Literature Review - Bibliography

The Retention Agenda: A selection of Inside Higher Ed articles and essays on student retention.

"A consensus has emerged ... that a crucial part of American efforts to create a better educated populace is through guiding those who start a higher education to finish a certificate or a degree. At the same time, many colleges' leaders have realized that demographic shifts mean that higher education can no longer count on enrolling only those who are well prepared for college. Increasingly, colleges are going to be filling classes with students who didn't necessarily have a great high school education."

"One result of the increased emphasis on retention has been a renewed focus on how to identify students who need more assistance, and how to get them the help they need to succeed. *Techniques being used include better analysis of high school transcripts, testing, and placement counseling.* Many experts agree that refining these techniques will be crucial to improving retention and graduation rates."

"The [report] feature[s] news articles and essays on the strategies colleges are trying – particularly at getting the right assistance to the right students." (emphasis added)

Included is SUNY's Monroe Community College's 100-Day Completion Agenda where low-cost 100day projects have been implemented to improve retention. The first was removing barriers to the enrollment process. The second may be the offering of a 1 credit hour course through community organizations (such as the Urban League or YWCA) designed to expose adults to college. Another program is the "redshirting" program at University of Colorado at Boulder's Engineering program - called GoldShirt - where students get a year to catch up to their better prepared classmates. The first graduate from this program took only 4.5 years to graduate and is graduating summa cum laude. The University of Washington and Washington State plan to emulate the program, calling it STARS. A third article demonstrates the use of modified MOOCs to help with remedial education in Louisiana and North Carolina community colleges. Verdict? It's not for everyone but does work for some students.

One report details a Carnegie Foundation remedial math redesign used at 19 community

12 research-validated risk factors for students dropping out:

- 1. Uneven formal academic knowledge and skills.
- 2. Lack of informal knowledge about being a college student
- 3. Inadequate development of selfregulation skills
- 4. Impaired self-efficacy and resilience
- 5. A mindset believing in fixed rather than flexible abilities.
- 6. Inability to delay gratification.
- 7. Impaired ethical judgment
- 8. Disengagement from the university environment
- 9. Lack of interest in courses
- 10. Issues in academic trajectory
- 11. Psychological issues
- 12. Financial concerns

colleges and 2 state universities in five states. Fifty-one percent of group completing the redesigned courses compared to only 6 percent of students in traditional remedial math courses. Another describes

how the use of high school grades by community colleges to place students appropriately has been found to be superior to the "high-stakes" testing usually done. South Texas community colleges saw the number of students enrolled in developmental work drop from over 30% to about 17%. Long Beach City College saw its incoming group of students taking transfer-level English rise from 5.5% to 53% with no decline in the passage rate (62%).

Several articles discuss research. One describes 12 research-validated risk factors for students dropping out. An essay on retention describes the positive impact that intrusive first-year advising merged with career counseling had on retention at some community colleges.

The Retention Agenda: A selection *of Inside Higher Ed* articles and essays on student retention. (2013, July). *Inside Higher Ed*.

National Evaluation of Student Support Services: Examination of Student Outcomes After Six Years.

"This is the final report of the national Evaluation of Student Support Services (SSS). SSS is one of eight federally funded grant programs that are administered as part of the Federal Trio Programs within the U.S. Department of Education (ED). The SSS program, in particular, focuses on students while they are enrolled in college. In general, SSS provides the most services to first-year college students. Two-thirds of the students served by an SSS project must be low-income and first generation college students or students with disabilities. The other third must be low-income or first generation college students. The purpose of the study was to estimate the effects of SSS on the outcomes of the student participants, [in particular] ... retention in college, transfers from two-year to four-year institutions, and degree completion."

"SSS projects have great latitude to design their services to fit particular needs... All SSS projects provide academic advising as one of their services but the projects differ with respect to offering other services to SSS students such as tutoring, labs, workshops, special instructional courses, etc. As a rule, SSS students are in full control of determining both the types and the amounts of services they receive..."

"The study had a quasi-experimental design... The lack of a uniform SSS experience, with considerable variation even within each institution, combined with the receipt of equivalent services outside of SSS, made it difficult to design statistical models that properly described students' experience. Rather than choosing a single methodology, this

SSS Services

Instructional courses

- Study skills
- Developmental math
- Developmental English
- English proficiency

Professional tutoring Peer tutoring

- One on one and group
- English, science, social sciences, math and general tutoring

Professional counseling

Peer counseling

- Academic
- Personal
- Financial aid
- Career

Labs (similar to group tutoring) Workshops (skill enhancement)

- Orientation to college
- Study skills
- Career guidance

study used multiple approaches. All models included separate measures of SSS services for first-year

students, supplemental services received outside of SSS or received after the first year, and measures of

student and school characteristics. The models differed in the statistical techniques that were used, in the ways that SSS and other supplemental services were measured, and in the use of propensity scores."

"...because this report uses multiple models as a tool for examining the implications of the methodological choices involved, there are multiple estimates of the effects of SSS from which to choose. The results across the various models are often highly consistent but not identical..."

The report identified a problem with estimating the impact of SSS programs while "controlling" for college GPA. The SSS program can influence college GPA as well as other measured student outcomes. The study created a "latent" GPA that controlled for the impact of the SSS program and used that to predict retention.

This study reports on effects after 6 years, when presumably graduation rates and transfer rates can be measured. Separate reports were done after one and three years, with the following results:

 "SSS showed a small but positive and statistically significant effect on students' GPAs, number of semester credits earned and retention." The greatest effect occurred during the first year when services were received, but some effects persisted in later years. The "size of the effect depended on the degree to which students participated in SSS, with greater levels of participation resulting in a greater effect."
 "The average effect was small because most

Techniques for Evaluating the Impact of SSS programs on Student Outcomes

Model Types:

- Standard Multivariate Regression Analysis
- Hierarchical Linear Modeling
 (HLM) using both logistic models
 and SMR

SSS Participation Treatment:

- Dichotomous (in or out)
- Collection of services, measured separately

Adjusting for Differences Among Students:

- Individual measures of student characteristics
- Propensity measures estimating the probability of receiving service.

Results presented in two formats:

- Regression coefficients
- Impact estimates
- students received only a models amount of services." The mean number of hours of services was 15 and the median was 6."

Results from this report, measured after 6 years.

- 1. "The single most consistent finding is that the receipt of supplemental services was correlated with improved student academic outcomes."
- 2. "The findings for first year SSS services in particular were also largely consistent and positive..."
- 3. "Supplemental services continued to be important after the freshman year. In fact, the lateryear services appear to show a stronger relationship to long-term outcomes than first-year services."
- 4. "A few SSS services appeared to stand out by being related to improved student outcomes: home-based programs, blended programs, peer tutoring, labs, workshops, and services for

students with disabilities. However some additional types of services also were related to improved student outcomes, though they were not necessarily SSS service: counseling, field trips or cultural enrichment, referrals to outside resources, services for those with limited English ability, college re-entrance counseling and recent contacts with support services. There is some evidence that what may be most important is that students receive an appropriate 'package' of services ..."

Chaney, B.W. (2010, April). National Evaluation of Student Support Services: Examination of Student Outcomes After Six Years. U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service.

A Compendium of Successful, Innovative Retention Programs and Practices: Winners of the Lee Noel & Randi Levitz Retention Excellence Awards, 1989-2012.

"[A] brief description of programs that have been recognized in the Lee Noel and Randi Levitz Retention Excellence Awards Program sponsored by Noel-Levitz. The program was established in 1989 to honor the retention achievements of post-secondary institutions throughout North America."

"Each year, awards are given to recognize the most successful, state -of-the-art retention programs in use at many different kinds of institutions, with many different target groups of students. Nominees for awards are judged on identifiable and measurable institutional outcomes, originality and creativity, use of resources, and adaptability for use at other institutions. Winners are selected by a national panel comprising leading campus-based retention practitioners."

"Since the program began, 31 community colleges, 31 private, and 98 public colleges and universities have been honored with Retention Excellence Awards, As a result of this national exposure, these award-winning programs have served as models of retention excellence to stimulate the creativity and energy of hundreds of two-year and four-year institutions."

A Compendium of Successful, Innovative Retention Programs and Practices: Winners of the Lee Noel & Randi Levitz Retention Excellence Awards, 1989-2012. (2012). *Noel-Levitz, Inc.*

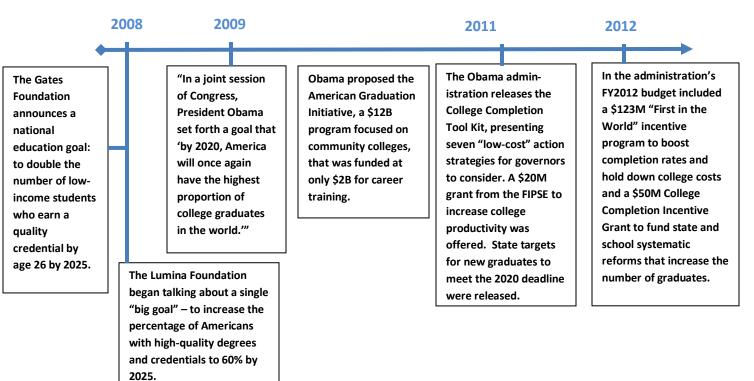
Policy Matters: A Guide to Major U.S. College Completion Initiatives.

"The current interest in college completion is rooted in growing concerns that the United States is steadily losing ground in global competitiveness. While other nations have been making progress, particularly in the attainment of sub-baccalaureate degrees and certificates, the United States has not. We have achieved measurable success in improving access to postsecondary education, but we have not achieved a comparable growth in degree attainment. ...The latest OECD data indicate that 41 percent of older workers (aged 55-64) and younger workers (aged 25-34) in the U.S. have attained tertiary education – indicating that there have been no increases over time."

"Concerns about [this lack of progress] have been moving this country from its traditional focus on increasing educational access to new interest in educational attainment. This is expressed not only in

terms of institutional graduation rates, but also in terms of meeting state and national educational attainment goals. As such, the terminology has shifted from 'access' goals to 'college completion' goals."

"The paper is intended as a guide to the myriad college completion initiatives that have arisen in recent years. [It] focuses only on major national/regional college completion initiatives. It does not address the efforts of specific states, systems and institutions, nor does it cover initiatives focused primarily on access or college preparation that happen to contribute to completion."



Catalysts Focusing National Attention on College Completion

There are now more than a dozen major national college completion initiatives. Some are broad based and others have a narrow focus concentrating on certain populations. Some focus on the achievement gap between the traditional college population and underrepresented groups.

CURRENT COMPLETION INITIATIVES

Completion Initiative	
Access to Success (A2S)	Sponsoring Organization: National Association of System Heads (NASH) and
	The Education Trust.
	Funding Partners: Lumina Foundation for Education and the Bill & Melinda
	Gates Foundation.
	Timeframe: Begun in 2007 and runs through 2015.
	Goals: To cut the college going and graduation gaps for low-income and

	minority students in half by 2015.
Achieving the Dream, now a	Participants: Twenty public higher education systems in 18 states. Sponsoring Organization: Lumina Foundation for Education and AACC, CC
Achieving the Dream; now a	Leadership Program at UT-Austin, CCRC at Columbia U; Jobs for the Future;
national non-profit organization	MDC; MDRC; Public Agenda.
organization	Funding Partners: Lumina Foundation for Education and over 20 funders.
	Timeframe: Begun in 2004 and is still continuing.
	Goals: To help more community college students, particularly low-income
	students and students of color, stay in school and earn a college certificate or
	degree.
	Participants: Started with 27 colleges in five states and continues to add
ACE Commission on Education	schools. Sponsoring Organization: American Council on Education (ACE), plus college
Attainment	sector organizations (AACC, AASCU, AAU, APLU, and NAICU).
Attainment	Funding Partners: Not identified.
	Timeframe: Begun in 2011 and runs through 2012.
	Goals: To assess the need for improved college retention and attainment
	and to chart a course for improvement.
	Participants: The six Washington DC-based presidential higher education
	associations.
Adult College Completion	Sponsoring Organization: Western Interstate Commission for Higher
Network	Education (WICHE). Funding Partners: Lumina Foundation for Education.
	Timeframe: Begun in 2010 and runs through 2014.
	Goals: To unite organizations and agencies working to increase college
	completion by adults with prior credits but no degree in a collaborative
	learning network.
	Participants: Regional organizations, state agencies, city programs, non-
	profit organizations and others.
Boosting College Completion	Sponsoring Organization: Education Commission of the States (ECS).
for a New Economy	Funding Partners: Bill and Melinda Gates Foundation. Timeframe: Begun in 2011 and runs through 2013.
	Goals: To work with legislative and higher education leaders to improve their
	state economies by increasing the number of residents with postsecondary
	credential.
	Participants: State legislative and higher education leaders.
College Completion Agenda	Sponsoring Organization: College Board, and collaborating partners –
	National Conference of State Legislatures (NCSL), Excelencia in Education and
	National Council of La Raza.
	Funding Partners: Not listed.
	Timeframe: Begun in 2008 with no end date listed. Goals: To increase the proportion of 25-to-34-year-olds who hold an
	associate degree or higher to 55 percent by the year 2025 in order to make
	America the leader in educational attainment in the world.
	Participants: Not listed.
College Completion Challenge	Sponsoring Organization: American Association of Community Colleges
	(AACC), Association of Community College Trustees, the Center for
	Community College Student Engagement, the League for Innovation in the
	Community College, the National Institute for Staff and Organizational
	Development and Phi Theta Kappa Honor Society.
	Funding Partners: Brought together by the Bill and Melinda Gates
	Foundation. Timeframe: Begun in 2010 with no end date listed.

College Completion Initiative	Goals: To promote the development and implementation of policies, practices and institutional cultures that will produce 50 percent more students with high quality degrees and certificates by 2020, while increasing access and quality. Asking for community colleges across the country to sign their own completion commitments, modeled on the "Call to Action." Participants: Six national associations that focus on community colleges. Sponsoring Organization: Southern Regional Education Board (SREB). Funding Partners: Not listed. Timeframe: Begun in 2008 with no end date listed. Goals: To increase significantly the numbers of students who complete postsecondary career certificates and associate's and bachelor's degrees, so that 60 percent of each state's adults ages 25 to 64 will have one of these credentials by 2025. Participants: Not listed.
Complete College America	Sponsoring Organization: Nearly 20 national and regional higher education
	organizations for policy and research expertise.
	Funding Partners: Carnegie Corporation of New York, Lumina Foundation for
	Education, Bill & Melinda Gates Foundation, W.K. Kellogg Foundation and Ford Foundation.
	Timeframe: Begun in 2009 with no end date listed.
	Goals: To significantly increase the number of Americans with a college
	degree or credential of value and to close attainment gaps for traditionally
	underrepresented populations.
	Participants: Number of states in the Alliance of States has grown to 29 in the three years since the organization's founding.
Complete to Compete	Sponsoring Organization: National Governors Association (NGA).
	Funding Partners: Bill & Melinda Gates Foundation, Lumina Foundation for
	Education and USA Funds.
	Timeframe: Begun in 2010 and ran through 2011.
	Goals: • Raise national awareness about the need to increase college completion and productivity, and the consequences of inaction. • Create a
	set of common higher education completion and productivity measures that
	governors can use to monitor state progress and compare performance to
	other states and between institutions. • Develop a series of best practices
	and a list of policy actions governors can take to achieve increased college
	completion. • Provide grants to states to design policies and programs that
	increase college completion and improve higher education productivity and serve as models for other states around the country. • Hold a learning
	institute for governors' senior advisors in education, workforce and
	economic development focusing on successful state strategies to graduate
	more students and meet workforce demands.
	Participants: State governors' offices.
Ensuring America's Future by Increasing Latino College	Sponsoring Organization: Excellence in Education, and collaborating organizations including ACT, Inc., American Council on Education, College
Completion (EAF)	Board, Complete College America, Hispanic Association of Colleges and
	Universities, Institute for Higher Education Policy, Jobs for the Future and
	National Conference of State Legislatures.
	Funding Partners: Bill & Melinda Gates Foundation, Lumina Foundation for
	Education and Kresge Foundation. Timeframe: Begun in 2010 with no end date listed.
	Goals: To inform, engage and sustain efforts to promote the role of Latinos
	in making the U.S. the world leader in college degree completion.
	Participants: Sixty organizations from diverse sectors.

National Coalition for College	Sponsoring Organization: Institute for Higher Education Policy (IHEP).
Completion (NCCC)	Funding Partners: Ford Foundation, Lumina Foundation for Education and
completion (Necc)	Bill & Melinda Gates Foundation.
	Timeframe: Begun in 2011 with no end date listed.
	Goals: To mobilize a diverse, non-partisan voice in support of college
	completion that speaks for the collective interests of the American public by
	demanding a policy agenda that encourages higher education institutions to
	provide better support to underrepresented students.
	Participants: More than 20 organizations, including Boys and Girls Club of
	America, Business
	Roundtable, Center for American Progress, Center for Law and Social Policy
	and National Urban League.
Droject Win Win	Sponsoring Organization: Institute for Higher Education Policy (IHEP), and
Project Win-Win	
	collaborating partners - State Higher Education Executive Officers (SHEEO).
	Funding Partners: Lumina Foundation for Education and Kresge Foundation.
	Timeframe: Begun in 2009 and runs through 2013.
	Goals: Focusing wholly on the associate degree: • To match student
	attainment with its official recognition. • To improve de facto degree
	completion rates at participating colleges through a retroactive award
	process. • To improve institutional data systems, student tracking, advising,
	communication with students, understanding of problems in degree
	qualifications, and degree audit systems. • To place qualified and interested
	students back on track to complete degrees in a relatively short time span.
	Participants: Operations in nine states, involving 64 colleges.

Russell, A. (2011 October). Policy Matters: A Guide to Major U.S. College Completion Initiatives. A *Higher Education Policy Brief*.

Effective College Access, Persistence and Completion Programs, and Strategies for Underrepresented Student Populations: Opportunities for Scaling Up.

"Effective strategies and solutions to boost college completion rates remain elusive, especially for underrepresented student populations (defined in this report as low-income students, minority students, and first-generation college students). For example, only one third of full-time bachelor's degree students graduate in four years, and just over 55 percent will graduate within six years, which is considered "on-time" graduation."

"Despite the significant research attention dedicated to college student retention in the last several years, there is a surprising lack of truly rigorous studies available. Much of the evidence is anecdotal and qualitative, and the existing quantitative evidence tends to lack sufficient controls. The general conclusion of the reviewed research (particularly the work of Dr. Vincent Tinto of Syracuse University) is that although academic preparation and performance do play a major role in retention of underrepresented students, up to 75 percent of all dropout decisions are non-academic in nature. This statistic suggests that low achievement may be more a result of external pressures rather than a student's inherent ability. The literature has developed three lenses through which to view these nonacademic factors."

Three lenses through which to view nonacademic dropout decisions:

Financial

• Non-tuition expenses (books, fees, meals, etc.) can be crippling, and schools generally do not provide enough funding to cover these costs.

• Part-time employment is a necessity for many students, but the presence of a job is associated with a significantly lower retention rate.

Institutional

• There are generally five types of intervention strategies schools use to increase retention: transition programs, mentoring, learning communities, faculty/student interaction programs, and advising:

- Transition programs include any type of summer bridge programs or orientation activities that a school may provide for its students. The literature indicates a positive relationship between an extensive transition program and student retention.
- Mentoring programs can have multiple arrangements, from one-on-one to group mentoring, and may or may not be peer-topeer. The literature is weak on the effectiveness of these types of programs, although there does appear to be a stronger retention effect for racial minorities.
- Learning communities are groups of students that typically enroll together, take a significant number of classes together during each academic year, and (in the case of residential colleges) typically live in the same dormitory. The literature is lacking regarding this intervention as well, but there appears to be no significant direct effect on retention through the use of such communities, but there may be in indirect effect.
- Faculty/student interaction programs typically refer to specialized programs allowing students to interact with faculty members for mentoring, advice, and even for research positions. Again, the existing research is very limited but such programs do not appear to have a significant effect on retention.
- Advising programs as used in this context typically refer to targeted, dedicated advising services for use by freshmen or underrepresented student groups. The research for this intervention is again lacking, and what research is available suggests there is no significant effect on retention.

• The research indicates that these programs are best used to address the needs of certain subsections of underrepresented students. For example, African-American students benefit from mentoring programs, while other groups may realize no gain in retention rates.

Psychological

• Many minority students, particularly African Americans, have a need to "fit in" on campus and to feel welcomed. Feeling out of place on campus can lead academically qualified students to drop out of school.

• Family support is critical for underrepresented students, but many of them are first-generation college students and thus do not have access to such support. Many underrepresented students must also take on additional family responsibilities, taking time away from classes and studying. "In an analysis of 45 institutions where there is some empirical evidence for improvements in retention rates, the following intervention strategies were the most common:

• Counseling or mentoring of students, either by peers or trained personnel. Nearly 75 percent of programs with higher persistence rates used this method;

- Offering some form of instruction specifically for freshman (17 institutions, 38%);
- Transition/orientation programs and tracking/early warning systems (13, 29% each);
- Learning communities (12, 27%);
- Student-faculty interactions and additional academic support services (11, 24% each);"

"Most institutions used a combination of interventions. The fact that counseling is only effective in conjunction with other approaches raises questions about excessive reliance on this approach."

"Two-year public institutions present special challenges in increasing retention, with higher attrition rates and a larger proportion of at-risk students than four-year institutions. Similarly, there are important distinctions between four-year residential and non-residential colleges and universities. Surveys of two-year institutions suggest that these colleges are the least likely to employ the most effective retention strategies."

"Within Indiana, the surveys of institutions provided the following findings:

• The entire range of persistence levers is in use statewide, with no two campuses using exactly the same approach, even within the same university system. This situation is beneficial since it indicates that institutions have started responding to the unique needs of their student bodies.

• The campuses that face larger persistence issues, such as Ivy Tech and IUPUI, have developed the most extensive retention packages in response to the problem.

• Of the 28 responding institutions, academic support (tutoring and advising) was the most common service offered, with 22 respondents indicating at least one service of this type is offered.

• Learning communities are the least common approach, with only two institutions reporting their use. Logistical costs for this intervention are high, likely leading to its infrequent use.

• Dual-credit options (allowing students to take college classes in high school) are being used in several institutions, which is a unique approach to persistence that is virtually ignored within the literature."

Effective College Access, Persistence and Completion Programs, and Strategies for Underrepresented Student Populations: Opportunities for Scaling Up. (2010, June). *Center for Evaluation & Education Policy*, Indiana University, Bloomington, Indiana.

The American Dream 2.0, How Financial Aid Can Help Improve College Access, Affordability, and Completion.

Of the 20 million students enrolled in a U.S. college or university, **46 percent do not graduate with any credential within six years**. Sixty-three percent of African American students, and 58 percent of Hispanic students, do not earn a credential within six years. Without a college credential, these students are much more likely to be unemployed; four of five jobs lost to the recession were held by Americans without a credential. And by 2018, the nation will need 22 million new workers with postsecondary

credentials, but we will fall at least 3 million short. Whereas we used to lead the world in the percentage of young adults with postsecondary credentials, we now trail 13 other nations.

"Despite such need, tuition is rising faster than inflation or family income while state support is declining. This means more students are picking up an ever-larger share of college costs. Total annual student borrowing has more than doubled over the last ten years. Burdened with such debt, many students without a credential are plunged under water financially. Indeed, **the average default rate for those with no credential is more than four times the rate for those with a bachelor's degree**."

The national bi-partisan coalition behind this report represents college foundation presidents; civil rights leaders; top state policymakers; student activists; former federal budget and education officials; college access higher advocates; business leaders; and the nation's foremost authorities on financial aid. "They have come together because they see the promise of using incentives within the \$226 billion financial aid system to help address our nation's college **completion challenge.**" They suggest that providing financial aid and just hoping for student success is not enough.

A Broad Range of Suggestions to Help Improve Completion Rates, Including:

- Have the federal government collect and report better higher-education performance metrics, on access, completion, cost and employment outcomes.
- Make it simpler to apply for aid, and make its costs and benefits clearer to students and their families.
- Offer federal incentives for states and schools to find faster and cheaper ways to educate students, including getting high-school students ready for college.
- Run experiments on new ways to aim and deliver financial aid.
- Reward colleges for improving completion rates, and tie student aid to getting past certain educational goal posts.

The American Dream 2.0, How Financial Aid Can Help Improve College Access, Affordability, and Completion. (2013). HCM Strategists in collaboration with a national coalition of education, social justice, and economic experts.

Campus-Based Retention Initiatives: Does the Emperor Have Clothes.

"After mining several electronic databases and reviewing almost one hundred articles (limited to propositional and research-based published studies in first- and second-tier journals that commonly publish research in the field of higher education that employed methodological and analytic rigor), only sixteen studies were identified as providing documentation that links a program with retention. The strength of the connections between programmatic interventions and student persistence varied in these studies. Only in the area of transition programs did we find a reasonable number of studies that reported consistently strong connections between interventions and improved student persistence. Overall, our findings demonstrate that academe is without a core set of documents upon which administrators can rely when seeking retention models to employ at their own institutions. Our

analyses of the existing research on programmatic efforts to improve student retention rates lead us to the following substantive conclusions."

"In addition to these areas, there is a host of areas for which there is simply no evidence to support the effectiveness, or lack thereof, of campusbased retention efforts. Within the body of empirical studies that does exist, the research team found that there is also a lack of longitudinal assessments of retention-based initiatives. The majority of the studies captured the program's impact at a single point in time. Our findings also revealed other gaps in the retention literature. We found few empirical studies that had been conducted at community colleges or at minority-serving institutions."

The authors suggest there is an excellent opportunity for colleges and universities to assess the impact of their various programs on retention. They suggest a possible framework for this purpose (Woodard, Mallory, and De Luca (2001)) to use as a point of reference from which to understand the importance of establishing the groundwork for effectively and efficiently

Substantive Conclusions:

- The evidence supporting the effectiveness of counseling as a means to reduce dropout rates of undergraduate students is weak.
- The evidence to support the efficacy of mentoring programs as a means to reduce dropout rates is weak.
- There are small to moderate levels of positive evidence that learning communities have a positive effect on student persistence.
- There are small to moderate levels of evidence that programmatic interventions designed to enhance student-faculty interaction can improve student persistence.
- There is moderate to strong positive evidence that transition or orientation programs can improve student retention rates.

assessing a program; understanding how to identify, capture, and analyze data and communicate findings to various audiences; and understanding how to use the findings to improve the program.

Davis, L.P., Morelon, C., Whitehead, D., Hossler, D. (2006). Campus-Based Retention Initiatives: Does the Emperor Have Clothes. *New Directions for Institutional Research*.

Inequality Matters, Bachelor's Degree Losses Among Low-Income Black and Hispanic High School Graduates.

"The Advisory Committee's 2010 report, The Rising Price of Inequality, found that need-based grant aid from all sources was inadequate by examining the enrollment and completion rates of low-income high school graduates who seek to earn a bachelor's degree and are qualified to gain admission to a 4-year college. The major finding was that the rates were declining rapidly. The impact of this trend can be seen in Census data, which show that educational attainment of 25- to 34-year-old Americans is now lower than the level of their peers who are 35 to 44 years old."

"To inform reauthorization of the Higher Education Act (HEA), this bulletin extends the findings of the Committee's 2010 report by focusing on the enrollment and completion of low-income Black and Hispanic high school graduates who had taken at least Algebra II and could gain admission to a 4-year college. There are five findings:

- **Financial Concerns**. Concerns about rising college expenses and financial aid, which has failed to keep pace with those expenses, are undermining the 4-year college enrollment of these students.
- **Enrollment Shifts**. Rising net prices, as a percentage of family income, are causing initial enrollment to shift away from 4-year colleges, with increases in no enrollment in postsecondary education.
- **Declining Completion Rates**. Enrollment shifts away from 4-year colleges, together with falling rates of persistence, are undermining rates of bachelor's degree completion.
- **Bachelor's Degree Losses**. Declining rates of college completion signal that over one million bachelor's degrees, in absolute terms, were lost last decade and even more will be lost in the future.

Bachelor's degree losses this decade among low-income Black and Hispanic high school graduates who took at least Algebra II will exceed the 1.4 million level of last decade.

• Increasing Inequality. Large losses in bachelor's degree completion will exacerbate existing disparities in educational attainment, by race, ethnicity, and family income, for the foreseeable future."

"These findings have major implications for HEA reauthorization and proposals to modify federal needbased grant aid should be evaluated in the context of these losses. In this regard, five proposals currently under discussion deserve special scrutiny. If implemented, these proposals are likely to further undermine the 4-year college enrollment, persistence, and completion of qualified low-income high school graduates, particularly minority students, and worsen inequality in national educational attainment by income, race, and ethnicity.

- Denying Aid to Students Based on Risk of Non-Completion
- Demanding Budget-Neutral Funding of Title IV Student Aid
- Eliminating Pell Grants to Fund Block Grants to the States
- Dismantling Partnerships in Need-Based Student Grant Aid
- Relying Exclusively on Improvements to Student Aid Delivery"

"These proposals disregard rising college expenses facing low-income students and the skyrocketing loan burden described in the Advisory Committee's November 2012 policy bulletin (ACSFA, 2012c). Policymakers should consider their likely negative impact on college enrollment and completion and, at a minimum, require that the proposals be pilot tested before implementation."

"In its 2010 report, the Advisory Committee recommended that need-based grant aid from all sources be increased. In particular, the 2010 report cautioned that the steady erosion in the purchasing power of Pell Grants must be reversed if any progress is to be made in ensuring equal educational opportunity and success in higher education. Without such increases, inequality in access and completion will steadily worsen – as will inequality in national income."

Inequality Matters, Bachelor's Degree Losses Among Low-Income Black and Hispanic High School Graduates. (2013, June). A Policy Bulletin for HEA Reauthorization. Advisory Committee on Student Financial Assistance.

Performance-Based Scholarships: What Have We Learned?

"Evidence suggests that financial aid as a whole (the combination of grants, scholarships, loans, workstudy jobs, and other aid) is positively associated with students enrolling in college and staying there. But there is relatively little evidence so far to show that scholarships, specifically, cause improved student retention and academic performance, even though they have played a prominent role in public and private support for higher education. A handful of studies have examined the effects of innovative financial aid structures. Preeminent among these is MDRC's Opening Doors Demonstration in Louisiana, which found substantial improvements in full-time enrollment, persistence, credit accumulation, and

grades for a form of financial aid called "performance-based scholarships." Since then, with anchor funding from the Bill and Melinda Gates Foundation and a consortium of other foundations, MDRC has worked in six states with over 12,000 students, eight institutions, and one intermediary to test several different scholarship designs and to address on a much larger scale and in a wide range of settings the question of whether this innovative form of financial aid can improve academic achievement in both the short and long term."

"Performance-based scholarships were designed by MDRC and colleges to help students overcome some of the financial obstacles they face in the postsecondary education system. These scholarships aim to help reduce the financial burdens on low-income college students while providing incentives for good academic progress. Students are generally paid at multiple points during the semester if they maintain a "C" average or better and earn a certain number of credits. By making additional financial aid conditional on students' meeting certain performance benchmarks, the programs seek to encourage students to focus on their studies, which should lead them to perform better in their classes in the short term. In the medium term they should progress through their degree requirements more quickly, which in the long term may then help them graduate or transfer to a four-year college. Finally, if the scholarship promotes academic success students could end up with better jobs and higher earnings."

Interim Analysis of Performance-Based Scholarships Shows That:

- The program can be implemented at a variety of institutions and with a diverse group of low-income student populations.
- Students in almost all of the program groups were more likely than those in the control groups to meet their scholarships' academic benchmarks in one or more semesters.
- The program increased the number of credits students earned by the end of the first year.
- So far, the program does not appear to increase the proportion of students who stay in college.
- The scholarships work for a variety of different types of students, including atrisk groups that traditionally perform poorly.
- Some of the programs reduced educational debt.
- In Ohio, performance-based scholarships increased the proportion of students earning a degree or certificate.

"Importantly, the scholarships are paid directly to students. They may use the money for any pressing need (for example, books, child care, or other financial obligations that might disrupt their studies). Students have complete discretion over how they use the funds, although most report using them to help with a range of essential expenses. The scholarships are paid in addition to Pell Grants — the main federal source of need-based aid — and other existing financial aid programs, including state and institutional grants. Students therefore have more money to cover academic and living expenses, and can potentially reduce their dependency on loans. Lastly, unlike merit-based aid, performance-based scholarships are paid to students based on their academic performance in the current term, regardless of what happened in previous terms. That is, eligibility for the scholarship is not based on evidence of prior performance such as high school grade point averages (GPAs)."

"The findings presented in this brief are based on one year of follow-up for all sites in the demonstration, two years of follow-up for the sites that launched their programs in 2008 or 2009 (California, New Mexico, New York, and Ohio), and three years of follow-up for the first of the sites to complete study recruitment (Ohio). The implementation phase of the PBS Demonstration has shown that this new form of financial aid is feasible to implement. **The initial evaluation findings provide some evidence that performance-based scholarships can improve academic outcomes without unintended negative consequences** (for example, students attempting fewer credits in order to keep their grades up).

Patel, R., Richburg-Hayes, L., de la Campa, E., Rudd, T. (2013, August). Performance-Based Scholarships: What Have We Learned? Interim Findings from the PBS Demonstration.

A Review of College Access Literature.

"At the high school level, the most powerful factors related to college enrollment for low-SES families are (1) measured academic ability, (2) adult support in the college search and application process, and (3) knowledge of financing strategies. **Research focusing on college retention is murkier**. For example, it remains unclear whether community colleges divert low-SES students from Bachelor's Degree attainment or provide needed and affordable access. Additionally, although postsecondary attainment also encompasses a wider range of possible "successes" than high school such as Associates, Bachelor's, and Master's Degrees, the majority of research is directed toward students who desire to attain a Bachelor's Degree and attend four-year institutions. **Research indicates that the most important factors in college retention are academic integration and social integration into the college**."

"At the college level, the majority of research into retention and persistence is limited to four-year residential colleges. For example, community colleges enroll well over one-third of students at the postsecondary level, yet have received little research attention (Bozick et al. 2008; Deil-Amen & Turley 2007; Wellman et al. 2009). In addition, the available research credits social integration as being, second to academics, the most important factor in retention. Yet retention research often ignores transfer students, and the majority of students transfer (Adelman et al. 2003). Social integration may explain why students stay at one institution, but research into transfer students, understanding why students transfer and why they stay at the institutions they graduate from is desperately needed. More recently, there has been rapid growth in for-profit and online education providers, such as DeVry University or the University of Phoenix. Very little research investigates the ways in which for-profit and online educational providers affect college going and persistence."

Heroff, J. (2009, February). A Review of College Access Literature. Prepared for the Illinois Student Assistance Commission.

Community College Retention and Recruitment of "At-Risk" Students.

In this report current best practices are assessed in retention and recruitment of "at-risk" community college students. "The main findings from the retention section of the report are:

- According to a 2010 survey of Chief Academic Officers at community colleges across the nation, issues with academic preparation, job and family responsibilities, finances, or personal motivation were perceived to be among the most significant reasons why students leave community colleges.
- As noted in the same 2010 survey, many of the programs believed to make the highest contributions to retention at community colleges focus on academic support/guidance, targeted interventions for specific student populations, and easing the transition of students to the college environment.
- Using the 2010 survey as a framework, our report takes a closer look at academic advising, firstyear seminars and transition programs, summer orientation/bridge programs, and early warning systems as means of increasing the retention of students. In addition to being well-supported in the literature on student retention, recent examples of community colleges that have employed such programs have displayed documented success in terms of student outcomes.
- Successful retention programs designed specifically for students with disabilities focus on building self-advocacy skills in addition to offering targeted academic support.
- Some community colleges employ strategies that will assist students who have undiagnosed learning disabilities. One set of strategies Universal Design for Learning focuses on flexible approaches to teaching that can be adjusted to fit the individual needs of learners."

"With regard to community colleges with enrollments of Black or Hispanic students that equal or exceed 20 percent of their total student population, ACT reported a similar set of factors that have the strongest influence on attrition as those reported for the overall group. The only differences between these lists are indicated below:

- In addition to all of the factors cited for community colleges overall, institutions with shares of Hispanic students that are 20 percent or greater indicated that "level of emotional support from family, friends, and significant others" and "amount of financial aid available to students" were also among the factors with the strongest influence on attrition.
- Representatives of community colleges with proportions of Black students that are 20 percent or higher also highlighted the same factors as community colleges overall. The only additional factor that made the list for this subset of colleges was "amount of financial aid available to students"."

Community College Retention and Recruitment of "At-Risk" Students. (2011, January). Gulf Coast Community College.

Advising At Risk Students.

"Jones and Becker (2002) identified several academic advising services for at-risk students. These include using peer advisors and providing a visual means to disseminate information to the students before they even see their advisor. They also suggest that advisors be aware that this group of students benefits from more personal attention from individual advising sessions that focus on the student's development of self-confidence and their ability to make sound decisions. Finally they suggest that advisors evaluate their delivery of academic services. Nutt (2003) suggests using an intrusive advising approach, insisting upon collaborative relationships with other campus resources, and encouraging advisors to invest in the student to help them gain a sense of belonging and that they matter."

"Jones and Becker (2002) identify the need for programs that teach decision-making skills, promote selfadvocacy, provide curriculum intensive advising, and provide services to support students during their first year. Ender and Wilkie (2000) include remedial courses for basic reading, writing, and math skills in their programming suggestions."

Walsh, P. (2003). Advising At Risk Students. NACADA Clearinghouse of Academic Advising.

Effective techniques of developmental advising with adult at-risk students in a community college setting.

"Academic advising has undergone great changes since its beginning in higher education. Modern educators recognize academic advising as one of the best ways to assist the personal, intellectual, and social development of learners. Advising as a service to students links students' academic and personal worlds; therefore, advising cultivates holistic development. On the other hand, many people know little about academic advisors or specifically to what degree advisors use a method described as developmental. This descriptive study inspected effective techniques of developmental advising with adult at-risk students in a community college setting. Without effective techniques and strategies in developmental advising, the college experience of adult at-risk students can suffer. The study used qualitative research designed to assess advisors' perceptions of effective techniques of developmental advising. A mixed methods survey tool and open-ended questions elicited data from a sample of 300 academic faculty and non-faculty (student support services) advisors. The study construction reflected previous research on developmental advising with updated survey items on current practices added. The survey and open-ended questions concentrated on advisors' perceptions of their role as advisors, including advising tasks and skills, barriers to effective developmental advising, and advisor's characteristics. The summary of findings led to the conclusion that faculty failed to practice some of the dimensions of developmental advising techniques with adult at-risk students at the level of importance they placed upon them."

Hoff, G.A. (2011). Effective techniques of developmental advising with adult at-risk students in a community college setting. Dissertation.

The Condition of Education 2013.

"The 2011 graduation rate for full-time, first-time undergraduate students who began their pursuit of a bachelor's degree at a 4-year degree-granting institution in fall 2005 was 59 percent. That is, 59 percent of fulltime, first-time students who began seeking a bachelor's degree at a 4-year institution in fall 2005 completed the degree at that institution within 6 years."

"...the 6-year graduation rate was 57 percent at public institutions, 65 percent at private nonprofit institutions, and 42 percent at private for-profit institutions. This graduation rate was 56 percent for males and 61 percent for females; it was higher for females than for males at both public (59 percent vs. 54 percent) and private nonprofit institutions (67 percent vs. 62 percent). At private for-profit institutions, however, males had a higher graduation rate than females; the rate was 48 percent for males and 36 percent for females."

"At 2-year degree-granting institutions, 31 percent of full-time, first-time undergraduate students who began their pursuit of a certificate or associate's degree in fall 2008 attained it within 150 percent of the normal time required to do so. This graduation rate was 20 percent at public 2-year institutions, 51 percent at private nonprofit 2-year institutions, and 62 percent at private for-profit 2-year institutions. At 2-year institutions overall, as well as at each type of 2-year institution, the completion rate was higher for females than for males."

"...graduation rates were highest at postsecondary degree-granting institutions that were the most selective (i.e., had the lowest admissions acceptance rates). For example, at 4-year institutions with open admissions policies, 31 percent of students completed a bachelor's degree within 6 years. At 4-year institutions where the acceptance rate was less than 25 percent of applicants, the 6-year graduation rate was 88 percent."

"In terms of student retention, among full-time, first-time students who enrolled in a postsecondary degree-granting institution in 2010, about 79 percent returned to 4-year institutions and 60 percent to 2-year institutions in the following fall."

The Condition of Education 2013. (2013, May). U.S. Department of Education, National Center for Education Statistics.

College Completion – Additional Efforts Could Help Education with Its Completion Goals.

"Because of concerns that not enough students who start college are completing a bachelor's degree, we examined (1) the extent to which students who enroll in a 4- year college complete a bachelor's degree and identify the factors that affect completion; (2) what states and 4-year colleges and universities are doing to foster bachelor's degree completion; and (3) what the Department of Education (Education) is doing to foster degree completion."

"More than half of all students who enroll in a 4-year college or university complete a bachelor's degree within 6 years of beginning postsecondary education. On the basis of our analysis, select background characteristics, work and college attendance patterns, as well as academic preparation and performance are correlated with bachelor's degree completion. Specific factors associated with a lower likelihood of

completing a bachelor's degree include coming from a family in which neither parent had earned a bachelor's degree, being black, working 20 or more hours per week, or transferring to another institution. Students were more likely to complete their degree if they were continuously enrolled during the 6-year period or attended full-time. The likelihood of a student graduating within 6 years also increased as rigor of their high school curriculum, high school grade point average, and first-year college grade point average increased. After controlling for other factors, we found that disadvantaged students were no less likely to complete a bachelor's degree than other students. Notwithstanding this fact, students from disadvantaged backgrounds are less likely to attend college in the first place."

"States and 4-year colleges and universities are employing various methods to foster bachelor's degree completion, but information on the effectiveness of these efforts is limited. Over two-thirds of the states responding to our survey reported having at least one effort in place to foster bachelor's degree completion. Most of these efforts fell into three categories: (1) increasing the number of students entering postsecondary education; (2) helping colleges improve their performance in retaining and graduating students; and (3) helping individual students remain in college and encouraging timely completion for these students."

"Education fosters bachelor's degree completion by making financial aid available to students and providing support services for students who are low-income, come from families in which neither parent has a bachelor's degree, or are disabled. Education administers the federal student aid programs, primarily through grants and loans to help students finance college. In September 2002, we reported that little information is available on the relative effectiveness of federal grants and loans on completion. Education also administers programs that provide support services, such as tutoring, at the pre-college and college levels to help ensure successful outcomes for students who are low-income, come from families in which neither parent has earned a bachelor's degree, or are disabled. Information on the effectiveness of these programs in fostering college completion is still being collected. Through its strategic plan, Education has identified priorities for reducing gaps in college completion among certain student populations and increasing completion overall. Its strategic plan also identifies strengthening the accountability of postsecondary institutions to ensure colleges are graduating their students in a timely manner as a priority. According to Education, providing prospective students with information on graduation and retention rates to help them make informed choices about where to attend college is one way to hold institutions accountable for their performance."

College Completion – Additional Efforts Could Help Education with Its Completion Goals. (2003, May). United States General Accounting Office.

The Role of Academic and Non-Academic Factors in Improving College Retention.

This report provides information about the influence of non-academic factors, alone and combined with academic factors, on student retention and performance at four-year colleges and universities. It highlights examples of successful retention strategies and stresses the need to evaluate on the bases one which retention policies are created. The purpose of the study was to identify which academic and non-academic factors had the greatest effect on college retention and performance.

"Our findings indicate that the non-academic factors of academic-related skills, academic selfconfidence. academic goals, institutional commitment, social support, certain contextual influences (institutional selectivity and financial support), and social involvement all had a positive relationship to retention. The academic factors of high school grade point average (HSGPA) and ACT Assessment scores, and socioeconomic status (SES) had a positive relationship to college retention, the strongest being HSGPA, followed by SES and ACT Assessment scores. The overall relationship to college retention was strongest when SES, HSGPA, and ACT Assessment scores were combined with institutional commitment, academic goals, social support, academic selfconfidence, and social involvement."

"In terms of performance, the findings indicate that of the non-academic factors, academic selfconfidence and achievement motivation had the strongest relationship to college GPA. Of the academic factors, both HSGPA and ACT Assessment scores had a stronger relationship to GPA than did SES, the strongest being HSGPA followed by ACT Assessment scores and SES. The overall relationship to college performance was strongest when ACT Assessment scores, HSGPA, and SES were combined with academic selfconfidence and achievement motivation."

Recommendations for Colleges and Universities:

- Determine their student characteristics and needs, set priorities among these areas of need, identify available resources, evaluate a variety of successful programs, and implement a formal, comprehensive retention program that best meets their institutional needs.
- Take an integrated approach in their retention efforts that incorporates both academic and non-academic factors into the design and development of programs to create a socially inclusive and supportive academic environment that addresses the social, emotional, and academic needs of students.
- Implement an early alert, assessment, and monitoring system based on HSGPA, ACT Assessment scores, course placement tests, first semester college GPA, socioeconomic information, attendance records, and non-academic information derived from formal college surveys and college student inventories to identify and build comprehensive profiles of students at risk of dropping out.
- Determine the economic impact of their college retention programs and their time to degree completion rates through a cost-benefit analysis of student dropout, persistence, assessment procedures, and intervention strategies to enable informed decision-making with respect to types of interventions required academic and non-academic, including remediation and financial support

Lotkowski, V.A., Robbins, S.B., Noeth, R.J. (2004). The Role of Academic and Non-Academic Factors in Improving College Retention. *ACT Policy Report*.

Reimagining Aid Design and Delivery.

This issue of Postsecondary Education Opportunity summarizes the reports that were published under the grants given by the Gates Foundation to 14 organizations to study and make recommendations under its Reimagining Aid Design and Delivery (RADD) initiative, between November 2012 and March 2013. These reports provide 14 different and fresh perspectives on the problems and potentials of the federal student financial aid hodgepodge. These new ideas will be discussed for years to come, and are already under review for the next reauthorization of the Higher Education Act.

"Specifically, the RADD project was designed:

- To shift the national conversation on federal financial aid away from incremental policy options aimed at reducing the annual cost of the federal Pell Grant program and towards a broader aid reform agenda which places a focus on achieving better outcomes for students, and
- To seed the field with innovative policy ideas in service of the first goal."

"These reports present a wide variety of creative, innovative, researched, thoughtful and constructive perspectives and recommendations on the different problems and needs of the federal student financial aid system."

14 Grantees	Broad Recommendations
Alliance for Excellent Education	Create institutional supports and accountability; Simplify the federal student aid system; Focus student aid on the highest-need students; Provide support for middle-class families.
Association of Public Land- Grant Universities	Redefine institutional eligibility for Pell Grants and Student Loans; Connect aid to degree progress; Put conditions on veterans/military benefits; Better target tax credits and reductions.
Center for Law and Social Policy	Make tax-based student aid simpler and more effective; Provide students, policymakers, and colleges with the facts they need, and create federal incentives for students and colleges to partner on college completion.
Committee for Economic Development	The federal Pell Grant and other campus-based programs should be consolidated into a single system focused exclusively on portable aid for low-income students; Elimination of federal tax credits; A "Race to the Top" for
	state-based financial aid programs; Determination of grant aid eligibility through the current tax system; Making income-based repayment the default option for students who use federal loan program.
Excelencia in Education	Make Pell grants an entitlement to guarantee financial support for low- income students; Revise the current expected family contribution calculation to determine more constructive levels of grant aid given the post-traditional student profile; Retain and strengthen work-study or campus employment
HCM Strategists	for low-income students; Revisit the campus-based program funding formula for uneven funding by geography and student eligibility; Provide a consistent amount of aid for students sufficient to minimize off-campus employment. Move toward a simpler aid system; Introduce "truth in lending" standards to the financial aid process; Light the fires of innovation by offering incentives
	to schools and states to use aid to support faster and cheaper ways to

	educate students, by reviewing and revising rules that tie innovators to a traditional academic calendar and fail to let older students progress and graduate at their pace, and by investing in research and development to experiment with new ways to target and deliver aid dollars; Sharing responsibility for the goal by encouraging student enrollment and completion by linking aid to educational outcome measures, and by rewarding colleges and students that exceed expectations.
Institute for Higher Education Policy	Promote early and coordinated preparation for college; Restructure or repurpose grant and loan delivery mechanisms; Provide incentives for completion; Reduce debt burdens and provide better repayment options for students.
National Association of Student Financial Aid Administrators	Examine the value of institutional and student "skin-in-the-game" through the use of a Super Pell to incentivize students to enroll in more credit hours, and by using a portion of campus-based funding to incentivize schools to create an environment that fosters better-than-predicted outcomes; Student loan reform; Streamline and improve consumer information; Rethink entitlement and professional judgment.
National College Access Network	Prioritize federal dollars for first-generation and low-income students while reshaping aid for those repaying their student loans; Continue to streamline the student aid application process and provide transparent, relevant information on student outcomes; Ensure that states and institutions share responsibility with the federal government to support graduation of low- income students, financially and through other assistance.
New America Foundation	Policymakers can achieve reforms at no additional cost to taxpayers by rebalancing existing resources and better aligning incentives for students and institutions of higher education. New American Foundation recommends specific changes to federal grants, loans, tax benefits, college outreach programs and federal regulations to provide more direct aid to the lowest- income students while strengthening accountability for institutions of higher education to ensure that more students are able to earn affordable, high- quality credentials.
Education Trust	Education Trust proposes to replace the current financial aid system with an up-front, no-loan guarantee to students from low-income families, and a no- interest loan guarantee to students from middle-income families. The federal government would consolidate most federal financial aid programs to provide grants to states based on the share of their students in poverty and performance on access, affordability, and success measures. Funds must be spent on education, and up to 20% may be spent on secondary school improvement.
Institute for College Access and Success	Simplify the student aid application process while better targeting and preventing fraud; More closely tie a college's eligibility for funding to the risk students take by enrolling and the risk taxpayers take by subsidizing it, and reward schools that serve students well; Secure and improve Pell Grants; With regard to students loans – reduce complexity, improve targeting, contain debt burdens, and encourage completion and wise borrowing; Streamline and improve targeting of higher education tax benefits; Provide students with key information when they need it.
Institute for a Competitive Workforce	Prioritize student and workforce needs; Increase transparency and provide better information about student aid and higher education institutions; Measure higher education outcomes, including student skills and knowledge; Streamline financial aid for students and families; Enhance affordability for those with the greatest need; Tie aid decisions to outcomes while ensuring quality.

Young Invincibles	Fully fund and invest in Pell Grants; Create a new program called PellWorks to retarget federal work-study dollars to schools that best connect school to work; Create a new program called PellPlus that target the lowest-income students and schools doing a better job of helping lowest-income students graduate; Overhaul our student loan system with a single, simple federal loan; Provide automatic enrollment the Income-Based Repayment; Increase transparency for students; Rethink and simplify tax incentives for higher education.
	euucation.

Reimagining Aid Design and Delivery. (2013, March). Funded by Bill and Melinda gates Foundation. *Postsecondary Education Opportunity*.

Creating the Case for a New Academic Advising Model at Winona State University: A Review of the Literature.

This paper includes a literature review of advising theories, models, and proven effectiveness, used by a working group at Winona State University charged with proposing an improved model for academic advising.

"The retention literature has long recognized academic advising as one of the three most effective strategies, along with academic support and orientation programs, for improving student success. Although there has not been a direct, causal relationship established between advising practices and retention, good advising promotes many outcomes that are also associated with a high rate of retention, such as student satisfaction, effective academic and career planning, goal setting, familiarity with and use of campus resources and support services, and student/faculty interaction outside the classroom."

"In addition to student satisfaction, academic and career planning, as well as goal-setting in general, are expected outcomes of good quality advising. These activities also impact a student's likelihood of staying in college. Research shows that most students, in fact about 75%, enter college without having made final decisions about majors and careers, because even those who declare a major right away are likely to change that major during their college experience. So most students are making these decisions while they are in college, and this exploration can and should be part of the academic advising experience."

Oertel, B. (2006). Creating the Case for a New Academic Advising Model at Winona State University: A Review of the Literature.

Completing College: A State-Level View of Student Attainment Rates.

One-third of first-time college students attend multiple institutions before earning a degree or certificate, but traditional graduation rate calculations are institution-based and count students who start as freshmen and finish at the same institution where they started.

This presentation is based on a new report by the National Student Clearinghouse that measures rates of first completion and subsequent completions, encompassing postsecondary credentials of all levels and types at any institution in any state, whether it is at the first, second, third, or more, institution attended. The report provides a state-by-state look at the various pathways that students take to complete a college degree or certificate, with a focus on six-year completion rates for students who started college in fall 2006.

Berman, H.J., (2013, March). Completing College: A State-Level View of Student Attainment Rates. Illinois Board of Higher Education and National Student Clearinghouse Research Center.

An Open Letter to College and University Leaders: College Completion Must Be Our Priority.

This report summarizes a yearlong effort by the National Commission on Higher Education Attainment to identify innovative repairs for colleges' leaky pipelines. The 18-member commission, including presidents from every college sector, was assembled in 2011 by the American Council on Education and five other national higher-education associations. The

What does the report say about Illinois *Strengths*:

Rankings of Illinois Public Universities:

- 5th in Total Completion Rate
- 6th in First Completion Rates At Starting Institutions
- 1st in Completion Rates for Part-Time Students
- 3rd in Completion Rates for Adult Learners (students over 24)

Rankings of Illinois Community Colleges:

- Above Average in Total Completion Rate (40.8% compared to 36.3% overall)
- 4th in Total Completion Rates for Full-Time Students
- 2nd in Subsequent Completion Rates for Full-Time Students
- 4th in Completion Rates for Students 24 and younger

What does the report say about Illinois *Weaknesses*:

- Encourage full-time attendance: 15-tofinish
- Develop strategies to boost completions of older, returning students

mandate came from President Obama, who has challenged the nation to have the world's highest proportion of people with college credentials by 2020.

As millions of low-skill, well-paying manufacturing jobs have been automated or outsourced, a growing number of positions require at least some postsecondary education, the report notes. College graduates are also more likely to land jobs with health insurance and retirement plans, are less likely to divorce, and are more likely to be tolerant and civically engaged, it adds.

But while a record number of students now attend college, too few of them graduate, and that's where colleges should be focusing more attention, the report notes.

First-generation, working, and part-time students far outnumber the 18- to 21-year-old residential students who used to be considered traditional, and the disparity is growing rapidly, the commission points out. They need flexible schedules, more financial help, and an efficient remediation system that doesn't discourage them so much that they drop out, it says.

"For all students, traditional or not," the report says, "offering access without a commitment to help students complete their degrees is a hollow promise."

The commission cautions colleges to reject two easy ways to increase their graduation rates: admitting only better-prepared students, which would limit access, and making it easier for students to pass, which would lower academic standards.

The commission's chairman, E. Gordon Gee, president of Ohio State University, said in a call with reporters that colleges should work closely with elementary and secondary schools and provide remediation for those who need it. But he added that "we can't be the Red Cross for public schools—we can't solve their problems."

After a year of hearings and deliberations, the group came to two main conclusions:

"First, we were dismayed that a country so rightfully proud of pioneering mass higher education through groundbreaking measures like the Morrill Land Grant Act, the GI Bill, and the

Three broad categories where reform is needed:

1. Changing campus culture to boost student success

Strategies:

- Assign ownership
- Implement initiatives campus-wide
- Study past mistakes
- Creating a student-centered culture
- Improve the academic experience
- Give credit for previous learning
- Provide support services for nontraditional students
- Teach the teachers

2. Improving cost-effectiveness and quality

Strategies:

- Offer flexibility to working adults
- Ease credit transfer
- Encourage competency-based learning
- Deliver courses more efficiently
- Narrow student choice to promote completion
- Improving remedial services
- Optimize non-core services

3. Making better use of data to boost success

Strategies:

- Pinpoint weaknesses in preparation
- Harness information technology to identify at-risk students
- Communicate with students about progress to graduation

Higher Education Act now faces unsatisfactory and stagnating college-completion rates," the report says. But it adds that the panel was encouraged by the innovative solutions some campuses have devised.

The colleges that have made the most progress start by looking closely at how many students they are graduating or helping transfer to another college, and then set specific goals for improvement, the commission says.

The University of Texas at Austin is a good example, the authors say, of an institution that identified barriers to completion and set out to knock them down. The university created an online tool to help students and their advisers chart progress toward a degree, get struggling students back on track, and identify bottleneck courses that students need to take but that lack the space for them.

Streamlining and accelerating remedial classes has also helped keep students enrolled, the group notes. California State University is trying to whittle down the numbers of students needing remediation by working with state education agencies to assess students' college readiness in their junior year of high school so they have another year to brush up their skills before they enter college.

Other successful efforts include using outside assessments to measure learning acquired outside the traditional classroom.

Among the challenges colleges face in providing academic support are a 25-percent drop, in real terms, in state support for higher education since 2008, the report notes.

The federal government's yardstick for measuring college completion, which treats transfer students as dropouts and doesn't count part-time students at all, also needs to be updated, the report says. The six associations are developing an alternative methodology for calculating completion rates that will follow full-time students wherever they're enrolled. They hope to expand it eventually to include part-time students.

Responsibility for improving completion rates also falls squarely in the laps of students, "who must show up for class, do the required work, and demonstrate mastery," the report notes. "Higher education demands active and engaged participation by those who enroll."

An Open Letter to College and University Leaders: College Completion Must Be Our Priority. (2013, January). National Commission on Higher Education. American Council on Education.

College Completion Agenda Progress Report for 2012.

This report outlines progress made on College Board's 10 college completion strategies. These strategies contribute to their national goal of increasing the proportion of 25- to 34-year-olds who hold an associate degree or higher to 55 percent by 2025.

Key findings from the report include:

- In 2010, our nation earned 257,772 more associate and bachelor's degrees than in 2008, the first year of reported data in the Completion Agenda.
- 43.1 percent of Americans age 25 to 34 hold a two- or four-year college degree, an increase of 2 percent from the 2009 figure.

- According to the most recently released international comparison figures, the U.S. moved from 16th to 14th of 36 nations in terms of the percentage of 25- to 34-year olds with an associate degree or higher.
- When looking at the attainment of bachelor's degrees and above for this age group, the U.S. ranks 11th.
- 90 percent of Americans ages 25 to 29 have a high school credential, up from 86 percent in 2006, and fully one-third have bachelor's degrees or higher.

College Completion Agenda Progress Report for 2012. (2013). College Board.

What Works in Student Retention: Four Year Public Colleges.

This report reflects ACT's three-decade commitment to assist colleges and universities to better understand the impact of campus practices on college student retention and degree completion. The findings are based on a survey that was sent to all accredited, degree-granting, two-year and four-year, public and private colleges with a final overall response rate of 35 percent and a four-year public response rate of 42 percent.

"Respondents from four-year public colleges are far more likely to attribute attrition to student characteristics than they are to attribute attrition to institutional characteristics.

• Of 24 institutional characteristics contributing to attrition, respondents identified only five factors that made a moderate or higher contribution: amount of student financial aid available, student-institution fit, student involvement in campus life, academic advising, and social environment.

Retention practices responsible for the greatest contribution to retention in four-year public colleges fall into three main categories:

- Academic advising: including advising interventions with selected student populations, increased advising staff, academic advising center, integration of academic advising with first-year transition programs and centers that combine advising and counseling with career/life planning
- First-year programs: including freshman seminar/university 101 for credit, non-credit freshman seminar/university 101, learning communities, and integration of academic advising with first-year programs
- Learning support: including supplemental instructions, a comprehensive learning assistance center/lab, reading center/lab, summer bridge program, and tutoring program

• Of 20 student characteristics contributing to attrition respondents identified 16 factors that made a moderate or higher contribution. Student characteristics cited as having the greatest impact were inadequate financial resources, lack of motivation to succeed, inadequate preparation for college level work, poor study skills, and too many job demands."

Several retention practices at high-performing (retention and degree completion) four-year public colleges differentiate those colleges from low-performing colleges. Those practices are:

advising interventions with selected student populations,

- increased advising staff,
- comprehensive learning assistance center/lab,
- integration of advising with first-year programs,
- center that combines academic advising with career/life planning,
- summer bridge program,
- non-credit freshman seminar/university 101,
- recommended course placement testing,
- performance contracts for students in academic difficulty,
- residence hall programs, and
- extended freshman orientation for credit.

"When asked to identify three campus retention practices that had the greatest impact on student retention, four-year public college respondents identified:

- freshman seminar/university 101 for credit (20.2%),
- learning communities (18.4%),
- advising interventions for selected student populations (12.3%), and

The remaining practices were cited by less that 10% of the colleges."

"Recommendations:

- Designate a visible individual to coordinate a campus-wide planning team.
- Conduct a systematic analysis of the characteristics of your students.
- Focus on the nexus of student characteristics and institutional characteristics.
- Carefully review the high impact strategies identified in through the survey.
- Do not make first to second year retention strategies the sole focus of planning team efforts.
- Establish realistic short-term and long-term retention, progression, and completion goals
- Orchestrate the change process.
- Implement, measure, improve!"

Habley, W.R., McClanahan, R. (2004). What Works in Student Retention: Four Year Public Colleges. *ACT Report*.

Entering a Program: Helping Students Make Academic and Career Decisions.

"In this literature review, the author examines the evidence on student decision making in the community college, focusing on the activities most relevant to students' entry into programs of study—academic and career planning. Although there is a large body of theoretical discussion and empirical evidence on potentially effective approaches to guidance and counseling, a review of current advising and counseling practices reveals barriers to effective implementation of these approaches on community college campuses. As currently structured, community college advising is limited in its ability to assist students in identifying career goals and academic pathways that will help them achieve those goals. The literature reviewed in this paper points to four broad principles to guide restructuring efforts: (1) that program pathways should balance structure with exploration; (2) that career counseling should drive an integrated approach to advising; (3) that colleges should provide services to students based on their level of need; and (4) that colleges should strategically deploy resources to allow for developmental advising."

Karp, M.M., (2013, May). Entering a Program: Helping Students Make Academic and Career Decisions. Community College Research Center, Teachers College, Columbia University. CCRC Working Paper No. 59.

National survey of counseling center directors 2011.

"The National Survey of Counseling Center Directors has been conducted since 1981 and includes data provided by the administrative heads of college and university counseling centers in the United States and Canada. The survey attempts to stay abreast of current trends in counseling centers and to provide counseling center directors with ready access to the opinions and solutions of colleagues to problems and challenges in the field. The areas addressed cover a range of concerns including budget trends, current concerns, innovative programming, and a number of other administrative, ethical and clinical issues."

• "The 228 centers surveyed represent 2.3 million students who are eligible for counseling services at their institutions. 165,000 of these students (10.6 %) sought counseling during the year for individual or group counseling, and the ratio of counselors to clients, on average, was 1 to 1,600 students with smaller schools having much better ratios. In addition 30% of the students in the surveyed schools were seen in other contexts (workshops, orientations, classroom presentations, etc.)"

• "33% of centers tend to place limits on the number of client counseling sessions allowed. 44% do not have a session limit policy but promote their centers as a short-term service and rely on counselors to make responsible judgments about how long a student can be seen. 23% tend to see students as long as necessary to resolve the presenting problems but will make external referrals when clinically advisable. The average number of sessions per student across all categories is 5.6. Based on earlier surveys this average tends to be approximately the same for time-limited counseling centers and for centers that do not have formally established limits."

• 91% of directors report that the recent trend toward greater number of students with severe psychological problems continues to be true on their campuses. In addition, over the past five years, the following percentage of directors have noted increases in the following problems:

- o 78% Crises requiring immediate response.
- o 77% Psychiatric medication issues.
- o 62% Learning disabilities.
- o 49% Illicit drug use (Other than alcohol).
- o 42% Self-injury issues (e.g. Cutting to relieve anxiety).
- o 42% Alcohol abuse.
- o 30% Problems related to earlier sexual abuse.
- o 25% Career Planning issues
- o 24% Eating disorders
- o 23% Sexual assault concerns (On campus).

Gallagher, R.P. (2011) National survey of counseling center directors 2011. Alexandria, VA: International Association of Counseling Services. Retrieved from www.iacsinc.org.

A Matter of Degrees: Promising Practices for Community College Student Success (A First Look).

"Community colleges across the country have created innovative, data-informed programs that are models for educating underprepared students, engaging traditionally underserved students, and helping students from all backgrounds succeed. However, because most of these programs have limited scope, the field now has pockets of success rather than widespread improvement. Turning these many small accomplishments into broad achievement — and improved completion rates — depends on bringing effective programs to scale."

"This report describes 13 promising practices in community colleges. Over the next three years, the Center will conduct additional data analysis, hold focus groups with students and faculty members, and continue the review of efforts under way in community colleges. This work will contribute significant new knowledge about high-impact educational practices and how they are associated with student engagement, persistence, and completion in community colleges."

"This first look describes the promising practices from four perspectives: entering students describing their earliest college experiences, students addressing their overall college experiences, faculty members providing their perceptions of student engagement, and colleges focusing on their use of the practices. There is emerging consensus that certain design principles are critical for student success. No matter what program or practice a college implements, it is likely to have a greater impact if its design incorporates the following principles:

• A strong start. Focusing attention on the front door of the college — ensuring that students' earliest contacts and first weeks incorporate experiences that will foster personal connections and enhance their chances of success — is a smart investment.

• **Clear, coherent pathways**. The many choices and options students face as they endeavor to navigate through college systems can create unnecessary confusion — and inhibit students' success. Colleges can improve student success (and minimize ill-used time) by creating coherent pathways that help students move through an engaging collegiate experience.

• Integrated support. Time is a resource — one of the most important resources a college has — and it is finite. A large part of improving success involves effectively connecting with students where they are most likely to be: in the classroom. This means building support, such as skills development and supplemental instruction, into coursework rather than referring students to services that are separate from the learning experience.

• **High expectations and high support**. Students do their best when the bar is high but within reach. Setting a high standard and then giving students the necessary support — academic planning, academic support, financial aid, and so on — makes the standard attainable.

• Intensive student engagement. Promoting student engagement is the overarching feature of successful program design, and all other features support it. In design and implementation of the collegiate experience, colleges must make engagement inescapable for their students.

• **Design for scale**. Bringing practices to scale requires a long-term commitment of time and money. Securing and maintaining this commitment requires significant political, financial, and human capital. In addition to allocating — and reallocating — available funding, colleges must genuinely involve faculty, staff, and students."

A Matter of Degrees: Promising Practices for Community College Student Success (A First Look). (2012). Center for Community College Student Engagement. The University of Texas at Austin, Community College Leadership Program.

What Can a Multifaceted Program Do for Community College Students? Early Results from an Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students.

"In recent years, there has been unprecedented national focus on the importance of increasing the stubbornly low graduation rates of community college students. Most reforms that have been tried are short-term and address one or only a few barriers to student success. The City University of New York's (CUNY's) Accelerated Study in Associate Programs (ASAP), launched in 2007 with funding from Mayor Bloomberg's Center for Economic Opportunity (CEO), is an uncommonly multifaceted and long-term program designed to help community college students graduate.

ASAP requires students to attend college full time and provides a rich array of supports and incentives for up to three years, with a goal of graduating at least 50 percent of students within three years. Unlike many programs, ASAP aims to simultaneously address multiple barriers to student success over many semesters. The program model includes some block-scheduled classes for ASAP students for the first year of the program; an ASAP seminar for at least the first year, which covers such topics as goal-setting and academic planning; comprehensive advisement; tutoring; career services; a tuition waiver that covers any gap between a student's financial aid and tuition and fees; free MetroCards for use on public transportation; and free use of textbooks.

This report presents very promising early findings from a random assignment study of ASAP at three CUNY community colleges: Borough of Manhattan, Kingsborough, and LaGuardia. For the study, ASAP targets low-income students who need one or two developmental (remedial) courses to build their reading, writing, or math skills. The study compares ASAP with regular services and classes at the colleges. Key findings include effects on:

• Full-time enrollment. During the study's first semester, ASAP increased full-time enrollment by 11 percentage points: 96 percent of the students assigned to ASAP enrolled full time, compared with 85 percent of the comparison group.

• Credits earned and completing developmental coursework. ASAP increased the average number of credits earned during the first semester by 2.1 credits and increased the proportion of students who completed their developmental coursework by the end of that semester by 15 percentage points.

• Semester-to-semester retention. ASAP increased the proportion of students who enrolled in college during the second semester by 10 percentage points and increased full-time enrollment that semester by 21 percentage points.

ASAP's early effects are larger than the effects of most of the community college programs MDRC has studied previously. ASAP's comprehensive package of financial aid, services, and supports, together with its full-time attendance requirement, has resulted in students taking and passing more credits than they would have otherwise. Future reports will show whether these effects can be sustained - or even grow - as students continue in this comprehensive, three-year program." (Summary from MDRC web site.)

Scrivener, S., Weiss, M.J., Sommo, C. (2012, June). What Can a Multifaceted Program Do for Community College Students? Early Results from an Evaluation of Accelerated Study in Associate Programs (ASAP) for Developmental Education Students. New York, NY: MDRC.

More Guidance, Better Results? Three-Year Effects of an Enhanced Student Services Program at Two Community Colleges.

"Over the past four decades, community colleges have played an increasingly important role in higher education. Today, community colleges — which are accessible and affordable, relative to four-year institutions — enroll more than one in every three postsecondary education students. Unfortunately, among students who enroll in community colleges with the intent to earn a credential or transfer to a four-year institution, only 51 percent achieve their goal within six years. These students may face fewer difficulties and make better academic progress if they had better access to, or more adequate, student services, but, as it stands, student-to-counselor ratios at community colleges are often more than 1,000 to 1, limiting the assistance that students receive.

As part of MDRC's multisite Opening Doors demonstration, Lorain County Community College and Owens Community College in Ohio ran a program that provided enhanced student services and a modest stipend to low-income students. Students in the Opening Doors program were assigned to one of a team of counselors, with whom they were expected to meet at least two times per semester for two semesters to discuss academic progress and resolve any issues that might affect their schooling. Each counselor worked with far fewer students than did the regular college counselors, which allowed for more frequent, intensive contact. Participating students were also eligible for a \$150 stipend for two semesters, for a total of \$300.

To estimate the effects of the program, MDRC worked with the colleges to randomly assign students either to a program group, whose members were eligible for the Opening Doors services and stipend, or to a control group, whose members received standard college services and no Opening Doors stipend. Any subsequent substantial differences in academic and other outcomes can be attributed to the program. This study's findings include the following:

• The program improved academic outcomes during the second semester that students were in the study. Program group students registered for at least one course during the second semester at a higher rate than did control group students and earned an average of half a credit more during the semester. The registration impact is likely primarily the effect of Opening Doors services provided during the first semester. The program did not substantially affect outcomes during the first semester.

• After students in the Opening Doors program received their two semesters of enhanced counseling services, the program continued to have a positive effect on registration rates in the semester that followed. The program did not, however, meaningfully affect academic outcomes in subsequent semesters. The program did not significantly increase the average number of credits that students earned after the counseling program ended or over the study's three-year follow-up period." (summary from MDRC web site.)

Scrivener, S., Weiss, M.J. (2009, August). More Guidance, Better Results? Three-Year Effects of an Enhanced Student Services Program at Two Community Colleges. New York, NY: MDRC.

Student success courses and educational outcomes at Virginia community colleges.

Community colleges are interested in providing support for students that improves student success, leading to increased completion rates. This report uses data from the Virginia Community College System to examine whether early enrollment in a student success course has positive academic outcomes for students, especially those in developmental education. The study finds that among all students, those who enroll in a student success course are more likely to earn college-level credits in their first year and persist to the second year, but also that students referred to developmental education are more likely to earn college-level credits within the first year if enrolled in a student success course.

Cho, S.W., & Karp, M.M. (2012). Student success courses and educational outcomes at Virginia community colleges (CCRC Working Paper No. 40). New York, NY: Columbia University, Teachers College, Community College Research Center.

Toward a New Understanding of Non-Academic Student Support: Four Mechanisms Encouraging Positive Student Outcomes in the Community.

"Despite their best efforts, community colleges continue to see low rates of student persistence and degree attainment, particularly among academically vulnerable students. While low persistence and degree attainment can be attributed in large part to students' academic readiness, non-academic issues also play a part. This paper examines programs and practices that work to address the non-academic needs of students.

A review of the literature on non-academic support yields evidence of four mechanisms by which such supports can improve student outcomes: (1) creating social relationships, (2) clarifying aspirations and enhancing commitment, (3) developing college know-how, and (4) addressing conflicting demands of work, family and college. Identifying these mechanisms allows for a deeper understanding of promising interventions and the conditions that may lead students to become integrated into college life.

Each of these mechanisms can occur within a variety of programs, structures, or even informal interactions. The paper concludes by discussing implications for community colleges."

Karp, M.M. (2011) Toward a New Understanding of Non-Academic Student Support: Four Mechanisms Encouraging Positive Student Outcomes in the Community College (CCRC Working Paper No. 28: Assessment of Evidence Series) New York, NY: Columbia University, Teachers College, Community College Research Center.

Academic Advising and First-Generation College Students: A Quantitative Study on Student Retention.

"For this quantitative study, a multiple logistic regression technique was used to investigate the relationship between the number of meetings with an academic advisor and retention of first-generation students, as represented by enrollment status and academic standing at a large, public

research institution in the Southeast. Consistent with previous studies and student retention literature, the number of advisor meetings (independent variable) was a significant predictor of student retention. Findings from this study suggest that for every meeting with an academic advisor, the odds that a student will be retained increase by 13%."

Swecker, H.K., Fifolt, M., Searby, L. (2013) Academic Advising and First-Generation College Students: A Quantitative Study on Student Retention. *NACADA Journal*: Spring, Vol. 33, No. 1, pp. 46-53.

This study that Steve Rock suggested requires you to pay for a subscription to the NACADA Journal.

RPPA, 10/8/13