

# CEOs for Cities: Strategy Guide

## College Retention and Completion

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With President Obama focusing a great deal of attention on increasing the number of college graduates, and research from the Talent Dividend and other sources demonstrating the significant benefits that result for both individuals and cities from an increase in college attainment, the time is ripe to begin a push for increasing completion of postsecondary education.

While enrollment in degree-granting institutions increased at a rate of 26 percent from 14.5 million in 1997 to 18.2 million in 2007<sup>1</sup>, degree completion rates haven't been quite as positive. Of students who enrolled in a 4-year institution in 1995, only 58 percent received their bachelor's degree by the year 2001, and only 38 percent of students who enrolled in a 2-year institution received any type of degree by 2001. One pathway to reaching the Talent Dividend is through taking steps to ensure that once students are enrolled in college—they stay there and earn their diploma or certificate.

Retaining students to completion in postsecondary institutions has proven benefits for individuals, institutions themselves and society in general. Research has shown that people with college degrees not only earn more money during their lifetime than their non-degree holding counterparts; they also have more access to employer-based pension plans and health benefits. Institutions benefit from retention practices as well—as it has been estimated that recruiting new students costs three to five times more than retaining an already enrolled student.<sup>2</sup> Finally, a larger college-educated population contributes to lower rates of unemployment, poverty and participation in public assistance programs, better health and increased participation in civic and charitable activities (higher voting rates, volunteerism and donating blood).<sup>3</sup>

There are many different reasons why students do not complete their degrees or persist long enough to earn a certificate, and an equal number of approaches to remedy the problem. This guide to college retention and completion reviews research and best practices that can help you think through how to make progress on this important potential Talent Dividend strategy.

## Each city and institution is unique and is advised to complete its own analysis

It is worth emphasizing here that when looking at specific barriers to completion, a very complex and dynamic interplay between student and institutional variables occurs *within each postsecondary institution*. Just as one city is distinct from another, student populations and institutional frameworks are likewise deserving of unique diagnoses and strategies. Therefore, the barriers and remedies discussed in the next few sections should be used as stepping-stones and guidelines for how each unique institution ought to

handle their own set of problems – and cannot alone determine specific causes for student departure nor the most appropriate intervention.

Furthermore, research indicates that it is frequently the interplay of academic and non academic factors that determine whether or not students persist in college and attain a certificate or degree. In the report, [\*The Role of Academic and Non-Academic Factors in Improving College Retention\*](#), from ACT Inc., those factors are outlined as follows:

## Non-Academic and Academic Factors

### Non-Academic Factors

Academic goals  
Achievement motivation  
Academic self-confidence

Academic-related skills

Contextual influences

General self-concept  
Institutional commitment  
Social support  
Social involvement

### Description

Level of commitment to obtain a college degree.  
Level of motivation to achieve success.  
Level of academic self-confidence (of being successful in the academic environment).  
Time management skills, study skills, and study habits (taking notes, meeting deadlines, using information resources).  
The extent to which students receive financial aid, institution size and selectivity.  
Level of self-confidence and self-esteem.  
Level of confidence in and satisfaction with institutional choice.  
Level of social support a student feels that the institution provides.  
Extent to which a student feels connected to the college environment, peers, faculty, and others in college, and is involved in campus activities.

### Academic Factors

ACT Assessment score

High school grade point average (HSGPA)

College preparedness measure in English, mathematics, reading, and science.  
Cumulative grade point average student average earned from all high school courses.

### Other Factor

Socioeconomic status (SES)

Parents' educational attainment and family income.

Many of these factors will be discussed on more detail in this guide, along with links to research and best practices. For general trends on completion rates see the appendix at the end of this guide.

## Barriers to Completion and Possible Remedies

### Academic barriers

#### *Academic preparation*

A significant number of students are entering college lacking adequate preparation and the skills necessary to successfully engage with college-level coursework and expectations. Nationally, many of these students tend to be minority and/or come from low-income households and attended urban schools. Adult students who have been out of the educational system for many years are also likely to find themselves unprepared for college courses when they matriculate.

Vincent Tinto at Syracuse University notes that academic dismissal accounts for about 20 to 30 percent of student dropouts, and that these figures are on the rise.<sup>4</sup> It is also commonly known that poor academic performance can have significant implications for overall academic motivation and commitment, which in turn translates to non-completion.<sup>5</sup> Thus, the need to intervene when students are struggling academically is especially salient for reducing overall attrition.

Certainly academic unpreparedness has its roots for many students in their pre-college years, and our College Readiness guide discusses traditional and alternative benchmarks for assessing high school students' readiness for college courses. But the first year of college is generally regarded as the most critical period for intervention (since dropout rates are highest after the first year), so tracking performance early is critical. The first step in any intervention for academically unprepared students is to develop an early warning system, based on high school GPA, ACT assessment scores, course placement tests, first semester college GPA and socioeconomic status, to identify at-risk students.<sup>6</sup>

### Possible Remedies and Interventions

#### *Developmental / remedial education*

Many colleges, especially two year colleges, seek to address the problem of academic unpreparedness by offering an array of developmental courses intended to help students improve their skills enough to succeed in college level coursework. However, researchers differ widely in their findings on how to carry out developmental programs effectively, and the evidence is either conflicting or inconclusive as to whether

or not students who participate in developmental education actually have higher rates of completion. For example, a longitudinal study by the Department of Education shows that only 30 percent of 12th graders taking remedial reading education in 1992 completed a degree by the year 2000, compared with 69 percent of students who did not take any remedial courses.<sup>7</sup>

Still, as Tomas Bailey of the Community College Research Center points out, "Even though developmental education students are less likely than non developmental students to complete degrees, it is not necessarily true that developmental education itself contributes to worse outcomes...it is possible that developmental students... would have even poorer outcomes if they did not avail themselves of remedial services."<sup>8</sup>

Research on the effectiveness of developmental education does not compare the gains of academically unprepared students who enroll in or complete developmental education versus those who do not. However, one study on Ohio college students concluded "students in remediation are more likely to persist in college in comparison to students with similar test scores and backgrounds who were not required to take the courses. They are also less likely to transfer to a lower-level college and more likely to complete a bachelor's degree."<sup>9</sup>

#### *Summer bridge programs*

Summer bridge programs are offered by colleges in the summer before matriculation to enhance students' reading, writing and math skills. These programs aim to reduce the need for developmental education, and many summer bridge programs also serve as a kind of early orientation. They provide students with information on the institution's resources and support services; what to expect in college academically, financially and socially; career counseling and study skills; and giving students early connections with faculty members and other students.<sup>10</sup>

Research on the efficacy of summer bridge programs is paltry, but a forthcoming analysis of the summer bridge programs at eight Texas schools aims to help illuminate best practices. For more information, see the [Texas Developmental Summer Bridge Study](#).

### *Adult Basic Education (ABE)*

Many adults are returning to higher education to find that they are not academically prepared, having been away from the educational system for many years or never having acquired the needed skills in the first place. Retention and completion rates for adults returning to post-secondary education are indeed very low. Adult basic education programs (ABE) aim to make this transition easier for adults by providing them with reading, writing, math, language (ESL) and other skills necessary for college level work. While data shows low rates of degree completion among those adults who take adult basic education courses (a recent report, for example, showed that in Washington state, less than three percent taking ABE courses moved into credit courses and finished a community college associates degree),<sup>11</sup> ABE can be an effective strategy for retention if executed correctly.

ABE courses must have flexible scheduling to work with the many external demands adult students face; they should be part of a clear degree pathway lest adult students find them irrelevant; and if courses are provided by non-degree granting institutions, which is often the case, partnerships should be made between the ABE provider the college or university to ensure that students transition into a degree path seamlessly.<sup>12</sup> More information is available at the [New England ABE-to-College Transition Project](#).

In research published by the Center for American Progress, Brian Bosworth suggests that adult basic education should focus on a new strategy centered on the use of technology to accelerate English-language proficiency among non-English speakers, and employer-defined basic skills for low-literacy adults. He recommends the creation of “employment-focused and technology-based program that supports individual and employer investment in basic skills and English acquisition.” His report, [Lifelong Learning: New Strategies for the Education of Working Adults](#) analyzes the shortcomings of existing programs and adult education structures, makes recommendations for improvements, and with providing specific examples of successful programs and interventions.

In addition, the Lumina Foundation has released a comprehensive report called [What We Know about Access, Persistence, and Success for Adult Learners in Postsecondary Education](#) that documents current research on adult learners in higher education.

### *Tutoring programs, learning assistance, and study groups*

Two of the most commonly cited successful retention practices in survey research by ACT are tutoring programs and a comprehensive learning assistance center.<sup>13</sup> While these programs are already in practice to some degree at many institutions, ACT stresses the importance of assessing whether they optimally address identified student needs and realigning offerings accordingly.

Other research has shown that participants in study groups, also called supplemental instruction, have shown they are less likely to withdraw from, drop out of, or fail a gateway course than are non-participants.<sup>14</sup>

### *Curriculum alignment and dual enrollment with high schools*

Initiatives like the American Diploma Project aim to align the goals of high schools more closely with the expectations of postsecondary institutions, while dual enrollment programs ease the transition for students. See our guide on [College Readiness](#) for more on this topic.

## **Non-academic barriers**

### *Student Engagement and “College Knowledge”*

Students’ interaction with an institution is not limited to academics. Many of the programs that are designed for academic integration (e.g., bridge programs or learning communities) do in fact contribute to a student’s overall engagement with the institution.<sup>15</sup> However, research has shown that dropouts tend to perceive themselves as having been less engaged than those who persist. Colleges and universities should seek to implement programs and services that aim specifically to integrate students.<sup>16</sup>

Vincent Tinto notes: “the ability of an institution to retain students lies less in the formal programs they devise than in the underlying commitment toward students which direct their activities.”<sup>17</sup> While it may seem obvious that making a commitment to students and student success is essential for successful retention, many colleges and universities may miss

this point and fail to communicate this message to their students in a consistent and meaningful way. Helpful to assess the level of student engagement within a given institution, are the [National Survey of Student Engagement](#) or the two year college equivalent, the [Community College Survey of Student Engagement](#), which colleges can administer on their campuses.

Also believed to be a critical piece of retention is a student's ability to navigate the college enrollment, registration, and financial aid system. In other words, do they possess "college knowledge"; the information they need to navigate their way through the postsecondary system. See our College Readiness guide for more information on how to prepare students on developing "college knowledge," or the [Lumina Foundation for Education's KnowHow2Go](#) initiative for college-bound high school students.

## Possible Remedies and Interventions

### *Academic advising*

Some research suggests that students' commitment to educational and career goals is perhaps the strongest factor associated with degree completion.<sup>18</sup> In other words, if a student aspires to some specific level of achievement in school or in their career, they are more likely to work harder to reach that goal (see more about aspirational relevance in the College Readiness guide).

One research study cites three-quarters of students are uncertain or tentative about their career choice at college entry; just eight percent feel they know "a great deal about their intended major;" over half of all students who enter college with a declared major change their mind at least once before they graduate; and only one in three seniors will major in the same field they preferred as a freshman.<sup>19</sup> In a national survey of 944 colleges and universities, college administrators identified "inadequate academic advising" as the number one characteristic linked to student attrition on their campuses; the same administrators reported that "improvement of academic advising services" was the most common retention strategy adopted by their institutions.<sup>20</sup>

Advising is a critical element a good retention strategy and centers for academic advising can be integrated into other

interventions with selected student populations and first-year transition programs, as well as combined with centers for career and life planning. Some examples of effective advising programs are listed here: [National Academic Advising Association's Outstanding Advising Program Award Recipients](#).

### *Freshman seminars / student success courses*

Freshman year seminars, or student success courses as they are also called, are intended to help first-year students transition to college through the development of study skills, time management, academic plans and career goals. These programs are often linked to advising, other classes and study groups, and so far have a proven track record in the form of higher GPAs and completion rates. Freshman Year Experience programs, which began at the [University of South Carolina's National Resource Center for the First-Year Experience and Students in Transition](#), typically range from one semester to the entire first year.<sup>21</sup>

Student success courses may be even more popular at Community Colleges, where higher numbers of students enter college underprepared and may be the first in their family to go to college. While research on the effectiveness of such programs is still rather slim, some positive preliminary data do exist. "A research team headed by Dr. Patricia Windham at the Florida Department of Education compared the outcomes of students who completed a student success course with those of students who did not take or complete such a course (Florida Department of Education, 2006). They found that student success course completers were more likely than non-completers to achieve one of the following three indicators of success: earning a community college credential, transferring to the state university system, or remaining enrolled in college after five years."<sup>22</sup>

Cuyahoga Community College in Ohio surveyed 239 institutions participating in the Freshman Year experience program and found the following five key elements for a successful program: a recognized need for such programs; a designated, staffed office; a mandatory first-year seminar involving former participants; ongoing intervention; and combining the Freshman Year Experience efforts with a marketing or enrollment plan.<sup>23</sup>

### *Learning communities*

One experimental approach to better student engagement involves voluntary participation in learning communities, where groups of students in a community college take multiple classes together throughout their academic career. [MDRC's Opening Doors](#) project uses a random selection process to test the effectiveness of learning communities. One of these experiments began in 2003 at Kingsborough Community College in Brooklyn, New York, placing 750 students randomly in groups of 25. So far, their research has shown positive effects on student performance but not necessarily on retention and completion—though conclusive assessments are as yet forthcoming.<sup>24</sup> More information on learning communities is available here: [National Learning Communities Directory](#).

### *Information networks*

Recent research showed students' integration into an institution is often mediated by so-called "information networks." Through relationships with peers, faculty and staff, students hear about campus resources and services and utilize them at higher rates than they would through traditional forms of communications. These information networks make it easier for students to navigate their way through the institution and feel more connected.<sup>25</sup> Researchers noted that community college students, who spend less time on campus and are therefore at greater risk of being disconnected from the community, can especially benefit from information networks.

Information networks within community colleges often originate in "University 101" and success courses that students take in their first year, as well as student-centered pedagogies, such as discussion classes. Having less of an impact were clubs and social organizations, which suggests that developing social relationships within the classroom may be the most useful rule of thumb for social integration in community colleges.

### *Special factors affecting first-generation, low-income and minority students*

The Institute for Higher Education Policy found in case studies that some students from low- to modest-income households described "feeling culturally and financially

distinct from their peers."<sup>26</sup> Furthermore, many first generation college students and minorities often come to colleges without an understanding of how to adapt to college culture and may feel further isolated from their peers – which can have significant implications for academic performance and attrition.

Research has shown that minorities in predominantly white institutions have especially high attrition rates. Some of the issues these students have identified are: "not enough professors of my race," "few students of my race," "racist institutional policies and practices," difficulty having friendships with non-minorities," "rude and unfair treatment because of race," "discrimination," "people close to me thinking I'm acting 'white,'" "doubts about my ability to succeed in college."

As previously discussed, integrative practices like summer bridge programs and learning communities can engage students on a deeper level both academically and socially and are good strategies for integrating minority students into campus life, especially when they are comprised of students with similar backgrounds.

But the importance of mentors and minority representation in faculty and staff cannot be overstated. Since the risk of minority students leaving school is much higher, informal contact between faculty and students is more critical than ever and institutions must work diligently to provide positive faculty role models for their students. One study of a mentoring program at Ohio University in Athens, Ohio, found that 91 percent of black students felt more confident as a result of having a mentor.<sup>27</sup>

For more information on best practices related to this topic, visit <http://www.studentaffairs.mnscu.edu/BestPractices.pdf>

### **Barriers involving time and financial constraints**

Students from low-income families and adults students are particularly susceptible to a host of external commitments and constraints that are common barriers to completing college. Work and familial obligations and financial limitations present more significant opportunity costs for these students, which can often result in diminished participation in their academics. This, in turn, puts them at greater risk.

A research study from the Institute for Higher Education Policy notes that low-income students who work are particu-

larly susceptible to delayed enrollment after high school, part-time attendance and periods of non-enrollment. As a result, many of these students do not complete a degree within six years of enrollment.<sup>28</sup>

The federal government identifies high attrition rates among disadvantaged students as an area of concern. As such, [TRIO](#) is a group of six outreach and support programs designed to support and track the progress of those who are low-income, first-generation college students and students with disabilities through the academic pipeline from middle school to postbaccalaureate programs. The outreach comes in the form of: counseling and information on the admissions and financial aid process, academic advice including tutoring and mentoring, career workshops and Student Support Services (SSS) geared specifically toward motivating students toward the successful completion of their postsecondary education – sometimes in the form of grant aid.

## Possible Remedies and Interventions

### *Financial aid*

One of the most commonly named characteristics contributing to attrition is the amount of student financial aid available from an institution. According to the National Center for Postsecondary Research, need-based aid is more effective in increasing access for low-income students than other forms of aid, though policies in the past two decades have moved more toward merit-based aid.<sup>29</sup>

The author notes as well that simplifying the financial aid system and making information more accessible for students in need is perhaps the easiest action institutions can take. “While there are strong arguments to improve the targeting of aid and ration limited resources by using means-tested aid eligibility criteria, making such application systems too complicated is likely to be detrimental for the students who are most in need of financial aid.”<sup>30</sup> Institutions must be proactive in advising families of the price of college, selection criteria and availability of financial aid opportunities as well as grants, loans and scholarship opportunities. The application process must also be designed in such a way that it does not deter families from applying for financial aid.

Other practices institutions can implement to improve their retention rates include: flexible cut-off dates for financial aid, earmarking a portion of tuition increases for low-income

students, using aid to promote transfer agreements and targeting specific aid (grants instead of loans) to low-income students, assuring lowest possible levels of unmet need and making an effort to reduce credit card and other high interest borrowing.<sup>31</sup> Some institutions train their staff to conduct financial aid workshops and seminars covering financial aid concepts and terms, navigating the FAFSA website, budgeting, renewing aid and credit management. For more information on how to conduct a seminar, visit the [ECMC Foundation’s PERSIST guide](#).

### *Jobs*

One key financial aid term is “cost of attendance,” or COA. Depending on whether a student is full- or part-time, certain COA expenses are covered by law, including housing and dependent care. Since students with full-time jobs are among the most at-risk for non-completion, institutions should make it more convenient for working students to take the courses they need or want by increasing evening and weekend offerings as well as online courses. For their part, employers can also help make college attendance easier for working adults by offering flexible scheduling, offering courses at the workplace, and providing tuition reimbursement.

The federal work-study program, which provides part-time jobs to financially needy postsecondary education students, has been found to increase student persistence and completion, while external employment (non-work-study) through full-time and off-campus employment tends to decrease students’ persistence, unless related to area of study.<sup>32</sup>

## Additional resources

### [The Achieving the Dream Initiative](#)

Achieving the Dream: Community Colleges Count is a multiyear national initiative to help more community college students succeed. The initiative is particularly concerned about student groups that traditionally have faced significant barriers to success, including students of color and low-income students. Achieving the Dream works on multiple fronts, including efforts at community colleges and in research, public engagement and public policy. It emphasizes the use of data to drive change.

Among the strategies being pursued by Achieving the Dream colleges to improve student success rates are the following:

- Improving gatekeeper courses
- Improving students' first-year experience through closer advising, learning communities, orientation programs, student success courses, and other approaches
- Piloting or expansion of learning communities
- Providing better academic and personal advising for at-risk students
- Improving or enhancing student support services
- Tutoring and supplemental instruction
- Strengthening K-14 links to improve high school students' preparation for college and improve community college students' successful transfer to four-year institutions
- Engaging the community in developing strategies and providing support for student success
- Using data more effectively to monitor student outcomes and improve college practices.

#### [PERSIST: A Comprehensive Guide for Student Success in Higher Education](#)

“PERSIST” is a practical resource guide for higher education professionals, to increase the persistence rates of low-income, first-generation college-going students. PERSIST encourages community colleges and four-year universities alike to assess their retention rates, set new targets, and plan retention-focused programs. In addition, the guide provides materials to help students adjust to college life, focus on their goals, overcome financial barriers, and succeed in higher education and in life.

## Where Do We Go From Here?

To help you think about using the information in this guide to inform your approaches to making progress on the Talent Dividend question, here are some questions to consider. You may not be able to fully answer these questions depending on what kind of data exists in your city, but they can be a useful place to start:

- Which students in your city are struggling with postsecondary education and most at risk of dropping out? Of course, there are myriad reasons why colleges can have trouble retaining students, but what do you know about your local institutions and student populations?
- What is already being done locally to address the issue at local institutions and among businesses—and what seems to be working or not working? How do these efforts compare to those highlighted as potentially promising solutions in this research brief?
- What are major employers in your city doing to help adults who want to return to college and/or take classes towards completing a degree they may have already started? Do their policies align with the suggestions put forth in this guide such as allowing flex time and providing tuition reimbursement?
- Based on your answers to questions 1, 2, and 3 what course of action would make sense for your city? ●

- <sup>1</sup> “Digest of Education Statistics,” U.S. Department of Education National Center for Education Statistics, 2008.
- <sup>2</sup> Cuseo, Joe. “Fiscal Benefits of Student Retention and First-Year Retention Initiatives.” Retrieved from: <http://www.bioscience.heacademy.ac.uk/ftp/transition/retention%20fiscal%20benefits.pdf>
- <sup>3</sup> Baum, Sandy, and Jennifer Ma. “Education Pays: The Benefits of Higher Education for Individuals and Society,” The College Board, 2007.
- <sup>4</sup> Tinto, Vincent. “Student Success and the Building of Involving Educational Communities,” Syracuse University, 2005.
- <sup>5</sup> Lotkowski, Veronica A., Steven B. Robbins, and Richard J. Noeth. “The Role of Academic and Non-Academic Factors in Improving College Retention,” ACT, 2004.
- <sup>6</sup> Habley, Wesley R., and Randy McClanahan. “What Works in Student Retention,” ACT, 2004.
- <sup>7</sup> “The Condition of Education,” U.S. Department of Education National Center for Education Statistics, 2004.
- <sup>8</sup> Bailey, Thomas. “Rethinking Developmental Education in Community College,” CCRC Research Brief, No 40, Feb. 2009.
- <sup>9</sup> Russell, Alene. “Enhancing College Student Success Through Developmental Education,” American Association of State Colleges and Universities 2008.
- <sup>10</sup> Kezar, Adrianna. “Summer Bridge Programs: Supporting All Students. ERIC Digest.” Retrieved from <http://www.ericdigests.org/2001-1/summer.html>.
- <sup>11</sup> Jacobs, James, and Pamela Tolbert-Bynum. “Shifting Gears: Community Colleges and Adult Basic Education,” Community College Research Center, 2008.
- <sup>12</sup> Ibid.
- <sup>13</sup> Habley, Wesley R., and Randy McClanahan. “What Works in Student Retention,” ACT, 2004.
- <sup>14</sup> Goldrick-Rab, Sara. “Promoting Academic Momentum at Community Colleges: Challenges and Opportunities,” Community College Research Center, 2007.
- <sup>15</sup> Karp, Melinda Mechur, Katherine L. Hughes, and Lauren O’Gara. “An Explanation of Tinto’s Integration Framework for Community College Students,” Community College Research Center, 2008. Tinto points out that student integration into an institution can occur along two dimensions, the academic and the social. Academic integration occurs when students become attached to the intellectual life of the college, while social integration occurs when students create relationships outside of the classroom. These two concepts, though analytically distinct, interact with and enhance one another. And, though students must be integrated into the institution along both dimensions to increase their likelihood of persistence, they need not be equally integrated along the two. Likewise, Tinto notes that both formal and informal systems within institutions can encourage integration and persistence.
- <sup>16</sup> Swail, Watson Scott, Kenneth E. Redd, and Laura W. Perna. “Retaining Minority Students in Higher Education: A Framework for Success.” ASHE-ERIC Higher Education Report, 2003. Several studies, including those conducted by Tinto (1975), Pantages and Creedon (1978), and Astin (1977), have found that friendship support is directly related to persistence in college and that college dropouts perceive themselves as having less social interaction than those students who persist in college.
- <sup>17</sup> Tinto, Vincent. “Student Success and the Building of Involving Educational Communities,” Syracuse University, 2005.
- <sup>18</sup> Cuseo, Joe. “Academic Advisement and Student Retention: Empirical Connections & Systemic Interventions,” 2003.
- <sup>19</sup> Ibid.
- <sup>20</sup> Ibid.
- <sup>21</sup> “PERSIST: A Comprehensive Guide for Student Success in Higher Education,” ECMC Foundation, 2006.
- <sup>22</sup> Matthew Zeidenberg, Davis Jenkins, and Juan Carlos Calcagno. “Do Student Success Courses Actually Help Community College Students Succeed?” CCRC Research Brief No 36, June 2007

- <sup>23</sup> Johnson, Alex B., and Gloria McFadden. “The Value of Multi-Dimensional Retention Programs for First-Time Students at Community Colleges,” Cuyahoga Community College, 2000.
- <sup>24</sup> Goldrick-Rab, Sara. “Promoting Academic Momentum at Community Colleges: Challenges and Opportunities,” Community College Research Center, 2007.
- <sup>25</sup> Karp, Melinda Mechur, Katherine L. Hughes, and Lauren O’Gara. “An Explanation of Tinto’s Integration Framework for Community College Students,” Community College Research Center, 2008. Students who were part of information networks, in contrast, found that they could navigate the college and felt that they could find ways to overcome challenges. They trusted the information they received from the institution and generally believed that their interests were being supported by the college. As a result, they expressed comfort and a sense of belonging on campus, and thus were more willing to continue with their education, even as some of them faced significant academic difficulty.
- <sup>26</sup> McSwain, Courtney, and Ryan Davis. “College Access for the Working Poor: Overcoming Burdens to Succeed in Higher Education,” Institute for Higher Education Policy, 2007.
- <sup>27</sup> Swail, Watson Scott, Kenneth E. Redd, and Laura W. Perna. “Retaining Minority Students in Higher Education: A Framework for Success,” ASHE-ERIC Higher Education Report, 2003.
- <sup>28</sup> McSwain, Courtney, and Ryan Davis. “College Access for the Working Poor: Overcoming Burdens to Succeed in Higher Education,” Institute for Higher Education Policy, 2007.
- <sup>29</sup> Long, Bridget Terry. “What Is Known About the Impact of Financial Aid? Implications for Policy,” National Center for Postsecondary Research, 2008.
- <sup>30</sup> Ibid.
- <sup>31</sup> “PERSIST: A Comprehensive Guide for Student Success in Higher Education,” ECMC Foundation, 2006.
- <sup>31</sup> Swail, Watson Scott, Kenneth E. Redd, and Laura W. Perna. “Retaining Minority Students in Higher Education: A Framework for Success,” ASHE-ERIC Higher Education Report, 2003.

## Appendix

### Completion rates and who is at risk

The two variables traditionally examined by researchers to identify differences in completion rates and reasons for attrition are *student variables* and *institutional variables*. Race, age and socioeconomic background are major student variables; institutional variables may include institution size (number of students matriculated), selectivity and the amount of financial aid given to students. Below are some recent data on completion rates in relation to both student and institutional variables generally (across many institutions).<sup>33</sup>

#### Student Characteristics

Students characteristics	Students starting in 2-year institutions			Students starting in 4-year institutions		
	Total, any degree	No degree, still enrolled	No degree, not enrolled	Total, any degree	No degree, still enrolled	No degree, not enrolled
<b>Total</b>	38.4	16.4	45.2	65.1	14.4	20.5
<b>Sex</b>						
Male	39.2	18	42.8	60.6	16.2	23.2
Female	37.7	14.9	47.4	68.7	12.9	18.4
<b>Age when first enrolled</b>						
18 years or younger	43.8	17.8	38.4	70	13.4	16.6
19 years	38.2	20.9	40.9	57.1	16.4	26.6
20 to 23 years	29.9	20.1	50	37.7	20.9	41.4
24 to 29 years	36.5	11	52.6	34.4	22.7	42.9
30 years or over	30.6	8.7	60.7	26.1	17	56.9
<b>Race/ethnicity</b>						
White	40.5	16.5	43	68.1	12.5	19.4
Black	28.4	13.3	58.3	51.3	20.6	28.2
Hispanic	34.3	18.1	47.6	53.9	20.4	25.7
Asian/Pacific Islander	41.9	21.2	36.9	71.3	13.9	14.8
American Indian/Alaska Native				55.4	26.1	18.5
<b>Highest education level of parents</b>						
High school diploma or less	36.5	12.4	51.1	52	16.5	31.5
Some postsecondary	32.8	19	48.2	59.5	16.4	24.2
Bachelor's degree	47.7	18.8	33.5	72.1	13.4	14.5
Advanced degree	45.4	25.2	29.4	76.5	11.7	11.8
<b>Timing of postsecondary enrollment</b>						
Did not delay	43.9	18.4	37.7	69.2	13.7	17.1
Delayed entry	32.8	14.9	52.3	45	18	37
<b>Attendance status when first enrolled</b>						
Full-time	47.3	15.9	36.8	69.3	12.7	18
Part-time	29.5	15.6	54.9	33.4	27.3	39.3
<b>Intensity of enrollment through 2001</b>						
Always part-time	13.2	13.3	73.4	10.3	12.9	76.8
Mixed	42.3	21.7	36	51.7	26.6	21.7
Always full-time	49.5	9.1	41.4	74.2	8.1	17.8
<b>Worked while enrolled 1995–96</b>						
Did not work	43	10.4	46.6	71.1	11.9	17
Worked part time	44.7	18.4	36.9	65	14.7	20.3
Worked full time	27.2	17	55.8	41.7	21.7	36.6
<b>Socioeconomic status 1995–96</b>						
Not disadvantaged	41.7	20.4	38	71.4	12.3	16.3
Minimally disadvantaged	33.9	13.1	53	59.8	16.4	23.8
Moderately or highly disadvantaged	43.7	14.5	41.8	47.1	19.5	33.4

- Race, gender, age, socioeconomic status, educational attainment of parents, family income, working while in school, delayed enrollment after high school, and intensity of enrollment (full- or part-time status while enrolled) are all factors that affect completion rates.
- Other research shows that major factors for non-completion are: part-time enrollment, delayed enrollment after high school, working full-time and being a parent.<sup>34</sup>
- More than any other characteristic, a students' socioeconomic background is the strongest indicator of non-completion risk.

### Institutional Characteristics

Students characteristics	Students starting in 2-year institutions			Students starting in 4-year institutions		
	Total, any degree	No degree, still enrolled	No degree, not enrolled	Total, any degree	No degree, still enrolled	No degree, not enrolled
<b>Total</b>	38.4	16.4	45.2	65.1	14.4	20.5
<b>Control of 1<sup>st</sup> institution</b>						
Public	36.7	17.4	45.9	60.5	17.4	22.2
Private	58.9	8.4	32.7	73.6	9.3	17.1
Not-for-profit	55.6	4.3	40	52.8	11.1	36.1

- Overall, public institutions tend to have lower completion rates than private ones, and two-year institutions have lower completion rates than four-year institutions. Two-year institutions have more “at-risk” students and thus face higher incompleting rates. Plus, completion rates do not take into account that students at two-year colleges often take courses without enrolling in a degree program.
- Other research shows that institutions most likely to have lower completion rates are those that are less selective,<sup>35</sup> larger and have more part-time faculty<sup>36</sup>. The most prominent institutional characteristic in determining graduation rates is the state the college is located, which suggests the power of state policy.<sup>37</sup>

<sup>33</sup> A note on looking at completion rates: When looking at degree completion figures, it is important to understand who exactly is represented in the data. Many postsecondary institutions measure *graduation rates*, which more or less refer to the number of people who complete their degree within 150% of the expected completion time. For example, at a 4-year institution, the graduation rate is often defined as the number of students who complete their degree in 6 years. However, the composition of people who have “not graduated” may be extremely diverse: they could still be enrolled at that institution but are taking longer to finish their degree, they could have transferred to another institution, they could have “stopped-out”—or left postsecondary education to have returned to the same or another institution later on—or they could have left postsecondary education altogether. Therefore, it is erroneous to assume that because an institution has a 60% graduation rate, for example, that 40% of students have dropped out of PSE altogether. Specific statistical data on these “non-graduated” students can be hard to come by and is often outdated. The reason for this is that degree completion data that differentiates between types of students who leave PSE must be collected in longitudinal studies of students—studies that track students over many years. As a consequence, analysis of data may take place years after students enrolled in postsecondary education; for example, the latest figures provided by the Department of Education represent students who enrolled in school in the 1995-1996 academic year. Snapshot graduation rates are much more up to date, but they may not provide much information on the non-graduating students (i.e., stop-outs, dropouts, transfers and those taking longer to complete their degrees).

- <sup>34</sup> Cabrera, Alberto F., Kurt R. Burkum, and Steven M. La Nasa. “Pathways to a Four-Year Degree: Determinants of Transfer and Degree Completion Among Socioeconomically Disadvantaged Students,” 2005.
- <sup>35</sup> Hess, Frederick M., et al. “Diplomas and Dropouts: Which Colleges Actually Graduate Their Students (and Which Don’t),” American Enterprise Institute 2009.
- <sup>36</sup> Bailey, Thomas, et al, “Community College Student Success: What Institutional Characteristics Make a Difference,” Community College Research Center 2005.
- <sup>37</sup> Ibid.

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