connected themes:

- “need to reduce the gross disparities in graduation rates that exist today among groups classified by race and socioeconomic status (SES)” (p. 207)
- “need to improve the overall level of educational attainment in the United States” (p. 207)
  - Turn the focus to target populations of students that have trouble achieving high graduation rates

Black Men

- Black men (25-29) who have earned bachelor’s degrees: 15%
- Graduated from flagship universities within 6 years: 59%; within 4 years: 26%; a similar pattern was found at the least selective universities as well
- Reasons why:
  - Black men are weaker academically when they enter college
  - Family backgrounds may have below-average graduation rates
  - Controlling for academics and family backgrounds, black men still have lower graduation rates than white men in similar situations
- “family structure and neighborhood and high school effects are widely agreed to be very important, though there is little agreement by scholars as to precisely how the various factors interact to affect the educational outcomes of black men” (p. 208)

Mismatches (“Overmatches”) or Undermatches?
“Overmatch” Hypothesis: students who are weak academically will find highly selective institutions to be too demanding; therefore, these students drop out; used by opponents of affirmative action practices

Authors found that black males who went to more selective schools were more likely to succeed, regardless of GPA; “Moreover, contrary to what the overmatch or mismatch hypothesis would lead us to expect, the relative graduation rate advantage associated with going to a more selective university was even more pronounced for black men at the lower end of the high school grade distribution than it was for students with better high school records.” (p. 209)

“students in general, including black students, are generally well advised to enroll at the most challenging university that will accept them” (p. 210)

This evidence means that many black male students may be “undermatched” and attending institutions that do not challenge them enough academically; black men need to be encouraged to “aim high” in order to raise their graduation rates

Interventions

Association of American Colleges and Universities (AAC&U) has found different “high impact” practices that can have a positive effect on graduation rates: “learning communities”, “writing intensive courses”, “undergraduate research programs”, and “capstone courses and projects” (p. 211)

- Students from historically underserved groups are less likely to participate in high impact practices, especially if they are first generation and African American; however, if African American students become more engaged on campus, they are more likely to persist at an institution in higher rates when compared to white students

Meyerhoff Scholars Program by Freeman Hrabowski: University of Maryland-Baltimore County
- Encourages black men to get degrees in science and engineering
- “highly competitive application process with rigorous standards, provides generous financial support, and utilizes a variety of pedagogical techniques to encourage students to work collaboratively, to stay engaged with their work, and to have high expectations” (p. 212)
- May 2008: 87% of participating students graduated with a bachelor's degree, 91% went on to graduate and professional programs
- Program could be replicated elsewhere, but is extremely expensive and time-consuming; needs strong leadership

Countering “stereotype vulnerability” in black males: “being at risk of confirming, as self-characteristic, a negative stereotype about one’s group” (p. 213)

- When race is emphasized, minority students do not perform as well
- Exercises in “ability reframing”, “self-affirmation”, an “forewarning” can have positive effects on black students (p. 213)
- More affordable

Hispanic Students

- Lower percentage of degree attainment than African Americans and whites: 10.8% in 2006
- Reasons why:
  - Similar as other groups
Hispanic students enroll in higher numbers at 2-year institutions; may be due to low family degree attainment.

Hispanic students in study who enrolled in 4-year public school graduated at slightly higher rate than blacks; issues with Hispanic student enrollment rates, not necessarily graduation rates.

Again, no “overmatch”: Hispanic students graduated at higher rates from more selective institutions; “the positive ‘other-things-equal’ association between graduation rates and institutional selectivity is even stronger for Hispanics than it is for blacks” (p. 214).

“Undermatch” problem: Hispanics are attending 2-year institutions at higher rates and dropping out when they could be attending more challenging 4-year institutions.

Reasons why: financial concerns and difficulty of filling out FAFSA forms, problems with application process – “lack of information and proper guidance, failure to understand the importance of applying to more than one ‘match’ school, and lack of a ‘college-going culture’ at the student’s high school” (p. 216).

Posse Foundation program: Deborah Bial.

Works to raise graduation rates of minority students.

85-95% 6-year graduation rates of students in the program.

“many of these students are attending selective private colleges with very high graduation rates for all students and graduation rates for underrepresented minorities that are distinctly above average” (p. 216).

Program features:

- Rigorous selection process: looks at academics and personality characteristics (leadership and ambition).
- Given full-tuition by partner colleges.
- Emphasis on “posse” mindset; students attend the institution as a group and are expected to help each other succeed.

Expensive and may need more resources than institutions can give.

Low-SES Student Who Are Not Underrepresented Minorities

Includes 12% of students in study.

Low-SES students perform better at highly selective private institutions.

Different graduation rate at public institutions: may be better financial aid packages at private institutions.

Most effective solution: give more money to those who need it….but may not be doable.

“family income bears very little relationship to graduation rates among students at public universities who were enrolled from the start in an honors college” (p. 219); intimate settings may matter more than SES.

Non-Minority Students From Middle- to High-SES Backgrounds

“just over two-thirds of students from the highest SES category earn bachelor’s degrees” (p. 219).

Higher graduation rates than other groups, but still low enough to be a concern.

Reasons why:

- Students may have parents who earn a lot of money, but that doesn’t mean parents will pay for students’ college; this could leave the student with small amounts of financial aid.
and the bulk of their college bill; students in this area need to get off-campus jobs to support themselves and fail to do so, causing higher rates of dropouts
  o May also have a lack of motivation or interest; institutions need to be committed to helping spark students’ interests

- Tinto: students leave for the following reasons
  o “intention, commitment, adjustment, difficulty, congruence, isolation, obligations, and finances” (p. 221)
  o Key “implementation principle”: “Institutions should place ownership for institutional change in the hands of those across the campus who have to implement the change” (p. 221)

Chap. 12: Looking Ahead (by Laura Welch)

- This chapter pulls together the threads of this analysis.
- Suggests challenges to be recognized
- Presents promising approaches to doing better
- Heightened awareness of the seriousness of the issues presented in this study could itself make a considerable difference in addressing the issues.

Challenges to Overcome (p. 223-224)

- “The overall level of educational attainment in the United States today is both too low and stagnant.”
- “The U.S. education system harbors huge disparities in outcomes – especially as measured by graduation rates – that are systematically related to race/ethnicity and gender, as well as to socioeconomic status (SES).”
- “These two problems are linked: the only way to substantially improve overall levels of educational attainment is by improving graduation rates for the rapidly growing Hispanic population, for underrepresented minority students in general (with black men requiring special attention), and for students from low-SES backgrounds.”
- “Time-to-degree matter as well as ultimate graduation rates.”
- “It is essential that public universities have to be the principal engines of progress in addressing these challenges.”

Sorting of Students I: Test Scores and High School Grades (p. 226-227)

- “High school grades are a far better incremental predictor of graduation rates than are standard SAT/ACT test scores…”
- “Overly heavy reliance on SAT/ACT scores in admitting students can have adverse effects on the diversity of the student bodies enrolled by universities.”
- “The strong predictive power of high school GPA holds even when we know little or nothing about the quality of the high school attended.”
- “Scores on achievement tests, especially Advanced Placement tests, are better predictors of graduation rates than are scores on the standard SAT/ACT tests…” Institutions should combine SAT/ACT scores, high school GPA, high school quality, and placement test scores together when making enrollment decisions.”
• “Putting more emphasis on content-based achievement tests has the further advantage of sending clear signals to high schools that they should concentrate on teaching content, including basic skills such as writing and the ability to use mathematics.”

Sorting of Students II: “Overmatching” and “Undermatching”
• Graduation rates suffer when students are at schools that challenge them too much or do not challenge them enough
• The Overmatch Hypothesis: No proof of it has been found by the authors
• “Students from all backgrounds, including black students, are generally well advised to enroll at one of the most challenging universities that will accept them.” (p. 228)
• Undermatching: Many students in the study from low-SES and minority groups enrolled in institutions that were not challenging enough or did not enroll in an institution at all
• “The scale of the undermatch phenomenon among students from modest backgrounds suggests that addressing this problem offers a real opportunity to increase social mobility and simultaneously to increase overall levels of educational attainment.” (p. 228)
• Occurs mostly at the application stage, not while students are in the process of obtaining a degree

Transfer Patterns
• Students who attend a 2-year institution straight out of high school are less likely to earn a bachelor’s degree than students who attend a 4-year institution directly from high school.
• Transfers attending more selective institutions had similar graduation rates to first-time freshmen, even though their pre-college credentials were weaker; transfer students at less selective institutions graduated at higher rates than first-time freshmen, even with weaker pre-college credentials
• Transfers from 2-year colleges were more likely to be from low-income families than first-time freshmen
• Accepting more transfer students may lead to higher graduation rates, as they have motivation and accomplishment by continuing to a four-year degree after completing an associate’s

Money Matters
• Students from high-income families are more likely to graduate from college and “on time”, than students from lower incomes
• Need-based aid was used at all public universities in the study, and it boosted graduation rates; however, the graduation rate for low-SES students was lower than students from other economic groups at public institutions; graduation rates were pretty much the same at private institutions
• “Low- and moderate-income students who reside in states where attendance at the flagship university involves a higher net price are less likely to graduate than are comparable students from states where they face a lower net price – and they are considerably less likely to graduate in four years.” (p. 231)
• “no such relationship between net price and graduation rates among student from families in the top half of the income distribution” (p. 231)
• “Finding more resources for need-based student aid…is demonstrably less expensive than keeping the net price low by reducing tuition across the board…” (p. 231)
• Merit aid: only 44% of it went to students who had financial need, 40% to non-need students, 18% to athletes
  o Some of this money could be used to help students who actually need it
• “Reliable, simple, and predictable provision of financial aid is important not just to initial access to college but to success in graduating.” (p. 232)
• There is a belief that giving “key campus actors” a large amount of discretionary money can help end financial woes and help with completion rates and time-to-degree.
• Funding is not coming as much as it used to…enrollments have been capped or cut at some institutions, courses could be closed due to lack of faculty, etc.

Institutional Selectivity and Graduation Rates
• Consistent finding: “powerful association between graduation rates and institutional selectivity as measured by a combination of the test scores and high school grades of entering undergraduates” (p. 233)
  o Controlling for high school GPA, test scores, and demographics still does not drastically change graduation rates related to institutional selectivity
• These differences are driven by five sets of factors:
  o Peer effects
  o Expectations
  o Access to excellent educational resources
  o Financial aid and student work opportunities
  o Unobservable selection efforts
• Larger institutions can create smaller communities to help create peer effects to reinforce high expectations
• “it is possible that the strong positive association between institutional selectivity and graduation rates reflects to some degree the impact of stimulating research environments at truly excellent universities” (p. 234)
• Some institutions have become more selective throughout the years, but it is also important to find a good balance

Promoting Persistence in Individual Institutions
• Students withdraw throughout the course of their careers; withdrawals go up after the second and fourth semesters, but “nearly half of all withdrawals occur after the second year” (p. 236)
• “Students who lived in a university residence hall during their first semester were more likely to graduate than were off-campus students after controlling for differences in entering credentials and background characteristics, including family income. There is also evidence of institution-wide effects. All students appear to benefit from attending an institution where more students live on campus.” (p. 236)
• Other interventions/thoughts
  o Students may not persist, because there are not other students “like them”; minority students; programs like the “Posse” program can help
  o “just paying attention” could make a difference (p. 237)
  o Focus more on creating programs that make it difficult for students to stay for more than 4 years; be more intentional with time-to-degree efforts
  o Be more accountable
Reference