

Widening Participation in Higher Education in the United States of America

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Contents

1 Introduction	6
Equality of opportunity – core United States (U.S.) constitutional and founding goal	6
The shift from widening participation (WP) to universal participation	6
Education as the engine of social mobility and increased inequality in wages	7
2 Elementary and secondary education in the U.S.	10
Number of schools and enrolment	10
Decentralized local and State governance	10
Implications of the secondary, elementary and pre-school education systems on access to HE	10
High school graduation rate differences by income levels	12
3 Overview of Higher Education (HE) in the U.S.	14
Number, enrolment and types of institutions	14
Degrees conferred and major fields of study	15
Undergraduate fields of study	15
Admissions process and student mobility	16
Funding for HE	18
4 Widening participation (WP) statistics	21
Rates of attainment	21
Degrees earned	23
Differences in continuation, retention and completion	25
Retention and completion rates	26
Research on why U.S. students leave college	28
5 Widening participation policy	30
Elementary and secondary education policy	30
Postsecondary education policy	31
6 Target groups for WP	34
Target groups overview	34

Minority serving institutions	35
7 Widening pre-college access strategies	37
Pre-college access program overview	37
Federal access program descriptions and evaluation results	41
Examples of selected other private non-profit and State programs	48
8 Retention, completion and progression	52
Federal access program descriptions and evaluation results	53
Strategies to increase college completion	54
Correlational and value added studies	56
9 Financial support	57
Variation between institution types	58
Student loan defaults	59
The rise of for-profit educational institutions	61
Studies of the effectiveness of financial aid	63
10 Critical review	66
The universal participation concept	66
Supplemental services strategies for college access	69
Strategies for college support after entrance into college	70
Financing HE strategies	71
Evaluation methods	73
11 Conclusions	74
Appendix 1 References	75
Appendix 2 List of abbreviations	83

1| Introduction

“Education, beyond all other devices of human origin is the great equalizer of the conditions of men, the balance-wheel of the social machinery.” Horace Mann, 19th Century American Educator.

Equality of opportunity – core United States (U.S.) constitutional and founding goal

- 1.1 The U.S. has a core constitutional and founding commitment to equality of opportunity for all citizens and the first official mission of the U.S. Department of Education was simply stated as to “ensure equal access to education”. Reflecting increased emphasis on concern with academic achievement and competitiveness levels, this mission statement was revised in 2005 under the Republican Bush Administration to “promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access”¹.

The shift from widening participation (WP) to universal participation

- 1.2 After WWII and into the 1990s, the U.S. prided itself on being a country with among the highest levels of educational attainment and also being a land of exceptional educational opportunity. A major report summarizing the National Postsecondary Education Cooperative (NPEC) and American Council on Education (ACE) Policy Panel on increasing college access in 1998 wrote “Our nation’s system of higher education enjoys the highest participation rates in the world”². By a decade later, the OECD³ yearly data on international college attainment rates led to a growing awareness that the U.S. was falling behind other countries. By 2012, it had fallen to 11th in Bachelor’s (BA) attainment rankings and 13th in any postsecondary degree attainment for the population aged 25 to 35⁴.
- 1.3 At the start of his first term, President Obama challenged American citizens to commit to universal participation in postsecondary for their own benefit and that of the country:

I ask every American to commit to at least one year or more of higher education or career training. This can be community college or four-year school; vocational training or an apprenticeship. But whatever the training

¹ The U.S. Department of Education’s mission statement is at <http://www2.ed.gov/about/overview/mission/mission.html>

² National Postsecondary Education Cooperative (NPEC), (1998) Reconceptualizing Access in Postsecondary Education and its Ramifications for Data Systems, Report of the Policy Panel on Access, Ruppert, Sandra.

³ Organization for Economic Co-operation and Development (OECD)

⁴ OECD, (2010-2012) Education at a glance (various years 2010-2012) OECD indicators. OECD Publishing.

may be, every American will need to get more than a high school diploma. And dropping out of high school is no longer an option. It's not just quitting on yourself, it's quitting on your country – and this country needs the values and the talents of every American. That is why we will provide the support necessary for you to complete college and meet a new goal: by 2020, America will once again have the highest proportion of college graduates in the world. [President Obama, Address to a Joint Session of Congress, February 24, 2009](#)

Education as the engine of social mobility and increased inequality in wages

- 1.4 While the U.S. has the national goals articulated by President Obama and previous recent administrations that the country work to support each student for college readiness and universal college completion, public financial support for postsecondary education at the State and local level has been declining and is at its lowest levels since 1980⁵. The additional costs have been passed on to students in the form of increased tuition and fees that have increased faster than inflation⁶. At the same time that college cost has dramatically increased, the median family income has declined in real terms and income inequality has increased⁷. In the U.S., large disparities by family income continue to characterize college completion opportunities (see figure 1.1 below). As the U.S. Census Bureau figure shows, Bachelor's (BA) degree attainment by age 24 was 40 percent in 1970 for the top family income quartile and by 2010 had increased to about 80 percent. In contrast, among the lowest family income quartile Bachelor's attainment by age 24 was about 6 percent in 1970 and was estimated to be between 8 and 11 percent in 2009 and 2010⁸.
- 1.5 Moreover, employment opportunities and salaries are increasingly determined by education with growing wage differentials between those with college degrees and those who do not have such credentials. This differential is one of the contributors to the general increases in the inequality levels within the U.S. and as Carnevale and Strohl (2009) note, a loss of middle class status for those who do have postsecondary credentials⁹.
- 1.6 Thus, paradoxically, the U.S. higher education (HE) system functions both as an engine of social mobility and as the major engine of inequality within the so-called "merit" based society. Rates of college attainment continue to differ greatly by family income quartiles and parent educational level. Likewise, studies have found that a

⁵ Mortenson T, State Disinvestment in Higher Education (February 2013), Postsecondary Education Opportunity Newsletter, number 248, http://www.postsecondary.org/last12/248_213pg1_20.pdf

⁶ The College Board, Trends in College Pricing, 2012, <http://trends.collegeboard.org/sites/default/files/college-pricing-2012-full-report-121203.pdf>

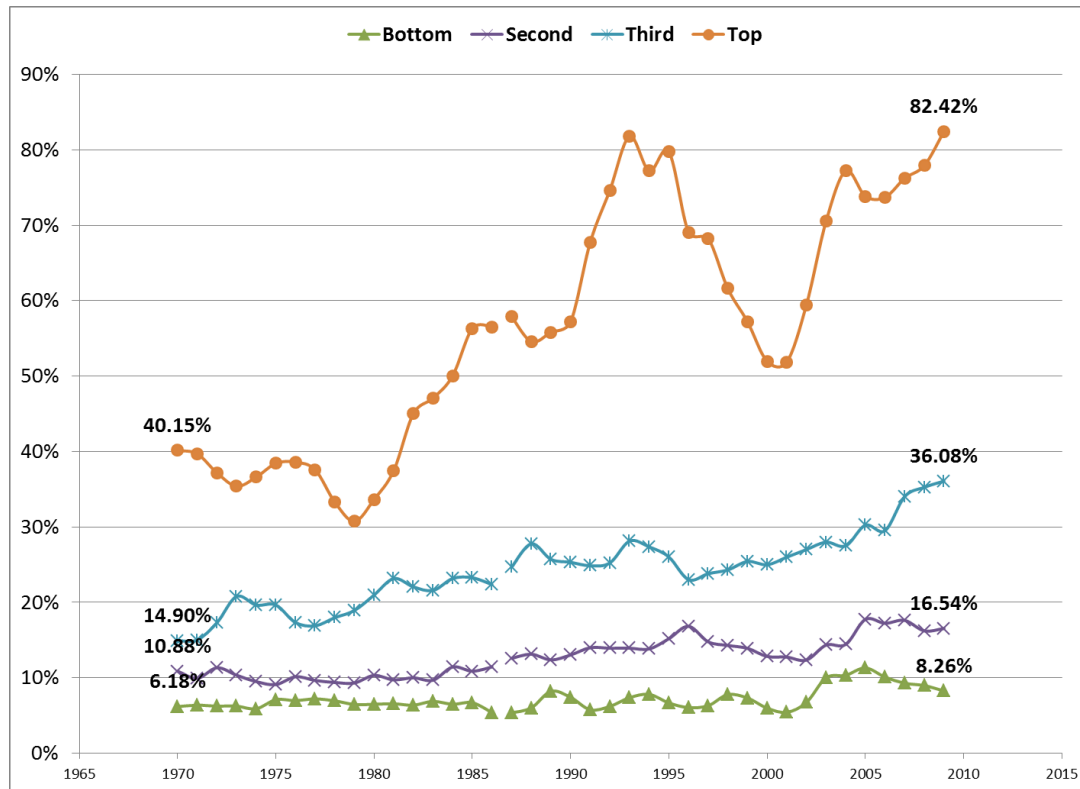
⁷ U.S. Census Bureau, American Community Survey, 5-Year Estimates, <http://factfinder2.census.gov>

⁸ U.S. Census Bureau, 1970-2006, p20 table 14, Report on School Enrolment 2007-2009, unpublished census tabulations. Analysis by Tom Mortenson; Graph prepared by the Pell Institute of the Council for Opportunity in Education (COE) (October 2011)

⁹ Carnevale A and Strohl J, How Increasing College Access is increasing Inequality and What to Do About it? In Rewarding Strivers, 2009

student's academic performance and educational attainment continue to be most strongly predicted and mediated by family income and parent education¹⁰. This situation forms the back drop for the current policy conversation within the U.S.

Figure 1.1: Bachelor's degree by age 24 by family income quartiles, 1970-2009



Source: U.S. Census Bureau, 1970–2006, p20 table 14, Report on School Enrolment 2007–2009 unpublished census tabulations. Analysis by Tom Mortenson; graph prepared by the Pell Institute of the Council for Opportunity in Education (COE) (October 2011)

¹⁰ Cahalan, M. AERA presentation, April 2007, Chicago Illinois, Exploring Demographic and Selected State Policy Correlates of Educational Attainment and Achievement Indicators, <http://www.slideshare.net/cheardsdotorg/exploring-demographic-and-selected-state-policy-correlates-of-state-level-educational-attainment-and-achievement-indicators-aera2007-cahalan>

- 1.7 This case study presents an overview of U.S. widening college participation in the current period with documentation of historical context and recent trends. It is presented in 11 sections as outlined in the template as follows:

Sections of the U.S. Case Study	
1. Introduction	6. Target groups for widening participation
2. Elementary and Secondary Education in the U.S.	7. Widening pre-college access strategies
3. Overview of Higher Education (HE) in the U.S.	8. Retention, completion, progression strategies
4. Widening participation statistics	9. Financial support
5. Widening participation policy	10. Critical review
	11. Conclusion

2| Elementary and secondary education in the U.S.

Number of schools and enrolment

- 2.1 Total U.S. public school Kindergarten to 12th grade (K-12) enrolment was about 49 million in 2010 and private school enrolment was about 5 million. About 90 percent of U.S. children attend public schools. Public schools are administered at the local level by about 13,629 local school districts. During most of the last century, the trend to consolidate small schools brought declines in the total number of public schools in the U.S. In academic year 1929–30, there were approximately 248,000 public schools, compared with about 99,000 in 2009–10¹¹.
- 2.2 A small but growing number of public schools (about 5,000) serving about 1.6 million students called Public Charter Schools are administered under a Charter granted by the local school district or by the State. Charter schools are considered to be public schools, and eligible for funding comparable to the cost per student of regular public schools; however, they have more leeway in setting policy and curriculum within certain frameworks of their charter. About 3 percent of public school students are in Charter schools, which more frequently serve low-income students.

Decentralized local and State governance

- 2.3 In the decentralized U.S. system, policies concerning education are set by the State and by the 13,000 local districts, each of which has a local school board. The local school districts differ widely in the amount of resources available and the U.S. neighborhoods are highly stratified by income level and the reputation of the school systems. Increasingly, the U.S. Federal government influences policy by requiring local districts and States to enact Congress's legislative policy and the Administration's priority policies in order to receive Federal funding. This funding is especially critical to the functioning of poor districts with high needs and a low tax base. Elementary and secondary education is financed primarily through local real estate taxes.

Implications of the secondary, elementary and pre-school education systems on access to HE

- 2.4 Although all students have equal access to elementary and secondary education through the public school system, it is widely recognized that all public schools are not the same. Following the recession of 2008, there were increases in the number and percent of children in the U.S. eligible for free or reduced lunch (a major indicator of poverty) and this number reached an unprecedented 49 percent by 2010, up from

¹¹ U.S. Department of Education, National Center for Education Statistics (NCES), Digest of Education Statistics, 2012, <http://nces.ed.gov/Programs/digest/>

about 36 percent in the previous decade¹². High poverty schools (defined as schools that serve a high proportion of children eligible for free lunch) are more common in urban areas than in suburbs, and Black and Hispanic students are more likely to attend these schools than White students. The U.S. Department of Education's annual publication the *Condition of Education* 2012 reports that 33 percent of students in city schools were enrolled in high poverty schools, compared with 14 percent in suburban schools¹³.

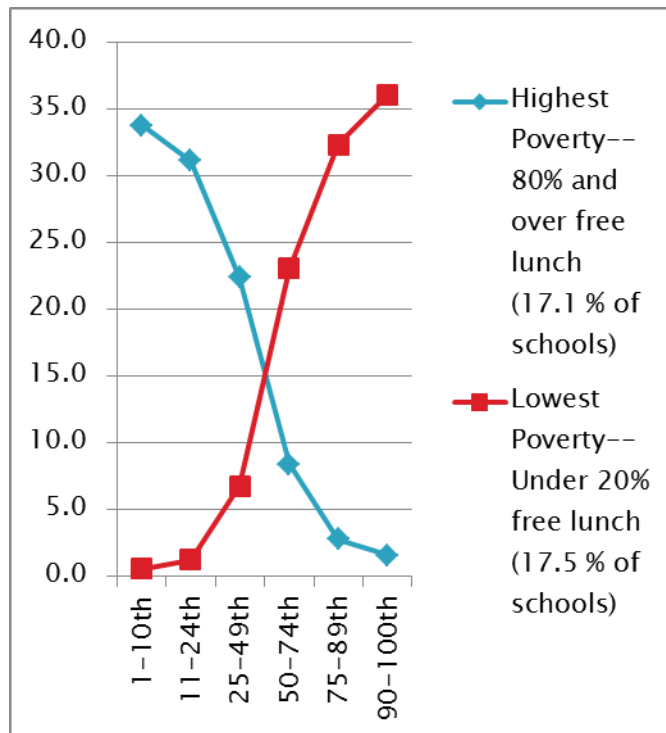
- 2.5 At the elementary school level in 2009–10, 46 percent of Black, 45 percent of Hispanic and 35 percent of American Indian/Alaska Native students attended high poverty schools, compared with 14 percent of Asian/Pacific Islander and 7 percent of White students. At the secondary school level, higher percentages of Hispanic (21 percent), Black (21 percent) and American Indian/Alaska Native students (17 percent) attend high poverty public schools.
- 2.6 Data from government and other sources have continuously indicated that the quality and outcomes of the elementary and secondary schooling vary according to the schools' and the students' socio-economic status. Students from schools with a high proportion of low-income families are less likely to score high on standardized tests, to graduate from high school and to continue to and complete college.¹⁴ The figure below is based on all elementary and middle schools in the U.S. and shows that only 1.6 percent of the highest poverty schools were in the 90–100th percentile in reading in their State compared with 36.1 percent of lowest poverty schools (tabulated 2010 by author based on ED-Facts Data). Conversely, 0.5 percent of the lowest poverty schools (under 20% free lunch) were at or below the 10th percentile on reading proficiency; while 33.8 percent of highest poverty schools (80% or above free lunch) were at or below the 10th percentile in their State.

¹² U.S. Department of Education, National Center for Education Statistics (NCES), (2012) Digest of Education Statistics, 2011, <http://nces.ed.gov/Programs/digest/>

¹³ U.S. Department of Education, National Center for Education Statistics (NCES), (2013) Digest of Education Statistics, 2012, <http://nces.ed.gov/Programs/digest/>

¹⁴ Orlich D and Gifford G, Test Scores, Poverty and Ethnicity: The New American Dilemma Phi Delta Kappa "Summit on Public Education," Washington, D.C.

Figure 2.1: Inverse relationship between percent eligible for free lunch (poverty indicator) and a school's proficiency score percentile ranking within their State: U.S. middle and elementary schools, 2009–2010



Source: Unpublished tabulation by Cahalan, 2010, based on U.S. schools reporting percent proficient to the U.S. Department of Education ED-Facts Reporting System; 2009–10 reporting year

High school graduation rate differences by income levels

2.7 Within the U.S., the legal mandatory school age for entrance and exit is set by the States and historically has been between the ages of 6 and 16, respectively, which would typically be at the completion of the 10th grade on average. The American Education Association (AEA) has been recommending that States require earlier entrance and later exit and ideally would mandate school entrance at 5 years and not allow exit until 18, and there is a trend in this direction. However, currently States vary with some having added mandatory kindergarten for 5 year olds but the exit age remains at 16. Currently in most States (for example, Maryland and Delaware), compulsory education age is between 5 years old and 16 years old. In other states (for example, California and Wisconsin), compulsory education is between 6 years old and 18 years old.¹⁵

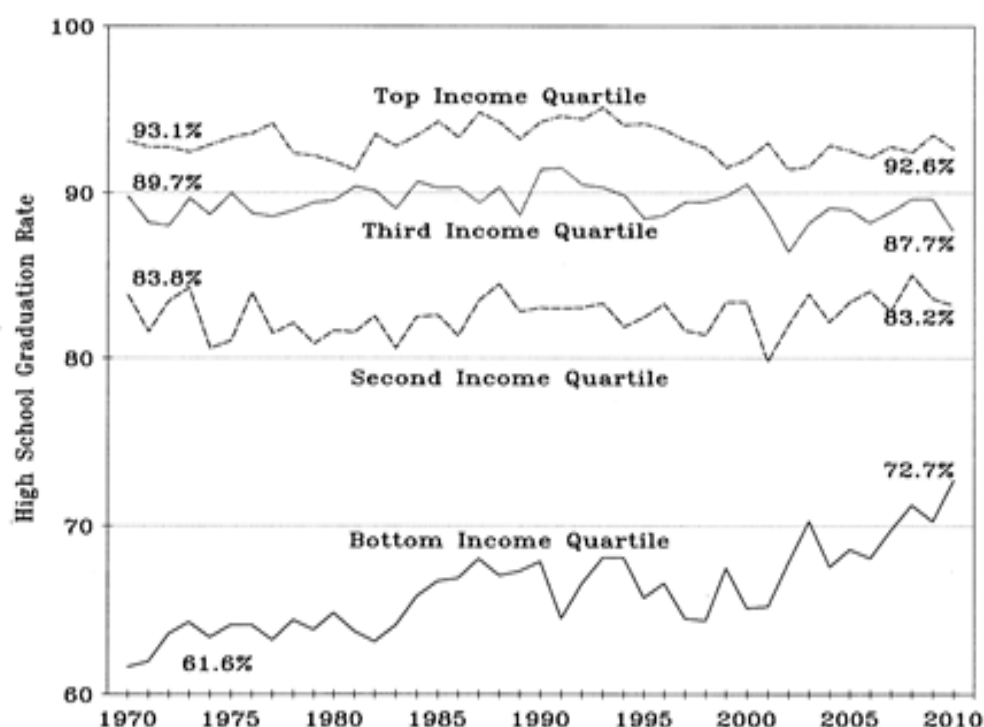
2.8 The National Center for Education Statistics (NCES) reports that among students living in low-income families (bottom 20 percent of family income) the high school dropout rate as reported to the Census Bureau was about five times greater than that for students from high income families (top 20 percent).¹⁶ NCES also reported that 68

¹⁵ State Compulsory School Attendance Laws, <http://www.infoplease.com/ipa/A0112617.html>

¹⁶ Aud, S., Hussar, W., Planty, M., Snyder, T., Bianco, K., Fox, M., Frohlich, L., Kemp, J. and Drake, L. (2010) The Condition of Education 2010 (NCES 2010-028). National Center for Education Statistics, Institute of Education

percent of 12th grade students in high poverty schools (i.e. more than 75 percent of students qualify for reduced or free lunch), graduated with a regular high school diploma in 2007–08, compared to 91 percent of low poverty schools (where 25 percent or less students qualify for reduced or free lunch).¹⁷ Similar data is illustrated in figure 2.2 from the Census Bureau in which high school graduation rates are 93 percent among the highest quartile and 73 percent among the lowest quartile.

Figure 2.2: High school graduation rates by family income quartiles for dependent 18 to 24 year olds, 1970 to 2010



Source: US Bureau of the Census, Current Population Survey various years (1970 to 2010). Chart prepared by Tom Mortenson, Postsecondary Opportunity Newsletter

- 2.9 Taken together, despite the fact that there is no dominant pattern of early streaming of students by classifying some students and or schools as college bound, and public schools are open to all U.S. residents, there is a great difference in rates of graduation and college going. Because of neighborhood segregation by family income level, students who are born to poor families are likely to be in schools with other poor children and are less likely to score proficiently, complete high school and attend college.

Sciences, U.S. Department of Education. Washington, DC Online Available:
<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2010028>

¹⁷ Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., Wang, X. and Zhang, J. (2012) The Condition of Education 2012 (NCES 2012-045). U.S. Department of Education, National Center for Education Statistics. Washington, DC. from <http://nces.ed.gov/pubsearch>

3| Overview of Higher Education (HE) in the U.S.

Number, enrolment and types of institutions

- 3.1 The U.S. HE system is complex and highly stratified. It is influenced by historical conditions of slavery and racial and economic segregation, and the presence of State and local differences. Title IV institutions are accredited institutions that enter into an agreement with the Federal government for their students to be eligible for Federal aid. There are about 7,200 Title IV postsecondary institutions in the U.S., but about 2,700 are career and technical colleges that do not grant academic postsecondary degrees. Taken together the 4,500, 2-year or 4-year academic degree granting accredited Title IV institutions were serving about 21 million students by 2010 (up from about 14 million a decade ago). About 75 percent of postsecondary enrolments are in public institutions, 15 percent in private non-profit and 10 percent in the private for-profit sector. While the private for-profit sector enrolls about 10 percent of students, it is the fastest growing sector, making use of technology with on-line degree granting programs. About 25 percent of Federal Pell Grant need-based aid goes to the private for-profit sector.
- 3.2 Of the 4,500 degree granting institutions, about 300 are institutions that are considered research universities that grant doctoral degrees, with about 108 of these classified as the “major research universities”. Typically each of the 51 U.S. States has at least one flagship university that is a major research university. In addition, there are about 700 institutions that award Masters' degrees as the highest degree. In addition, there are about 700 BA and BS degree granting institutions that have smaller enrolments. These range from highly selective small liberal arts colleges to liberal and open admissions schools. There are about 1,500 Associate's and other degree or certificate granting Title IV institutions.
- 3.3 About 44 percent of undergraduates are enrolled in 2-year institutions. Among minorities this is higher, being 47 percent among Blacks, 58 percent among Hispanics and 52 percent among American Indians¹⁸.
- 3.4 By 2007–08, about 4.3 million U.S. undergraduate students, or 20 percent of all undergraduates, took at least one distance education course. About 0.8 million, or 4 percent of all undergraduates, and about 9 percent of graduate students took their entire program through distance education. More recent data would be expected to show higher rates.

¹⁸ The U.S. Department of Education, National Center for Education Statistics (NCES), (2007) Characteristics of Minority-Serving Institutions and Minority Undergraduates Enrolled in These Institutions: Postsecondary Education Descriptive Analysis Report (NCES 2008-156), Xiaojie Li

Degrees conferred and major fields of study

- 3.5 As reported using data from the Department of Education's Integrated Postsecondary Data System (IPEDS), between academic years 1999–2000 and 2009–10, the number of postsecondary degrees conferred by public, private for-profit, and private non-profit institutions increased for each level of degree.¹⁹ The number of Associate's degrees awarded increased by 50 percent, Bachelor's degrees increased by 33 percent, Master's degrees increased by 50 percent and Doctor's degrees increased by 34 percent. For all postsecondary degree levels, the percentage increases from 1999–2000 to 2009–10 were smaller for public and private non-profit institutions than for private for-profit institutions.
- 3.6 The number of Certificates conferred by U.S. postsecondary institutions increased at higher rates than any other type of degree – 64 percent in the last decade, from 572,000 in 2000–01 to 936,000 in 2009–10, surpassing the 850,000 Associate's degrees conferred in 2009–10. Certificates are typically conferred in vocational fields (whereas many Associate's degrees are conferred in academic fields) and are intended to prepare students for the growing number of jobs requiring education at the sub-baccalaureate level.

Undergraduate fields of study

- 3.7 IPEDS data also indicate that of the 1.7 million Bachelor's degrees awarded in 2009–10, over half were concentrated in five fields: business, management, marketing, and personal and culinary services (22 percent); social sciences and history (10 percent); health professions and related programs (8 percent); education (6 percent); and psychology (6 percent). The fields of visual and performing arts (6 percent), engineering and engineering technologies (5 percent), biological and biomedical sciences (5 percent), and communication and communications technologies (5 percent) represented an additional 21 percent of all Bachelor's degrees awarded in 2009–10.
- 3.8 Over the last decade Bachelor's degrees awarded in the field of parks, recreation, leisure, and fitness studies exhibited the largest percent increase of all fields (from 17,600 to 33,300 degrees, a 90 percent increase). The next largest percent increase was in the field of homeland security, law enforcement, fire fighting and related protective services (from 24,900 to 43,700 degrees, a 76 percent change). Education was the only field in which fewer Bachelor's degrees were awarded in 2009–10 than in 1999–2000 (from 108,000 to 101,000, a decrease of 6 percent)²⁰.
- 3.9 Of the 849,000 Associate's degrees earned in 2009–10, about 54 percent were awarded in two broad areas of study: liberal arts and sciences, general studies, and humanities (34 percent) and health professions and related programs (21 percent).

¹⁹ Aud, S., Hussar, W., Johnson, F., Kena, G., Roth, E., Manning, E., Wang, X. and Zhang, J. (2012) The Condition of Education 2012 (NCES 2012-045). U.S. Department of Education, National Center for Education Statistics. Washington, DC. <http://nces.ed.gov/pubsearch>

²⁰ U.S. Department of Education, National Center for Education Statistics. (2012), Digest of Education Statistics 2011 (NCES 2012-001), http://nces.ed.gov/programs/digest/d11/ch_3.asp

Overall, the number of Associate's degrees awarded from 1999–2000 to 2009–10 increased by 50 percent, or by 285,000 degrees. The field of psychology experienced the largest percentage increase in the number of Associate's degrees awarded over this time period (352 percent, from 1,500 to 6,600 degrees)²¹.

Admissions process and student mobility

3.10 The U.S. postsecondary system is highly stratified with 2- and 4-year degree granting institutions that range from highly selective to open admissions. The classification systems in use by U.S. college admission books and data collection systems typically classify institutions into: 1) Highly Selective; 2) Selective; 3) Traditional; 4) Liberal, and 5) Open. In addition within a given university, 4-year or community college there may be programs that have limited spaces and hence become more selective. For example, certain health programs, at an otherwise open admission community college, may admit only a certain number of students yearly. Most for-profit institutions are open admissions. In addition, highly selective and selective institutions may have on-line programs or other extension programs that are designed for non-traditional students and that are not as selective as their traditional undergraduate programs. The growth of the “on-line open access to information movement” is breaking down some of the traditional selectivity barriers.

3.11 Highly selective and selective schools have very competitive admissions for undergraduate programs based on high school grades and ACT or SAT standardized test scores and to a limited extent the students' extracurricular record. It is not uncommon for highly selective admissions colleges to require a “Straight A” high school record plus extra points gained from Advanced Placement (AP) classes. Advanced Placement courses are courses that the College Board sponsors that are offered to high school students. Students meeting the AP course requirements and scoring above a certain level on a standardized national test can then be awarded a credit that will often meet a college's requirement for that course, thus lessening the number of general education college courses that a student must take for a BA or Associate's degree. Often, high schools will also give students extra points on their GPA (Grade Point Average) for these courses. For example, a student who gets an “A” in a regular World History course might get 4.0 grade points, while one who received an “A” in AP World History might get 4.3 points. Historically, high schools serving large proportions of low-income students have been less likely to offer these AP courses²². This puts students from these lower income schools at a disadvantage in competing for selective college entrance and potentially makes college more expensive. Recently, there have been some programs sponsored by the Federal government and private groups to increase the availability of AP courses in high schools serving low-income students.

3.12 Students with lesser academic records can enroll in less selective 4-year schools or community colleges, or State public 2-year systems. Students with good records can

²¹ U.S. Department of Education, National Center for Education Statistics. (2012), Digest of Education Statistics 2011 (NCES 2012-001), http://nces.ed.gov/programs/digest/d11/ch_3.asp

²² Educational Testing Service, (ETS), Access to Success: Patterns of Advanced Placement Participation in U.S. High Schools, Philip Handwerk, Namrata Tognatta, Richard J. Coley, Drew H., Gitomer, 2008

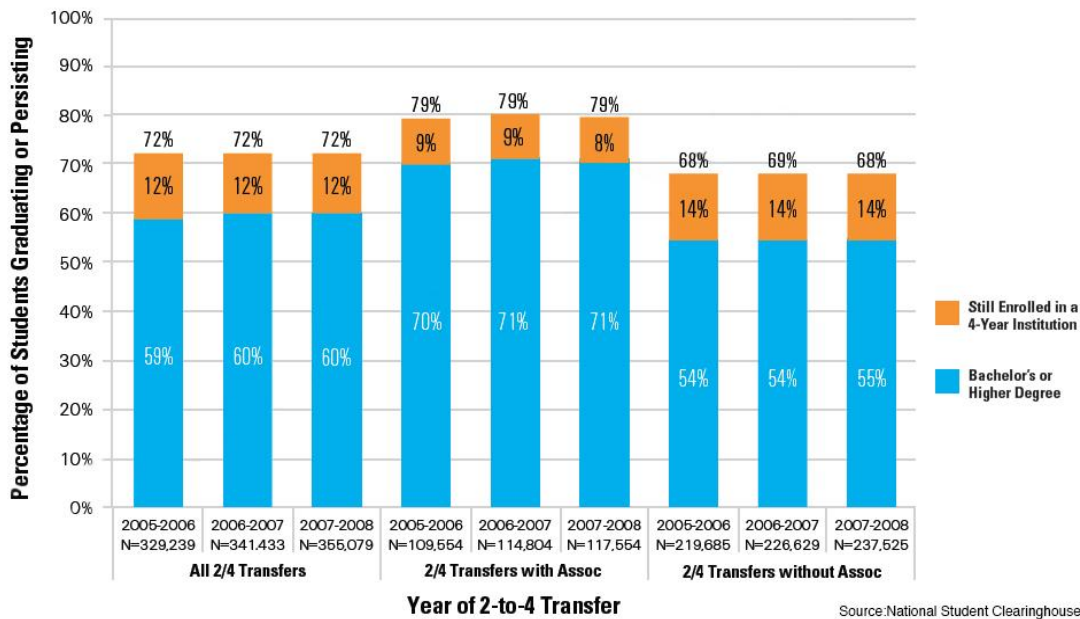
transfer after 2 years to a 4-year institution. Many public State systems have articulation agreements that promote automatic acceptance and transfer of credits from 2- to 4-year institutions. The National Student Clearinghouse (NSC) Research Center is a non-profit that collects records from about 3,300 postsecondary institutions and covers about 96 percent of U.S. college students. NSC reports that of all Community College enrolments, about one in five or 20 percent transfer to a 4-year institution.²³ Many of these students never intended to seek a 4-year degree, but based on the fact that about 80 percent of high school students state their intention to obtain a 4-year degree, it's probable that a sizable proportion did hope to transfer when they first enrolled²⁴.

- 3.13 Among those that do transfer, the statistics indicate that most are successful in getting their 4-year degrees. As figure 3.1 from the NSC indicates, about 60 percent earned a BA within 4 years and another 12 percent were still enrolled. Among those that transfer with an Associate's degree from a community college, about 71 percent earned a BA degree within four years and 80 percent had either graduated or remained enrolled. The NSC also reports that 45 percent of students who completed a 4-year degree in 2010–11 had previously enrolled in a 2-year college.

²³ National Student Clearinghouse (NSC) as reported in publication – Inside Higher Ed.
<http://www.insidehighered.com/news/2012/11/08/high-graduation-rates-community-college-transfers#ixzz2RrMzEnOA>

²⁴ Cahalan, M, Ingles, S, Burns, L, Planty, M. United States High School Sophomores: A Twenty-Two Year Comparison, 1980–2002: Statistical Analysis Report, September 2006, U.S. Department of Education, NCES 2006–327

Figure 3.1: Outcomes of students who transferred from 2-year to 4-year institutions (4-years after transfer)



Source: National Student Clearinghouse (NSC) as reported in publication – Inside Higher Ed. <http://www.insidehighered.com/news/2012/11/08/high-graduation-rates-community-college-transfers#ixzz2RrMzEnOA>

Funding for HE

3.14 Within the U.S., there has been considerable concern that college yearly costs have risen far ahead of inflation and wages. For example in 2002–03 the average tuition and fees for a public 4-year institution were \$4,115 and in 2011–12 they were \$7,209. Average tuition and fees at a private non-profit were \$14,313 in 2002–03 and \$22,924 by 2011–12; and for a private 4-year for-profit the average was \$11,771 and \$15,336.²⁵ These costs have occurred when the median family income in constant 2012 dollars has fallen over the decade from \$55,470 in 2002 to \$50,964 in 2012. These costs have also come when unemployment is at 8.2 percent with 5.2 million unemployed and an additional 8.2 percent are working part time because they cannot find full time work²⁶.

3.15 Figure 3.2 provides information from the *U.S. Bureau of Economic Analysis National Income and Product Accounts* giving the distribution of revenue sources for financing HE in the U.S. from 1952 to 2010. The increasing costs borne by students and parents are clear. The State and local share had a peak of about 60 percent in 1980 and by 2010 was at a low of about 34 percent. The student and parent income share was at a

²⁵ U.S. Department of Education, National Center for Education Statistics. (2012), Digest of Education Statistics 2011 (NCES 2012-001), http://nces.ed.gov/programs/digest/d11/ch_3.asp Total tuition, room and board rates charged for full-time undergraduate students in degree-granting institutions, by type and control of institution: Selected years, 1980–81 to 2010–11

²⁶ U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1984, 1994, and 2004.

low of about 30 percent in 1980 and was at a high of 51 percent by 2010. The Federal government share was at about 10 percent in 1980 and was at about 15 percent in 2010.

- 3.16 As part of the Higher Education Opportunity Act (HEOA) first authorized in 1965, the first U.S. need-based grants for postsecondary education, the Basic Education Opportunity Grants (BEOG) were established as well as Direct Student Loan programs. In the 1972 and 1978 re-authorizations, a number of extensions were made and the need-based basic grants were re-named for Senator Clayborn Pell of Rhode Island who had been a leader in the fight in the Senate to support educational grants based on income.²⁷ A major concern is that the buying power of the Pell Grants in real dollars has declined over time. For example, in order to be comparable to the 1979–80 buying power the maximum grant would have to be \$13,600 and not \$5,500²⁸. It should be noted that for the 2010–11 school year, 7 of the top 10 colleges by total Pell Grant money awarded were for-profit rather than public or not for profit postsecondary institutions. This may be in part due to the large enrolment numbers at many of these institutions. For example, the University of Phoenix, one of the largest U.S. for-profit postsecondary institutions with large on-line enrolments has an enrolment of 380,000 students. Traditionally, postsecondary education has been a publicly or private non-profit supported good. These statistics, indicating that tax payer money for Pell Grants is going increasingly to for-profit publicly traded corporations, prompted major Senate Committee hearings in 2011 and calls for increased regulation of this industry²⁹. Additional discussion of financial considerations is in Section 9.
- 3.17 One response to these increases has been new Federal requirements that institutions publicize their costs and some incentives to institutions that have kept costs down. In accordance with the HEOA of 2008, by October 29, 2011, each postsecondary institution in the U.S. that participates in Title IV student aid programs must post a net price calculator on its website that uses institutional data to provide estimated net price information to current and prospective students and their families based on a student's individual circumstances³⁰.

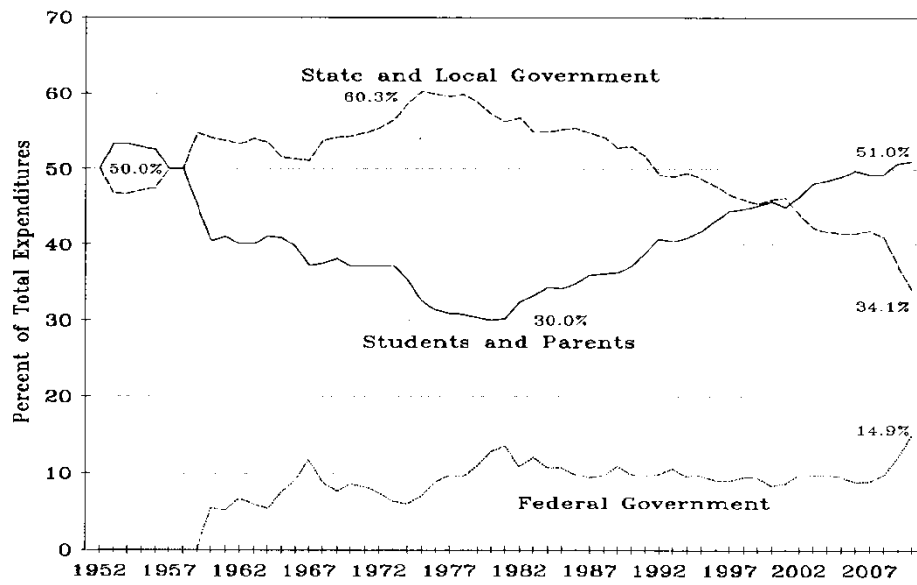
²⁷ The Pell Institute, (2013) Pell Grant Legislative Time Line, in Reflections on Pell, Washington DC.
http://www.pellinstitute.org/downloads/publications-Reflections_on_Pell_June_2013.pdf

²⁸ The College Board, Trends in Student Aid 2010

²⁹ U.S. Senate Health Education, Labour and Pensions Committee Report, For Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success, 2010,
http://www.help.senate.gov/imo/media/for_profit_report/Contents.pdf

³⁰ National Postsecondary Education Cooperative (NPEC) Working Group on the Higher Education Opportunity Act of 2008 (HEOA), Information Required to Be Disclosed Under the Higher Education Act of 1965: Suggestions for Dissemination: (October 2009)

Figure 3.2: Distribution of revenue sources for financing HE 1952 to 2010



Source: U.S. Bureau of Economic Analysis: National Income and Product Accounts various years. Chart prepared by Tom Mortenson, Postsecondary Opportunity Newsletter; 2011

4| Widening participation (WP) statistics

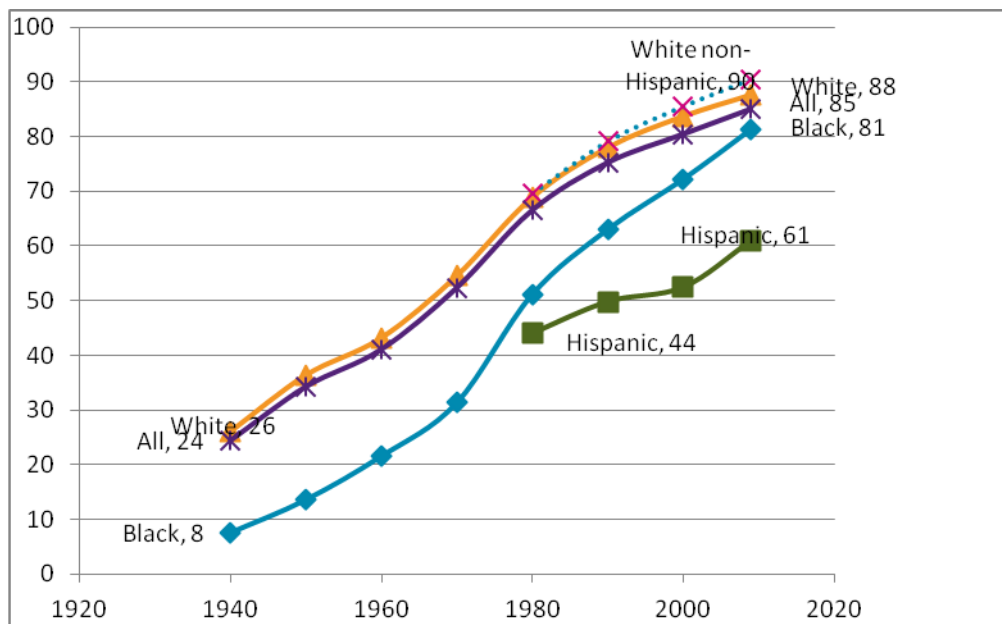
Rates of attainment

- 4.1 In considering the statistics of WP in the U.S., it is important to note the rapid changes that have occurred in educational attainment across the general population in the last 70 years. In 1940 just over one-quarter of the U.S. population had completed high school. By 2010, more than 4 out of 5 (85 percent) of adults aged 25 and over reported having at least a high school diploma or its equivalent, and over 1 in 4 (28 percent) reported a Bachelor's degree or higher³¹. This reflects more than a three-fold increase in high school attainment and more than a five-fold increase in college attainment since the Census Bureau first collected educational attainment data in 1940 (see figures 4.1 and 4.2 below).
- 4.2 There have also been some reductions in gaps by race/ethnicity over the period since 1940. However, significant gaps remain, reflecting the impacts of historic restrictions on education from slavery followed by legally sanctioned education segregation by race/ethnicity into the 1960s and continuing segregation of neighborhoods in which families live by income and race/ethnicity. As the figures below show, rates of increase in education have been highest among Blacks and Hispanics. Census data indicate that in 1940 about 8 percent of Blacks had a high school degree or equivalent, compared with 26 percent of the White population. By 2009, the estimate was 82 percent for Blacks and 88 percent for Whites. For BA receipt, the percent of Blacks over 25 with a BA degree was estimated to be 1 percent in 1940, compared to 5 percent of Whites. By 2009 the estimate was 18 percent for Blacks and 29 percent for Whites. Separate data for Hispanics began to be collected only around 1980. Among Hispanics, 61 percent of the population over 25 had a high school diploma by 2010 up from 44 percent in 1980 and 13 percent had a BA, up from 8 percent in 1980³².

³¹ U.S. Census Bureau – Decennial Census data and American Community Survey Data: 1940–2009

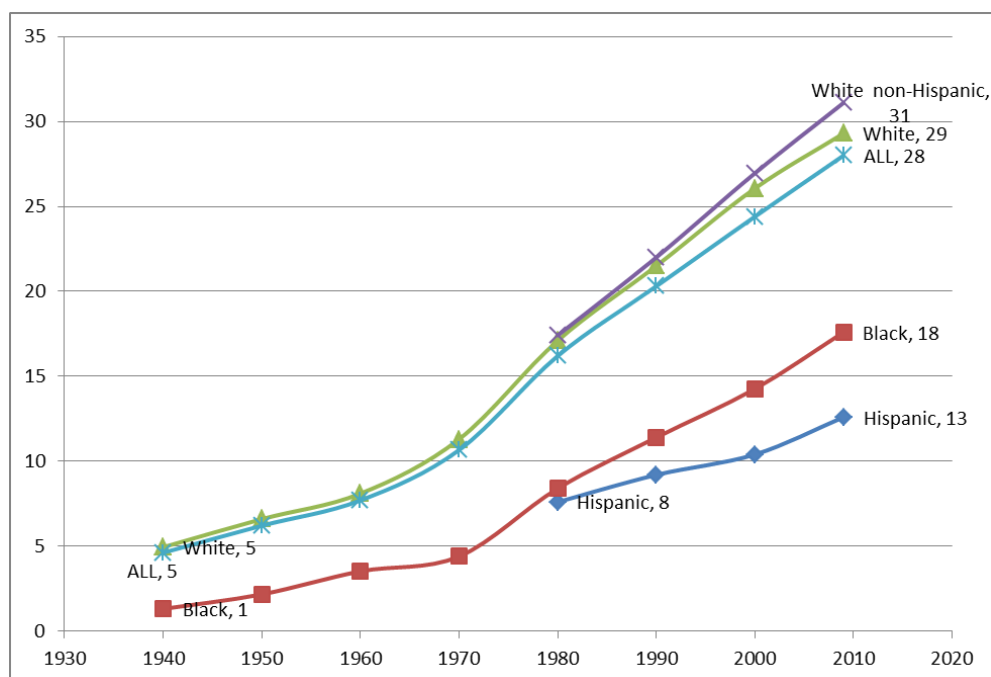
³² U.S. Census Bureau – Decennial Census data and American Community Survey Data: 1940–2009

Figure 4.1: Percent of the U.S. population over age 25 that has completed high school, 1940–2009



Source: U.S. Census Bureau – Decennial Census data and American Community Survey
Data: 1940–2009

Figure 4.2: Percent of the U.S. population 25 years of age and older who have a Bachelor's degree or higher by race/ethnicity, 1940–2009



Source: U.S. Census Bureau – Decennial Census Data and American Community Survey
Data, 1940–2009

- 4.3 Parent education has been found to be the greatest predictor of academic achievement and attainment differences across the U.S. States and schools³³. While gaps remain, as the data below indicates, there are large increases in the last 40 years in parent education levels overall and especially increases among minority parents.

Table 4.1: Percent of high school students having at least one parent with a BA degree by race/ethnicity: high school longitudinal studies, 1972 and 2002

	1972	2002	Percent Change
All	21%	38%	81%
American Indian or Alaska Native	11%	29%	164%
Asian	23%	52%	126%
Black	8%	31%	288%
Hispanic or Latino	7%	21%	200%
White	22%	43%	95%

Source: U.S. Department of Education, National Center for Education Statistics (NCES), High School and Beyond (HS&B 1972); Educational Longitudinal Study: ELS:2002

Degrees earned

- 4.4 The attainment statistics above are reflected in continuing increases in postsecondary enrolment and in degrees earned. For example, enrolment in Title IV institutions increased by 38 percent, from 14.8 million students in fall 1999 to 20.4 million students in fall 2009. This growth was accompanied by a 41 percent increase, from 2.4 million to 3.4 million, in the number of degrees earned in the same time period. The number of degrees earned increased by 50 percent each for Associate's and Master's degrees, 33 percent for Bachelor's degrees and 34 percent for Doctor's degrees.³⁴
- 4.5 According to NCES statistics, from 1999–2000 to 2009–10, the number of degrees earned among U.S. residents increased for students of all racial/ethnic groups for each level of degree, but at varying rates. For Associate's, Bachelor's and Master's degrees, the change in percentage distribution of degree recipients was characterized by an increase in the numbers of degrees conferred to Black and Hispanic students. For Doctor's degrees, the change in percentage distribution of degree recipients was characterized by an increase in the numbers of degrees conferred to Hispanic and Asian/Pacific Islander students.
- 4.6 Among U.S. residents, the number of Associate's degrees earned by Hispanic students more than doubled from academic years 1999–2000 to 2009–10 (increasing by 118

³³ Cahalan M, AERA presentation, April 2007, Chicago Illinois, Exploring Demographic and Selected State Policy Correlates of State Level Educational Attainment and Achievement Indicators, <http://www.slideshare.net/cheersdotorg/exploring-demographic-and-selected-state-policy-correlates-of-state-level-educational-attainment-and-achievement-indicators-aera2007-cahalan>

³⁴ U.S. Department of Education, National Center for Education Statistics, (2012), The Condition of Education 2012 (NCES 2012-045), http://nces.ed.gov/programs/coe/indicator_dcd.asp, Number of degrees conferred to U.S. residents by degree-granting institutions, percentage distribution of degrees conferred, and percentage of degrees conferred to females, by level of degree and race/ethnicity: Academic years 1999–2000 and 2009–10

percent), and the number earned by Black students increased by 89 percent. As a result, Blacks earned 14 percent and Hispanics earned 13 percent of all Associate's degrees awarded in 2009–10, up from 11 percent and 9 percent, respectively, in 1999–2000³⁵.

- 4.7 During the same time period, the number of Bachelor's degrees awarded to Black students increased by 53 percent, and the number awarded to Hispanic students increased by 87 percent. In 2009–10, Black students earned 10 percent and Hispanics earned 9 percent of all Bachelor's degrees conferred, versus the 9 and 6 percent, respectively, earned in 1999–2000. Similarly, the numbers of Master's degrees earned by Black and Hispanic students more than doubled from 1999–2000 to 2009–10 (increasing by 109 percent and 125 percent, respectively). As a result, among U.S. residents in 2009–10, Black students earned 12 percent and Hispanics earned 7 percent of all Master's degrees conferred, up from 9 percent and 5 percent, respectively, in 1999–2000. In addition, the number of Doctor's degrees awarded increased by 60 percent for Hispanic students and by 47 percent for Black students.
- 4.8 The question has been posed “To what extent can the increase in attainment by Blacks and Hispanics be attributed to specific WP policies or institutional level interventions?” In the opinion of many researchers, a basic primary factor is simply the reality of global and local requirements for jobs in “the information technology driven age.” Some of the increase noted above in absolute terms, especially for Hispanics, is related to the fact that Hispanics were 6 percent of the U.S. population in 1999 and are now 16 to 17 percent, with an even higher concentration among school age population. While they remain underrepresented, they currently have the fastest rate of increase³⁶. Blacks are now close to being represented at their population levels for Master's degrees and not far behind in BA degrees. (Blacks were about 12 percent of the US population in 1999 and 13.6 percent in 2010)³⁷.
- 4.9 From 1999–2000 to 2009–10, the percentage of degrees earned by females remained between approximately 60 and 62 percent for Associate's degrees and between 57 and 58 percent for Bachelor's degrees. The percentages of both Master's and Doctor's degrees earned by females increased from 1999–2000 to 2009–10 (from 58 to 60 percent and from 45 to 52 percent, respectively)³⁸.
- 4.10 In addition and in interaction with the technology-driven job requirements the rapid rate of increase has been influenced by WP policies at the Federal and State levels, and also the “social marketing for college” being done in local communities. Without the

³⁵ U.S. Department of Education, National Center for Education Statistics, (2012), The Condition of Education 2012 (NCES 2012-045), http://nces.ed.gov/programs/coe/indicator_dcd.asp, Number of degrees conferred to U.S. residents by degree-granting institutions, percentage distribution of degrees conferred, and percentage of degrees conferred to females, by level of degree and race/ethnicity: Academic years 1999–2000 and 2009–10

³⁶ Mortenson T, Postsecondary Opportunity Newsletter 2012, Hispanics and Higher Education, Issue 224, October 2012

³⁷ The number of people who identified as black, either alone or in combination with one or more other races, in the 2010 Census was 13.6 percent of the total U.S. population. U.S. Census Bureau, The Black Population: 2010 <http://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf>

³⁸ http://nces.ed.gov/programs/coe/pdf/coe_fsu.pdf

Federal support services and Federal Student Financial Aid program, it is doubtful that college participation rates among the U.S. population would be as high as they are currently. However, the past decade of level funding (a de facto downtrend) in support services access combined with the significant decline in financial support at the State level is probably lessening the rate of increase, especially among minority and low-income populations. As noted in Section 1, since at least 1965, there has been a formal national commitment at the Federal and State levels to increasing educational participation for “disadvantaged” persons, later defined in the 1970s as low-income, first-generation college, persons with disabilities, limited English speaking, and minority persons.

- 4.11 Increasingly, within the business community and among civic groups there is also a developing commitment to encouraging each citizen to commit to postsecondary education. Correspondingly, there are WP policies and institutional development in most communities designed to foster this end. For example, in Louisville Kentucky, a typical middle sized mid-west U.S. city, there are a number of initiatives with the goal of increasing college readiness and entrance within the city. One is an initiative called *GO College*³⁹ that the Council for Opportunity in Education (COE) administers and co-ordinates and that is funded by an Investment in Innovation (i3) grant from the Federal government. In addition, there are several local programs that foster college going, one of which is a group of business and civic leaders called “55,000 Degrees.” This group has a publicized goal of having 55,000 more degrees earned by Louisville residents by 2020. This program seeks to create a “college going culture” in the whole of Louisville community and promote partnerships among civic, business and religious groups in promoting college attendance and successful completion⁴⁰.

Differences in continuation, retention and completion

- 4.12 Despite advances by race/ethnicity, students from low-income families and high-poverty schools remain less likely than more advantaged students to continue to college and especially unlikely to continue at 4-year institutions. As the figure below indicates, college continuation of high school graduates was about 64 percent for the lowest income quartile and about 86 percent for the highest quartile⁴¹. The U.S. *Digest of Education Statistics* reports while 52 percent of public high schools that have 25 percent or less students with free or reduced lunch immediately attended 4-year college after their graduation, the corresponding figure was 26 percent among students who attend a high poverty high school (schools in which 76-100 percent of students qualify for free or reduced lunch)⁴².

³⁹ <http://louisville.edu/communityengagement/go-college-louisville.html>

⁴⁰ <http://www.55000degrees.org/>

⁴¹ U.S. Census Bureau, Current Population Reports and American Community Surveys, various years

⁴² Digest of Education Statistics, Table 221, http://nces.ed.gov/programs/digest/d11/tables/dt11_211.asp

Figure 4.3: College continuation rates by family income quartiles for dependent 18 to 24 year old high school graduates, 1970 to 2010



Source: US Bureau of Census, Current Population Survey and American Community Survey, various years. Chart prepared by Tom Mortenson, Postsecondary Education Opportunity Newsletter

Retention and completion rates

- 4.13 This section gives statistics for completion rates once a student has entered college. Recently in the U.S. there has been recognition that college entrance rates have increased faster than college completion rates with many students unable to complete their programs of study. There is a special concern related to students who begin programs, incur debt and then are not able to complete the program and find employment. For the past decade, all U.S. Title IV institutions are required by Congress to publish yearly data on retention and completion through the Integrated Postsecondary Data System (IPEDS) graduation rate surveys. The following are the basic statistics⁴³.
- 4.14 **Retention to second year.** The average retention rate to the second year among 4-year institutions (including both private and public) is 77 percent. The figure is 54 percent among 2-year institutions⁴⁴.
- 4.15 **4-Year overall rates.** Approximately 58 percent of first-time, full-time students who began seeking a Bachelor's degree at a 4-year institution in fall 2004 completed a Bachelor's degree at that institution within 6 years, which is 150 percent of normal completion time to degree. In comparison, 55 percent of first-time, full-time students who began seeking a Bachelor's degree in fall 1996 earned a Bachelor's degree within

⁴³ <http://www.higheredinfo.org/dbrowser/?level=nation&mode=data&state=0&submeasure=228>

⁴⁴ U.S. Department of Education, National Center for Education Statistics, (2012), IPEDS Graduation Rate Survey, The Condition of Education 2011 (NCES 2012-045), http://nces.ed.gov/programs/coe/indicator_pgr.asp

6 years at that institution⁴⁵. It should be kept in mind that these are aggregate completion rates reported by the institution. Many U.S. students leave one institution and enroll in another to complete their degrees. The statistics below from the National Postsecondary Student Aid Study (NPSAS) and associated follow-up studies Beginning Postsecondary Study (BPS) give information from individual student records.⁴⁶

- 4.16 **Sex differences.** At both public and private non-profit 4-year institutions, the 6-year graduation rates of first-time, full-time female students who sought a Bachelor's degree in fall 2004 were higher than those of males. At public institutions, about 58 percent of females seeking a Bachelor's degree graduated within 6 years, compared with 53 percent of males. At private non-profit institutions, 67 percent of females graduated within 6 years, compared with 63 percent of males. However, at private for-profit institutions, the 6-year graduation rate was higher for males (30 percent) than for females (27 percent).
- 4.17 **Variation by race/ethnicity.** Completion rates for first-time, full-time students who sought a Bachelor's degree in fall 2004 also varied by race/ethnicity. Asian/Pacific Islander students had the highest 6-year graduation rate (69 percent), followed by White students (62 percent), Hispanic students (50 percent), and Black and American Indian/Alaska Native students (39 percent each).
- 4.18 **Variation by income level.** Students from higher income families are much more likely to complete degrees. For example, 76 percent of students from the highest income families (\$92,000 or more) attained Bachelor's degree, while 30 percent of students from the lowest income families (less than \$32,000) obtained a degree in 6 years.
- 4.19 **Variation by admissions.** At both public and private non-profit institutions, the 6-year graduation rates for first-time, full-time students who sought a Bachelor's degree in fall 2004 varied by the acceptance rate of the institution. Graduation rates were highest at institutions with the lowest admissions acceptance rates. For example, at public 4-year institutions with open admissions policies, 29 percent of students completed a Bachelor's degree within 6 years. At public 4-year institutions where the acceptance rate was less than 25 percent of applicants, the 6-year graduation rate was 82 percent. Among all institutions, BA 6-year completion rates for highly selective institutions were 88 percent and for open admissions they were much lower about 30 percent.
- 4.20 Completion rates at the Associate's and Certificate levels are more difficult to measure and are lower due to the fact that many students enroll in 2-year schools and transfer to 4-year schools without obtaining a degree. As with Bachelor's degrees, Associate's and Certificates also differ by race/ethnicity and income levels, but there is less difference. For example, the Federal government's periodic longitudinal survey series, BPS, found among students who were enrolled in 2-year public colleges that about 22

⁴⁵U.S. Department of Education, National Center for Education Statistics, (2012), IPEDS Graduation Rate Survey, The Condition of Education 2011 (NCES 2012-045), http://nces.ed.gov/programs/coe/indicator_pgr.asp

⁴⁶Walton A., Berkner, R.L., Wheeless, S., Shepherd, B., Persistence and Attainment of 2003–04 Beginning Postsecondary Students: After 6 Years, U.S. Department of Education, December 2010, NCES 2011-151

percent of both low-income and higher income students had completed an Associate's degree within 150 percent of the program period⁴⁷. However, the BPS reports that after 6 years, the percentage of students who did not complete the program and were not attending HE was much higher among students from the lowest income levels (38 percent of students from the lowest income group had not completed and were not attending college, while the corresponding figure was 24 percent for students from highest family income group).

- 4.21 Taking Associate's and Certificate programs together, at 2-year institutions, approximately 30 percent of first-time, full-time students who enrolled in fall 2007 completed a Certificate or Associate's degree within 150 percent of the normal time required to complete such a degree. For the cohort that enrolled in fall 2000, the completion rate was also about 30 percent.

Research on why U.S. students leave college

- 4.22 The research on why students leave college reports different factors depending on whether the student is leaving to go to another school, temporarily stopping out, dropping out with no intent to return or simply drifting out. Studies that interview students who leave one school for another often find the primary reasons students give for leaving one school for another relate to factors associated with customer satisfaction. These include: lack of feeling like the school cared and that they belonged, or that the school cost was not worth the amount of money being paid. The percentage distribution of major reasons that students gave as reasons for leaving in one yearly trend study were as follows: College Doesn't Care - 25 percent; Poor Service - 23 percent; Not worth it - 18 percent; Finances - 13 percent; Schedule - 10 percent; Personal - 8 percent; Grades - 2 percent; Educational Quality - 1 percent⁴⁸. In the most recent edition of this yearly random sample study, the author (Neil Raisman) noted that finances along with the opinion that college is not worth it were increasing in frequency. As noted on the author's, website: "Simply put, many students are simply not being able to pay for the ever-increasing costs of college. Students also reported that the increase in tuition and fees plus all allied costs simply did not make college as worth it as they thought it would be especially since the estimates say that almost 50 percent of all college graduates were not able to find a full time job."
- 4.23 Those students that leave college and seek full time employment and do not enroll in another college more frequently site issues related to finances and work requirements as the major factor. A recent study entitled *Their Whole Lives Ahead of Them* by Public Agenda and funded by the Gates Foundation noted that while there are many reasons why students leave college, the study found that the top reason students report for leaving their college degree programs was that they couldn't juggle the stress of working and going to school simultaneously. According to the study, which was conducted through surveys with students between age 22 and 30 who had some

⁴⁷ Walton A., Berkner, R.L., Wheelless, S., Shepherd, B., (2011), Persistence and Attainment of 2003–04 Beginning Postsecondary Students: After 6 Years, U.S. Department of Education, NCES 2011-151

⁴⁸ Raisman, N (2012), Why Students Leave College, The Power of Retention Nealr@GreatServiceMatters.com, <http://academicmaps.blogspot.com/2012/05/why-students-leave-college-2012-study.html>

college education, 45 percent of the students at 4-year schools worked more than 20 hours a week. At community colleges, the numbers were even higher: 60 percent worked more than 20 hours and 25 percent worked more than 35 hours per week. The students claimed that working was mandatory to help pay off tuition and keep college debt low, but working also took time away from college. When asked what factors could have helped them complete a college degree, the students who dropped out proposed more financial aid for part-time students and more courses offered in evenings and on weekends. Increased aid would have allowed students to cut down their work schedule, while flexibility with course times would have made it easier for students to accommodate their work schedule. The study also addressed some common myths about why students leave, noting that most students who fail to finish are often those who are going it alone and do not have parents and family to help. Essentially, they are putting themselves through⁴⁹.

- 4.24 **U.S. undergraduate students attend postsecondary close to home.** In recent testimony (April 2013) to the House Committee on Education and the Workforce, Subcommittee on Higher Education and Workforce Training, Dr. Donald E. Heller, Dean of the School of Education at Michigan State University, reviewed the data on where undergraduates are enrolled. Using calculations from the U.S. Department of Education's National Postsecondary Student Aid Study of 2008, Dr. Heller reported that 54 percent of all first-year students enrolling in postsecondary educational institutions attend community colleges, and the great majority of these are attending community colleges in their local regions. Another 14 percent of first-year students are enrolled in for-profit colleges (also known as proprietary institutions). For-profit colleges are also most likely to be in the student's local community. Among independent students who are not dependents of their parents the percentage attending close to home is even higher. For example, among those over the age of 24, 59 percent of first time students attend community colleges, and another 22 percent attend proprietary institutions. Over two-thirds of all first-year college students are enrolled in an institution within 25 miles of their home, and 81 percent are enrolled within 50 miles of their home⁵⁰.

⁴⁹ Public Agenda, *Their Whole Lives Ahead of Them*, 2012; The full report is on the Public Agenda website <http://www.publicagenda.org/pages/with-their-whole-lives-ahead-of-them>.

⁵⁰ Dr. Donald E. Heller, Dean of the School of Education at Michigan State University, Testimony to (April 2013) House Committee on Education and the Workforce, Subcommittee on Higher Education and Workforce Training; Calculations from the U.S. Department of Education's National Postsecondary Student Aid Study of 2008; Heller, D. (2001); *The States and Public Higher Education Policy: Affordability, Access, and Accountability*, Baltimore, M.D., The Johns Hopkins University Press

5| Widening participation policy

- 5.1 The major vehicles that policymakers in the U.S. have used to expand college access are: 1) Increasing the number of college enrolment places available; 2) Provision of financial aid; and 3) Provision of pre-college academic and motivational preparation support services and continued support services during college. Among the first efforts by the Federal government was the Veterans Readjustment Act of 1944 that provided support for returning veterans to attend college through what was popularly known as the GI Bill. Overt efforts to widen access further were enacted as part of the Civil Rights Movement and the renewed efforts to eradicate poverty within the U.S. in the 1960s (known as the War on Poverty or the Great Society). These efforts were embodied in both the Elementary and Secondary Education Act (ESEA) most recently re-authorized in 2002 in what is known as *No Child Left Behind* (NCLB); and in the HEOA first enacted in 1965 and most recently re-authorized in 2008. This set of legislation provides for the current Federal Education programs, most of which are administered by the U.S. Department of Education aimed at widening successful participation in education at all levels. It is widely recognized that efforts to widen educational attainment in the population must begin early in education and there are also Federal early childhood programs such as *Head Start*. These early childhood and pre-K programs are largely administered in the Health and Human Services Department (HHS) rather than the Department of Education; however, there are strong strategic links between the legislative language and the programs of the two agencies.

Elementary and secondary education policy

- 5.2 The ESEA defines programs for primary and secondary schools to promote equal educational opportunity. For example, the purpose of Title I of ESEA *Improving the Academic Achievement of the Disadvantaged* is “to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments.”⁵¹ The legislation provides funding to local education agencies and programs for schools that have high concentrations of low-income students. Schools with more than 35 percent of the children qualifying for “free or reduced lunch” in the geographic area or attending the school are qualified to receive Title I funds. The fund may be used for professional development, hiring additional instructional staff, extended curriculum and other activities to improve students’ achievement.
- 5.3 The re-authorization of ESEA known as the *No Child Left Behind* (NCLB) was a radical re-authorization that provided much stronger focus on academic achievement goals and on accountability provisions. The law requires States and local Districts, and schools to set academic achievement goals and submit plans to the Federal

⁵¹ ESEA, Title I, Sec 101, Sec 1001, Statement of Purpose

government to have 100 percent of students reach “proficiency” by 2014. A major focus of the law is the elimination of “gaps” between eight identified sub-groups in achievement test scores and high school graduation rates. The eight identified subgroups are the five race/ethnicity categories (Black, Hispanic, White, American Indian, and Asian), students with disability status, economically disadvantaged students (EDS) and those with limited English proficiency (LEP). Each school is required to test students at every grade and measure the “percent proficient” at various levels. Scores are required to be posted on a public website and parents whose children are in schools “in need of improvement” or “failing schools” were to be given access to special tutoring and supplemental instruction and given a choice of a better school within the District. The assessment tests used to measure “proficiency” are selected by the individual States and standards for proficiency levels are also set by the individual States and not the Federal government. Schools not meeting the State’s targets are classified as not making “Adequate Yearly Progress” (AYP) or “In Need of Improvement” with corresponding increasingly severe required improvement actions such as: school re-organization, replacement of principal and staff, becoming a charter school, closing the school or other plans to show improvement. As the decade after 2002 progressed and it became apparent that the NCLB goals could not be reached and more and more high poverty schools were found to be on track to “not meet the goals”, the Obama administration began a policy of issuing waivers for States who submitted plans to measure growth in student’s and schools ability to meet the goals. It is now generally recognized that the accountability and assessment reform movement manifest in *No Child Left Behind* has not had its intended outcomes. In fact, some evidence is mounting that it may have had the opposite impact from the one intended and resulted in more segregation of schools by family income and parent education⁵². Test scores have not improved, drop-out rates have not improved and college completion rate increases have slowed. Former advocates are publicly rethinking the policies⁵³.

Postsecondary education policy

- 5.4 **The Higher Education Opportunity Act (HEOA) of 1965** has been re-authorized by Congress six times, most recently in 2008⁵⁴. This legislation contains the major provisions for Federal Student Financial Aid. There are three types of Federal student aid: a) grants, b) loans and c) work study. Federal Pell Grants (received by about 45 percent of students) are provided based on financial need and are awards up to \$5,500 dollars per year. Federal loans are received by about 60 percent of all enrolled. High school students fill out an application through a centralized system managed by the Department of Education that is linked to family Internal Revenue Service (IRS) tax reports to establish expected family contribution and need levels. Based on financial

⁵² Granowsky, A, Ed. D., *No Child Left Behind—A Tale of Unintended Consequences*, <http://www.ldat.org/pdf/Granowsky-NCLB.pdf>

⁵³ http://m.washingtonpost.com/local/education/bush-obama-focus-on-standardized-testing-leads-to-opt-out-parent-movement/2013/04/14/90b15a44-9d5c-11e2-a941-a19bce7af755_story.html, <http://m.washingtonpost.com/blogs/answer-sheet/wp/2013/02/27/an-education-reform-warning-for-democrats/>, *An Education Reform Warning for Democrats* By Valerie Strauss, Published: February 27, 2013, 12:45 PM

⁵⁴ Public Law 110-315 (HEOA), <http://www2.ed.gov/policy/highered/leg/hea08/index.html>

need which is determined by family income, cost of college, and other factors, the amount to be awarded to each applicant through the institution attended varies. The legislation also provides for college access and support services aimed specifically at widening participation opportunity in the U.S. Additional information on the Federal Student Aid Program is provided in section 9.

5.5 Student access and success support programs in HEOA. The original 1965 legislation language spoke of giving academically qualified disadvantaged students equal access to HE. Recognizing that support services would be needed in addition to financial aid, to achieve equal access, the HEOA provided for a series of programs that have grown over the six re-authorizations. Collectively these are known as the “TRIO” programs dating from the time when there were three programs. Now there are eight major programs. These Federal programs aim to create a college pipeline by providing academic and social support to middle school and high school students as well as supports to students once they enter college. The characteristics of the various Federal programs reflect the times in which they were initiated by Congress in their major features. The middle and high school programs are Talent Search (TS), Upward Bound (UB), Upward Bound Math Science (UBMS) and GEAR UP. The programs to encourage success once in college are: Student Support Services (SSS), Child Care Access Means Parents in School (CCAMPIS) and the McNair program to increase graduate school entrance and completion. The table below provides summary information on these programs. More information is provided in Sections 7 and 8 on these programs.

Table 5.1: Summary of major non-financial Federal college support programs in Higher Education Opportunity Act (HEOA) legislation, FY2012

Federal PROGRAMS and Year Authorized By Congress	Total funding	Number of grants	Number served	Average award	Amount per person served	Average number funded to serve per project
Upward Bound (1965)	\$269,229,023	826	62,576	\$325,943	\$4,302	76
Talent Search (1965)	\$135,968,652	454	313,641	\$299,490	\$434	691
Student Support Services (1970)	\$290,325,810	1,028	202,750	\$282,418	\$1,432	197
Veterans Upward Bound (1974)	\$14,120,000	51	6,831	\$282,203	\$2,107	134
Educational Opportunity Centers (1974)	\$45,901,792	126	189,131	\$364,300	\$243	1,501
McNair (1989)	\$37,270,374	158	4,482	\$235,888	\$8,316	28
Upward Bound Math Science (1991)	\$44,141,410	166	10,265	\$265,912	\$4,300	62
GEAR UP (State Grants) (1998)	\$140,352,958	34	403,818	\$4,060,148	\$347	11,877
GEAR UP (Partnership Grants) (1998)	\$158,385,469	98	243,954	\$1,633,294	\$649	2489
CCAMPIS* (Fy2006-07 data) (2000)	\$15,969,760	153	NA	\$104,378	NA	NA
College Assistance Migrant Program (CAMP) (Office of Migrant Education)	15,108,364	13	NA	404,658	NA	NA

Source: U.S. Department of Education, Office of Postsecondary Education, <http://www2.ed.gov/about/offices/list/oep/programs.html>

- 5.6 In addition to programs that serve individuals, the HEOA also provides for institutional aid to postsecondary institutions that serve high proportions of minority students and high proportions of low-income students (discussed in section 6). Other financial aid and loan programs for students include: Federal Supplemental Education Opportunity Grants (FSEOG), Teacher Education Assistance for College and Higher Education (TEACH), and Iraq and Afghanistan Service Grants. The government also offers scholarships for military service or to members of military personnel. They are Reserve Officers' Training Corps (ROTC) and Department of Veterans Affairs (VA) Education Benefit.

6| Target groups for WP

Target groups overview

- 6.1 Within the U.S. widening college access has been noted to be a complex issue, in part due to the variety of special groups in the nation that compete for “target status” and the changes that have occurred over time in political and public policy. Nettles, Perna and Millett (1998) writing in the late 1990s pointed out:

The focus of efforts to achieve access has shifted from time to time over the past five decades from veterans of World War II to more contemporary emphases upon women, African Americans, Hispanics, Native Americans and the economically disadvantaged.⁵⁵

- 6.2 In the period since 2008, with renewed concern about the growth of economic inequality, there is a strong emphasis on WP among those in the lower two quartiles in family income. There is also beginning to be concern that women are outcompeting men in postsecondary education and programs targeted on males, especially minority males, are beginning to be designed.
- 6.3 The original 1965 legislation language spoke only of giving academically qualified “disadvantaged students” equal access to HE and did not define what was meant by “disadvantaged students.” In the 1980 re-authorization of HEOA the term “disadvantaged” was made more specific with regard to the Federal TRIO college access and support programs (these programs are listed above in table 5.1---UB, UBMS, ETS, SSS). Eligibility for these services was specifically not legislatively defined in terms of race/ethnicity, but rather in terms of family income, parent educational level and disability status. The term “Low Income” was defined as 150 percent of the Poverty Level set by the U.S. Census Bureau. Parent education was defined to be “First Generation College” meaning that neither parent has a Bachelor’s degree. The McNair program begun in 1989 and designed to foster graduate doctoral degree attainment is the only TRIO program in which the official eligibility criteria can also include under-represented minorities (Blacks, Hispanics, and American Indian or Alaska Native) who do not meet the low-income and first-generation criteria.
- 6.4 As noted above, under the *No Child Left Behind* re-authorization of ESEA in 2002, there are eight sub-groups for gap reduction reporting purposes. The specifically targeted groups are: the under-represented minorities (Black, Hispanic, and American Indian) students, economically disadvantaged students (EDS), Limited English Proficiency students (LEP) and students with disabilities. There are also some programs administered by the National Science Foundation to support the participation

⁵⁵ National Postsecondary Education Cooperative (NPEC), (1998) *Reconceptualizing Access in Postsecondary Education and its Ramifications for Data Systems*, Report of the Policy Panel on Access, Nettles, M, Perna Laura, Millet Catherine

of women, under-represented minorities and disabled people in science, technology, engineering and math fields (STEM). There have also been programs for Migrant Worker children and Homeless children. Disabled students make up about 11 percent of the elementary and secondary school population. LEP students make up another target group. In addition, there are special programs for adult learners and returning veterans from the Iraq and Afghanistan wars.

- 6.5 In determining eligibility for Federal Pell Grants, family income for dependent students and personal income for independent students has always been the sole determinant and there is a strong commitment among many to keep Federal aid need-based rather than merit based. In 2005, a Republican Congress passed the Higher Education Reconciliation Act of 2005 which created two new merit grant programs for Pell undergraduates: the Academic Competitiveness Grant (ACG) program and the National Science and Mathematics Access to Retain Talent (National SMART) grant program. The ACG program was intended to encourage Pell-eligible students to take challenging courses in high school and thus increase their likelihood of success in college. The National SMART grant program was intended to encourage Pell students to pursue college majors considered in high demand in the global economy (mathematics, science, engineering, technology, and foreign languages deemed critical to the national interest). This legislation provided for an additional \$700 for first-year full-time Pell Grant recipients who could show that they had completed a rigorous course of study in high school as defined by their individual State and a \$1,500 increase for Pell recipients who maintained a 3.0 grade average in subsequent years of college. The law also provided a \$4,000 increase for those Pell recipients majoring in STEM fields and who maintained a 3.0 grade average. The legislation proved very difficult to implement with widely different participation rates by States due to the need for verification. The program did not have a constituency and was allowed to “Sunset” in Congressional appropriations by 2011. State scholarship programs on the other hand typically have a merit component similar to that in the Academic Competitiveness Federal legislation. For example, States often require certain high school course completions and a Grade Point Average (GPA) for initiation and continuance of State financial aid.

Minority serving institutions

- 6.6 The HEOA under Title III and V also provides some aid to institutions that serve underserved populations⁵⁶. Minority-serving institutions (MSIs) are colleges and universities serving a large percentage of minority students and are eligible for small amounts of Federal institutional aid. The classification is based on either of two separate criteria: specified in legislation based on the historical classification or the institution having a percentage of current minority student enrolment that is above 25 percent. In Title III of the Higher Education Act of 1965, Congress identified a specific set of accredited institutions that had been founded prior to 1964 and whose primary mission was the education of African Americans as Historically Black Colleges and Universities (HBCUs). About 100 institutions are considered HBCUs, most of which

⁵⁶ US Department of Education, NCES, Characteristics of Minority Serving Institutions and Minority Undergraduates Enrolled at These Institutions, 2008-156

have been in existence as higher education institutions (HEI) for over a century. There are also 32 institutions identified as Tribal Colleges serving American Indians and Alaska Natives. Using these criteria of the approximately 4,000 degree granting institutions serving undergraduates just under one-third 1,254, were recently classified as minority-serving institutions and they enroll about 60 percent of the 5 million minority undergraduates. Hispanic-serving institutions and Black-serving (non-HBCUs) accounted for 27 percent and 16 percent respectively of MSIs followed by Asian-serving (8 percent), HBCUs (5 percent), and American Indian-serving institutions (1 percent)⁵⁷.

- 6.7 The majority of students in Hispanic and Black-serving MSIs were enrolled in public 2-year institutions. Four-year MSIs (except for Asian-serving) had a higher percentage of institutions with open admissions policies and institutions with at least half low-income enrolment compared with non-MSIs.
- 6.8 Another part of Title III (*Part A Programs—Strengthening Institutions*) provides support for those institutions serving high proportion of low-income students. Eligible institutions must have at least 50 percent of their students receiving federal financial aid, loan or work study. In addition, the Federal government provides matching funds to States and institutions that promote partnership to increase the number of low-income students who are prepared to enter and succeed in postsecondary education.

⁵⁷ Characteristics of Minority Serving Institutions and Minority Undergraduates Enrolled at These Institutions, NCES 2008-156

7| Widening pre-college access strategies

- 7.1 This section provides additional information and where possible evaluation results for some of the pre-college Federal programs and also for programs sponsored by non-profits or States to widen access or entry to HE for the priority groups discussed in Section 6.⁵⁸ While the Federal government provides leadership in widening access, each State and large local districts also have entities devoted to increasing access. The programs discussed in Sections 5 and 6 directly serve only a small minority of the low-income and first-generation students who would be eligible. For example, TRIO programs taken together serve only about three percent of eligible students in any given year. However, they provide models for services and there are other programs sponsored by non-profits that reach some additional students.

Pre-college access program overview

- 7.2 The 1,500 or so postsecondary institutions that have Federal programs collaborate in sharing of best practices and professional development through organizations such as the Council on Opportunity in Education (COE) at the national level⁵⁹ and through regional Educational Opportunity Organizations covering each State and Territory making up the U.S. These are listed below in Table 7.1.

⁵⁸ The Pell Institute, (2009) National Studies find TRIO programs Effective at Increasing College Enrolment and Graduation. Online Available: http://www.pellinstitute.org/publications-Studies_Find_TRIO_Programs_Effective_May_2009.shtml

⁵⁹ <http://www.coenet.us/>

Table 7.1: Listing of Regional Professional Opportunity Associations Affiliated with the Council on Opportunity in Education (COE)

AEEE –Association for Equality and Excellence in Education, Inc. – Link:

<http://www.aeee.org/>

AEEE is a professional association comprised of administrators, counselors, teachers, and other staff members in **New York** and **New Jersey** who are involved in programs which promote access, retention and opportunity for disadvantaged and minority youth in high schools and colleges.

ASPIRE, Inc. Link: <http://www.aspire-online.org/>

ASPIRE, Inc. is a professional organization of persons engaged in the administration, recruitment, counseling, instruction, tutoring, or other support services for disadvantaged students. ASPIRE works to advance and defend the ideal of equal educational opportunity. States which form ASPIRE include **Colorado**, **Montana**, **Wyoming**, **North Dakota**, **South Dakota** and **Utah**.

CATP – Caribbean Association of TRIO Programs

CATP represents Puerto Rico and the U.S. Virgin Islands. CATP is committed to the development and excellence of the TRIO programs. CATP promotes access, retention and opportunity for disadvantaged and minority youth in Puerto Rico and the U.S. Virgin Islands.

MAEOPP – Mid-America Association of Educational Opportunity Program Personnel

– Link: <http://www.maeopp.org/>

MAEOPP represents 10 states: **Illinois**, **Indiana**, **Iowa**, **Kansas**, **Michigan**, **Minnesota**, **Missouri**, **Nebraska**, **Ohio** and **Wisconsin**. MAEOPP members include State colleges and universities, independent colleges, vocational-technical schools, State and local educational agencies, community colleges, public and private high schools, and community agencies. MAEOPP strives to promote secondary and postsecondary support programs to meet the academic, financial, and socio-cultural needs of minority and/or disadvantaged students.

MEAEOPP – Mideastern Association of Educational Opportunity Program Personnel –

Link: <http://www.meaeopp.org/>

MEAEOPP is a regional association composed of educational opportunity program personnel in the **District of Columbia**, **Delaware**, **Maryland**, **Pennsylvania**, **Virginia** and **West Virginia**. The mission of the association is to promote equal educational opportunity and greater accessibility to HE for non-traditional students, who, by reason of socio-economic status, ethnic definition, physical handicap and/or restricted cultural-educational experience, find themselves in a disadvantaged position with traditional or conventional students.

NASP – Northwest Association of Special Programs – Link: <http://www.nasp-trio.org/>

NASP is an organization representing professional educators who work with low-income, first-generation and disabled students throughout the Pacific Northwest. NASP promotes the development, improvement and extension of education to nontraditional students living in **Oregon**, **Washington**, **Alaska** and **Idaho**.

NEOA – New England Educational Opportunity Association – Link:

<http://www.neoaonline.org/>

NEAO serves as a powerful and respected voice for equal educational opportunity. The association is committed to playing a leading role in advocating for non-traditional, low-income, minority and physically disabled students. NEOA represents and serves institutions and students in the states of **Connecticut**, **Maine**, **Massachusetts**, **New Hampshire**, **Rhode Island** and **Vermont**.

SAEOPP – Southeastern Association of Educational Opportunity Program Personnel

– Link: <http://www.saeopp.org/>

SAEOPP is composed of educational opportunity program personnel in **Alabama**, **Florida**, **Georgia**, **Kentucky**, **Mississippi**, **North Carolina**, **South Carolina** and **Tennessee**. SAEOPP seeks to bring together those persons who have an active interest in becoming professionally involved in broadening access to and retention in postsecondary education.

SWASAP – Southwest Association of Student Assistance Programs – Link:
<http://www.swasaptrio.org/>

SWASAP is an association whose purpose is to advance and defend the ideal of equal educational opportunity for all TRIO eligible individuals by providing its members the guidance and support needed to foster those activities necessary to cause the target population to persist in achieving their educational goals. SWASAP represents the states of **Louisiana, Arkansas, New Mexico, Oklahoma** and **Texas**.

WESTOP – Western Association of Educational Opportunity Personnel – Link:
<http://westop.csuchico.edu/>

WESTOP is an association whose purpose is to bring together individuals interested in furthering educational opportunities for disadvantaged students. WESTOP represents the states of **Arizona, Hawaii and the Pacific Territories, Nevada** and **California (Northern California Chapter, Central California Chapter, Southern California Chapter)**.

- 7.3 Other major organizations are the Nation College Access Network (NCAN) and the National Council for Community and Education Partnerships (NCCEP). The regional organizations listed above each hold annual meetings typically at a central location and representatives of these professional organizations make up the board of the national organization, COE. The organizations also participate in a policy seminar once a year in Washington DC, in which they each send delegations to their Congressional representatives to discuss TRIO funding and general college access support and practice issues. In addition a national conference is held every year in a different location. Committee meetings are held and plenary and concurrent sessions are held on educational access and success issues and best practice. Both college access professionals and also students typically attend these meetings. There is on-going collaboration through participation in committees throughout the year and participation in webinars.
- 7.4 Typically the postsecondary institutions receiving the college access Federal TRIO program grants work with middle and high schools serving a large proportion of low-income and first-generation college students. Major services are assistance in preparation for college through summer programs on college campuses, academic year services such as tutoring and mentoring, Federal aid application support and college-board test taking support. The programs have somewhat different models and vary in intensity of services. For example, GEAR UP serves entire grade cohorts of students starting in middle school in one school, while a Talent Search program serves interested individuals in many low-income schools. The counseling, motivational and tutoring services provided however are similar across the programs. Collaboration is encouraged; however, the grants are very competitive and every 5 years there is a competition. The fact that existing projects can earn prior experience points makes it difficult for new projects to achieve funding, especially in periods of budget cutting which has been the situation for the last decade for TRIO programs. In addition, there are private non-profit or State and local funded programs that have similar models to the Federal programs such as Aspire, AVID, and Project Grad (examples to be discussed below). The Federal programs act as incentives for the postsecondary

institutions to engage in widening access work; however, there are also certain disincentives operating that have led to less WP over the years. One of these is the movement of many State public flagship institutions to raise admission standards in order to achieve better rankings⁶⁰. The recent emphasis on increasing graduation rates may also lead to a disincentive for schools to admit students who are more at risk.⁶¹ The emphasis on test accountability may also be serving as a disincentive for widening HE as many students leave high school with a mark of failure and a corresponding retreat from organized education.

- 7.5 The U.S. Department of Education published a guide that presents a list of recommended strategies to increase college access. The list was compiled by consulting published research and an expert panel⁶². The following strategies were recommended for supporting students' access to college.
- > Offer courses and curricula that prepare students for college level work, and ensure that students understand what constitutes a college-ready curriculum by 9th grade.
 - > Utilize assessment measures throughout high school so that students are aware of how prepared they are for college, and assist them in overcoming deficiencies as they are identified.
 - > Surround students with adults and peers who build and support their college-going aspirations.
 - > Engage and assist students in completing critical steps for college entry.
 - > Increase families' financial awareness, and help students apply for financial aid
- 7.6 These recommendations are reflective of the dominant theme of increasing the rigor and individual achievement levels of all students and especially raising the participation of low-income students in rigorous courses, such as AP courses. However, there is beginning to be a push-back from parents and students in all socio-economic classes that the competitive and achievement culture now dominant in the U.S. schools may be negative for some student's mental health and also may not be having its intended goals. A popular documentary prepared by school parents, in which high school students tell their stories, entitled *Race to Nowhere*, challenges whether the dominant current competitive academic achievement culture is the best way to prepare students to be healthy and contributing citizens⁶³, and calls for a movement to "*End the Race*".

⁶⁰ Gerald, D. and Haycock, K (2006), *Engines of Inequality, Diminishing Equity in the Nation's Premier Public Universities*, The Education Trust, Washington D.C.

⁶¹ Monks, J. and Ehrenberg, R.(1999) *The Impact of U.S. News and World Report College Rankings on Admissions Outcomes and Pricing Policies at Selective Private Institutions*. Working Paper 7227, Cambridge: National Bureau of Economic Research.

⁶² Tierney, W.G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N.F., (2009, National Center for Education Evaluation, *Helping Students Navigate the Path to College: What High Schools Can Do: A Practice Guide* (NCEE #2009-4066). Washington D.C.,

⁶³ <http://www.racetonowhere.com/>

Federal access program descriptions and evaluation results

- 7.7 The **Talent Search (TS)** TRIO program was first begun in 1965, and currently there are about 450 postsecondary and community services agency grantees with Federal grants to provide low-intensity college access service for low-income, first-generation and disconnected youth. The average cost per student served is about \$434⁶⁴. The program identifies and assists individuals from disadvantaged backgrounds within target middle and high schools who have the potential to succeed in HE. The TS program provides academic, career and financial counseling to its participants and encourages them to graduate from high school and continue on to and complete their postsecondary education. The program publicizes the availability of financial aid and assists participants with the postsecondary application process. Projects may provide tutorial services, career exploration, aptitude assessments, counseling services, mentoring programs, workshops and information on postsecondary institutions.
- 7.8 An independent evaluation of Talent Search was conducted in 2006 using a quasi-experimental administrative records design⁶⁵. Using the complete longitudinal files for students in three states (Texas, Florida and Indiana) combined with service records for all Talent Search participants in the U.S., the study used propensity matching to establish a comparison group. The study found significant and substantial positive impacts for TS on high school graduation, application and award of financial aid and college entrance in each of the states. For example, in Florida, the study found that Talent Search students were 20 percent more likely to attain a high school diploma, (84 percent vs. 70 percent); 58 percent more likely to be first-time applicants for financial aid (52 percent vs. 33 percent) and 42 percent more likely to immediately enroll in a Florida public college (51 percent vs. 36 percent). Effect sizes varied somewhat but were generally similar in the other two states studied.
- 7.9 **Upward Bound** is one of the first Federal programs and is considered a flagship model. It is also one of the more intensive low-income and first-generation college access programs with an average cost per student of about \$4,300⁶⁶. There are about 900 Upward Bound 4-year and 2-year postsecondary institution grantees serving about 65,000 high school students yearly. The program has a strong academic focus with an intensive six-week summer (often residential) program that is held on a college campus followed by weekly academic year sessions throughout high school. The program provides academic and motivational support to participants in their preparation for college entrance. As specified in the legislation, all Upward Bound projects must provide instruction in mathematics through pre-calculus, laboratory science, foreign language, composition and literature through summer programs on a

⁶⁴ U.S. Department of Education, Office of Postsecondary Education, Program Descriptions; Cahalan, M. W. and Curtin, T.R. (2004) A Profile of the Upward Bound Program 2000-2001. Washington D C, U.S. Department of Education, Office of Postsecondary Education, Washington, DC.

⁶⁵ Constantine J.M, Seftor N.S., Martin E.S., Silva T and Myers D, A Study of the Effect of Talent Search on Secondary and Postsecondary Outcomes in Florida, Indiana, and Texas, US Department of Education, 2006; Cahalan, M., The National Evaluation of Talent Search, The Implementation of the Federal Talent Search Program: Past and Present, US Department of Education, 2003

⁶⁶ U.S. Department of Education, Office of Postsecondary Education (OPE), Upward Bound program description

college campus and academic year supplemental services. The goal of Upward Bound is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary education.

- 7.10 Two national evaluations have been conducted. The first was begun soon after the program was initiated in the 1970s and conducted by Research Triangle Institute (RTI). The second was conducted by Mathematica Policy Research (Mathematica) and was initiated in the in the 1990s and followed students sampled in middle school and early high school until 2004⁶⁷. The Mathematica National Evaluation of Upward Bound randomly selected half of the students from a “waiting list” of about 3,000 eligible low-income and first-generation middle school and early high school students to be invited into the Upward Bound program (given the Upward Bound opportunity). The study then followed those selected and not selected for a period of 6 to 10 years after expected high school graduation.
- 7.11 Between 1996 and 2004, Mathematica published three reports concluding there were no overall impacts, except for certificate attainment, but they reported large positive impacts for the sub-group of students defined as academically at risk. In conjunction with a review of the 2009 final Mathematica Upward Bound evaluation report, the Department of Education’s Technical Monitors assigned to provide oversight of the contracts conducted a Quality Assurance (QA) examination of the study design, and implementation and analysis procedures. Department staff also conducted re-analyses using data from each of five follow-up surveys, the Federal aid application and award files, and, where coverage was deemed adequate in the time period, from the National Student Clearinghouse (NSC). The Technical Monitoring staff of the department found a number of serious statistical design flaws as well as a serious uncontrolled bias in favor of the control group on academic risk factors in the Mathematica impact estimates. The QA review concluded that the Mathematica conclusions were in error overestimating the impact on UB on certificate attainment and seriously underestimated the UB impact on postsecondary entrance and BA attainment.
- 7.12 Among the most serious of the errors was selecting only one single project to represent the largest study-defined 4-year stratum, which resulted in this project’s sampled students carrying 26 percent of the final student weights. This meant that outcomes for this project’s students counted 40 times those of the students from the lowest weighted projects. Unfortunately this project whose students carried extreme weights was found to be atypical of the types of projects for which it was the sole

⁶⁷ Burkheimer, G., J. Riccobono, G. Wisenbaker (1979) Final Report: Evaluation Study of the Upward Bound Program—A Second Follow-Up, Research Triangle Park, NC, Research Triangle Institute; Myers, D., and A. Schirm, The Short-Term Impacts of Upward Bound: An Interim Report, Washington D.C., U.S. Department of Education, Planning and Evaluation Service, 1996; Myers D, Olsen R, Seftor N, Young J, and Tuttle C, The Impacts of Regular Upward Bound: Results from the Third Follow-Up Data Collection, Report submitted to the U.S. Department of Education, Washington D.C., Mathematica Policy Research, Inc., 2004; Myers, D., and Schirm A, The Impacts of Upward Bound: Final Report on Phase I of the National Evaluation, Report submitted to the U.S. Department of Education, Washington D.C., Mathematica Policy Research, Inc., 1999 Seftor, N S. Mamun, A, Schirm, A, The Impacts of Regular Upward Bound on Postsecondary Outcomes 7-9 Years After Scheduled High School Graduation, Report submitted to the U.S. Department of Education, Washington D.C., Mathematica Policy Research, Inc., 2009

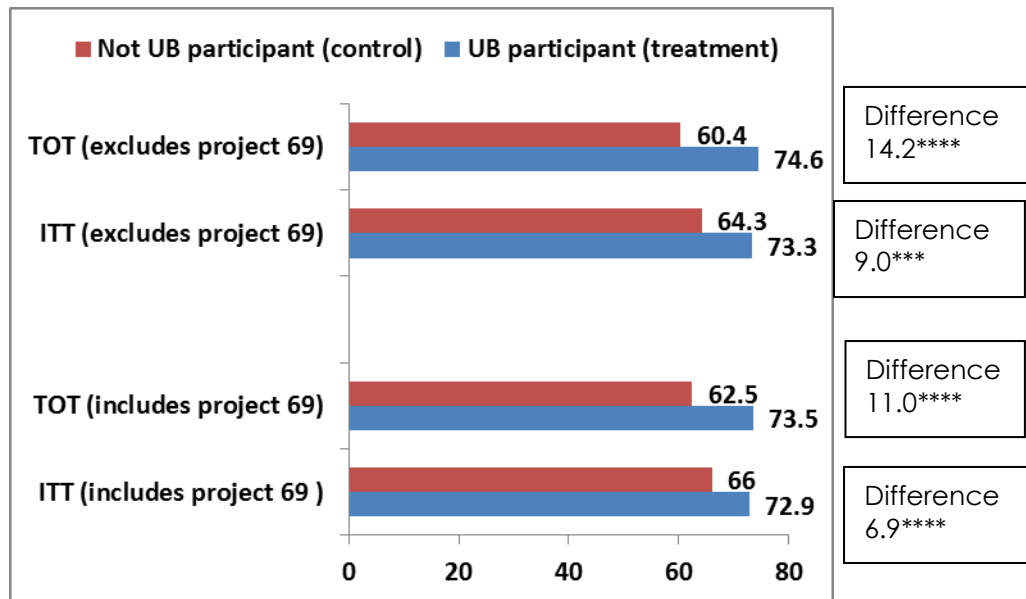
representative and for which it was so highly weighted. It was located at a college that while officially listed as a 4-year college was a former junior college that awarded a large number of certificates. The UB project at this site was atypical for a 4-year college grantee with a UB program that partnered with a job training program and had a non-residential UB program. Very importantly for a random assignment study, something appears to have gone wrong with the random assignment procedures in this project resulting in a severe non-equivalency between the treatment and control group on entering characteristics. The treatment group reflected the vocational orientation of the Upward Bound project at the site, while the control group on average resembled Upward Bound Math Science (UBMS) project applicants being in a higher grade and more academically proficient applicants than the treatment group. For example in this highly weighted project, 80 percent of the academically at risk students were in the treatment group and 20 percent in the control group and, conversely, 79 percent of the students expecting an advanced degree (MA or above at baseline) were in the control group and 21 percent in the treatment group. In addition, 77 percent of the lower grade at baseline students was in the treatment group and 23 percent in the control group. These non-equivalencies in such a heavily weighted project led to a substantial uncontrolled academic risk bias, educational expectations bias and expected high school graduation date bias in the overall combined sample of 67 projects in favor of the control group. These issues were made worse by the failure of Mathematica to standardize the outcome measures used by expected high school graduation year for a sample that spanned 5 years of expected high school graduation dates⁶⁸.

- 7.13 Despite the strong academic-risk bias in favor of the control group, when the Department of Education staff standardized the outcome measures by expected high school graduation year (not done by Mathematica) ED staff found significant and substantive positive impacts on the key measures. For example, as can be seen from figure 7.1 significant and substantive impacts on postsecondary entrance were found for both the Intent to Treat (ITT) and the Treatment on the Treated (TOT) impact estimates for the entire sample from the 67 participating study projects (figure 7.1). Similar impacts were also found for postsecondary entrance in 4 years after expected high school graduation, application for and award of financial aid within 1 and 4 years and attainment of any degree or credential by the end of the study period.

⁶⁸ Cahalan M: Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change?; can be accessed at http://www.pellinstitute.org/publications-Do_the_Conclusions_Change_2009.shtml

Cahalan, M., Goodwin D, (forthcoming 2013), Flawed Contractor Report Masks Significant and Substantial Positive Impacts for Upward Bound, Pell Institute for the Study of Opportunity in Higher Education

Figure 7.1: Treated on the Treated (TOT) and Intent to Treat (ITT) estimates of impact of Upward Bound (UB) on postsecondary entrance within +1 year of expected high school graduation year (EHSY), 1992-93 to 2003-04



NOTE. */**/**** Significant at 0.10/0.05/. 01/00 level. Model based estimates based on STATA logistic and instrumental variables regression and also taking into account the complex sample design. Based on responses to three follow-up surveys and federal student aid files

SOURCE: Data tabulated January 2008 using: National Evaluation of Upward Bound data files, and federal Student Financial Aid (SFA) files 1994-95 to 2003-04. (Excerpted from the Cahalan Re-Analysis Report, Figure IV)

- 7.14 Among the more significant findings, however, was that for a well-balanced treatment and control group on academic risk and educational aspiration characteristics, (found among 66 of the 67 projects in the sample), being randomly assigned to Upward Bound and participating in the program resulted in a 50 percent increase in BA attainment in +6 years compared with those who were not randomly assigned to Upward Bound and who did not participate in the program⁶⁹.
- 7.15 In addition there are also issues of control group participation in alternative pre-college supplemental services. From the beginning of the Upward Bound evaluation these concerns were raised by participating sites who observed that a large percentage of the control group also had pre-college supplemental services, most frequently other Federal TRIO programs such as Talent Search and less frequently Upward Bound Math Science (UBMS) a form of Upward Bound. Project directors also reported that often those not randomly selected for the UB treatment group were placed in some other similar service precisely because they were not randomly selected to be given the UB opportunity. In the five Upward Bound follow-up surveys, about 60 percent of the control group (those not selected for Upward Bound) reported that they received some other pre-college supplemental services (most frequently Talent Search) before

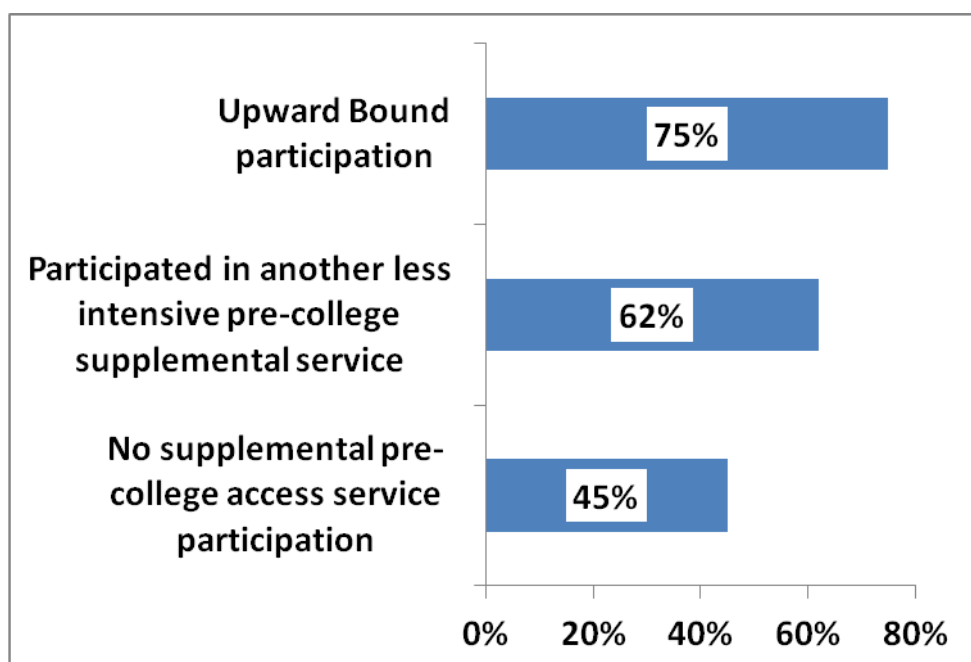
⁶⁹ Cahalan, M., Goodwin D, Flawed Contractor Report Masks Significant and Substantial Positive Impacts for Upward Bound, Pell Institute for the Study of Opportunity in Higher Education, forthcoming 2013

or after the random selection, and conversely about 20-25 percent of those randomly selected for Upward Bound were classified as drop-outs from the “waiting list” and most of these students did not enter the program. Overall about 75 percent of the sample (treatment and control groups) reported some form of supplemental pre-college services, with 92 percent of the treatment group and 60 percent of the control group reporting getting some form of supplemental pre-college services. As Upward Bound is the most intensive of the college access programs in most cases it can be assumed that the alternative services would be less intensive.

7.16 Figures 7.2 and 7.3 present comparative impacts for postsecondary enrollment and BA attainment for sample members classified according to the differential levels of services in which they reported participating (no supplemental services, non-Upward Bound services, and UB or UBMS services). The analyses used two-stage instrumental variables regressions that first models factors related to differences in participation in various levels of services and then use these factors in the second stage to help control for, but not eliminate, participation selection bias factors.

7.17 **College Enrollment.** As figure 7.2 below indicates, in two-stage instrumental variable regression analysis, about 45 percent of students who did not report participating in any pre-college supplemental services had evidence of entering college, compared with 62 percent of those that had some non-Upward Bound service (presumably less intensive than Upward Bound, such as Talent Search). In contrast, 75 percent of students who were randomly assigned and who entered the more intensive Upward Bound program had evidence of entering postsecondary education within 18 months of expected high school graduation.

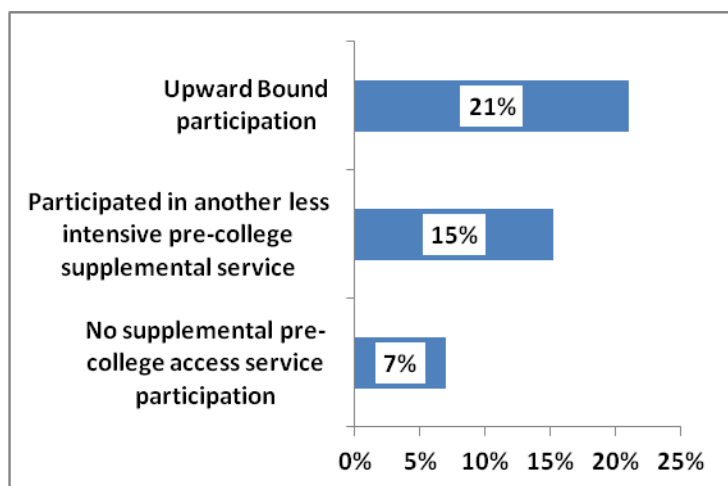
Figure 7.2: Estimates of relative impact of participation in various levels of pre-college access supplemental services on evidence of entry into postsecondary education within 18 months after expected high school graduation year among low-income and first-generation students sampled in middle school or early high school; National Evaluation of Upward Bound



SOURCE: Cahalan, Margaret: Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change? The report can be accessed at the following site: http://www.pellinstitute.org/publications-Do_the_Conclusions_Change_2009.shtml

7.18 **BA Completion.** As figure 7.3 indicates, among those low-income students sampled in the 8th and 9th grades who reported receiving no pre-college supplemental services about 7 percent were found to have received a BA degree by +6 years after their expected high school graduation date. This is very similar to the national data from the Census Bureau for low-income persons in the time period and also to the findings from the National Educational Longitudinal Study (NELS) from the same time period⁷⁰. Among those sample members not receiving Upward Bound or Upward Bound Math Science but reporting receiving some other type of less intensive program such as Talent Search about 15 percent had achieved a BA degree by +6 years after their expected high school graduation. Among those who were randomly assigned to and entered the Upward Bound or Upward Bound Math Science program, about 21 percent had attained a BA in +6 years after the expected high school graduation date⁷¹.

Figure 7.3: Estimates of relative impact of participation in various levels of pre-college access supplemental services on BA attainment by 6 years after expected high school graduation year among low-income and first-generation students sampled in middle school or early high school; National Evaluation of Upward Bound



SOURCE: Cahalan, Margaret: Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change?. The report can be accessed at the following site: http://www.pellinstitute.org/publications-Do_the_Conclusions_Change_2009.shtml The study uses National Evaluation of Upward Bound data files and was sponsored by the Policy and Program Studies Services (PPSS) of the Office of Planning, Evaluation and Policy Development (OPEPD), U.S. Department of Education. Study conducted 1992–99 to 2003–04.

⁷⁰ Ingels, S.J., Curtin T.R., Kaufman P., Alt M.N. and Chen, X, (2002), Coming of Age in the 1990s: The Eighth-Grade Class of 1988 12 Years Later, Washington D.C., U.S. Department of Education, National Center for Education Statistics, (NCES 2002–321)

⁷¹ Cahalan M, Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change?; can be accessed http://www.pellinstitute.org/publications-Do_the_Conclusions_Change_2009.shtml

- 7.19 **The Upward Bound Math and Science program** is a form of Upward Bound designed to strengthen the math and science skills of participating students. The goal of the program is to help students recognize and develop their potential to excel in math and science and to encourage them to pursue postsecondary degrees in math and science, and ultimately careers in the math and science profession.⁷² Program services include summer programs with intensive math and science training and year-round counseling and advisement. Services also include exposure to university faculty members who do research in mathematics and the sciences; computer training; and participant-conducted scientific research under the guidance of faculty members or graduate students serving as mentors; and education or counseling services designed to improve the financial and economic literacy of students. The programs also include specially designed services for students who are limited English proficient, students from groups that are traditionally underrepresented in postsecondary education, students with disabilities, students who are homeless children and youths, students who are in foster care or are aging out of the foster care system or other disconnected students.
- 7.20 Upward Bound Math and Science was also evaluated by Mathematica Policy Research using quasi experimental propensity matching design. The evaluation found Upward Bound Math Science participants were more likely than the comparison group to complete a 4-year degree in math or science, enroll in a selective 4-year institution, major in math or science disciplines, take chemistry and physics coursework in high school and to improve grades in math and science⁷³.
- 7.21 **Veterans Upward Bound** is designed to motivate and assist veterans in the development of academic and other requisite skills necessary for acceptance and success in a program of postsecondary education. The program provides assessment and enhancement of basic skills through counseling, mentoring, tutoring and academic instruction in the core subject areas. The primary goal of the program is to increase the rate at which participants enroll in and complete postsecondary education programs. Projects may also provide short-term remedial or refresher courses for veterans who are high school graduates but have delayed pursuing postsecondary education. Projects are also expected to assist veterans in securing support services from other locally available resources such as the Veterans Administration, state veterans agencies, veteran associations, and other state and local agencies that serve veterans.
- 7.22 **The Educational Opportunity Centers (EOC)** Federal program provides counseling and information on college admissions to qualified adults who want to enter or continue a program of postsecondary education. The program also provides services to improve the financial and economic literacy of participants. An important objective of the program is to counsel participants on financial aid options, including basic financial planning skills, and to assist in the application process. The goal of the EOC program

⁷² Curtin, T. R. and Cahalan, M.W. (2004). A Profile of the Upward Bound Math-Science Program 2000-2001. Washington D C. U.S. Department of Education, Office of Postsecondary Education, Washington, DC.

⁷³ Olsen, R, Seftor N, Silva T, Myers D, DesRoches D, and Young J, Upward Bound Math Science: Program Description and Interim Impact Estimates, U.S. Department of Education, Washington D.C., Mathematica Policy Research, Inc., 2007

is to increase the number of adult participants who enroll in postsecondary education institutions.

- 7.23 **GEAR UP**, first begun under the Clinton Administration in 1998, is a discretionary grant program that emphasizes partnerships with States and Local Educational Agencies (LEAs) and is designed to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. GEAR UP provides 6-year grants to States and/or districts or other community partnerships to provide services at high-poverty middle and high schools. GEAR UP grantees serve an entire cohort of students beginning no later than the 7th grade and follow the cohort through high school. GEAR UP funds may also be used to provide college scholarships to low-income students. An evaluation was begun soon after the program was authorized in 1998 to measure impacts on the first cohort of students served. The first phase looked at outcomes from the 7th to the 8th grade comparing participants with non-participants and found modest increases in knowledge of college related matters such as financial aid among both participants and their parents. Difficulties in following the participants into different high schools and comparison group participation in similar services in the years of high school and beyond did not allow for additional conclusions about the high school outcomes⁷⁴.

Examples of selected other private non-profit and State programs

- 7.24 **Project GRAD**⁷⁵ is an example of a comprehensive dropout prevention and college attendance program that works with high schools and their feeder schools to implement multiple reforms. Interventions are implemented that focus on classroom management, student performance, parent involvement, graduation and college acceptance rates. Annual college scholarships are provided to students who graduate on time, complete a set number of math courses, maintain a minimum GPA and attend at least two program-sponsored summer institutes. Results from a recent correlational evaluation of the project⁷⁶ are reported on the Project GRAD website. The researchers used focus groups, a student survey, and academic and attendance records gathered during the 2011–12 school year and reported a strong correlation between the level of advising and programming that middle school students received and their math and English grades. There was also a positive correlation with students' self-reported assessments of soft skills such as academic efficacy and goal setting.
- 7.25 **ASPIRE**⁷⁷ (Access to Student Assistance Programs In Reach of Everyone) is an example of a State program. According to their website, ASPIRE is Oregon's official mentoring program to help students access education and training beyond high school. Students receive information about college options, admission, and financial aid from trained ASPIRE volunteer mentors who work one-on-one with them throughout the

⁷⁴ Standing K., Judkins D., Keller B., and Shimshak A., Early Effects of the GEAR UP Program, report submitted to U.S. Department of Education, Policy and Program Studies Service, 2008

⁷⁵ <http://projectgrad.org/>

⁷⁶ Berry T., Sloper S. and Langan S., (2012), Project GRAD Evaluation, Project GRAD website; <http://projectgrad.org/>

⁷⁷ Aspire, <http://oregonstudentaid.gov/aspire.aspx>

year. Beginning with initial funding from The Oregon Community Foundation, four pilot schools were launched in 1998. Today, ASPIRE has expanded to 125 sites across Oregon and annually engages more than 1,500 volunteers, and reaches more than 60,000 students from all walks of life⁷⁸. Students who participate in ASPIRE receive one-on-one mentoring. Other students at the site may receive information about scholarships and financial assistance at workshops that are open to everyone. ASPIRE is administered by the Oregon Student Access Commission (OSAC), a State agency whose mission is to assist Oregon students and their families in attaining a postsecondary education and to enhance the value, integrity and diversity of Oregon's college programs.

- 7.26 **The Talent Development Model**⁷⁹ is one of several initiatives begun under the U.S. Department of Education's Comprehensive School Reform Demonstration program. Targeting some of the most troubled schools in the country, the model seeks to raise the expectations of teachers and students and to prepare all students for postsecondary education and employment. The model, developed by the Center for Research on the Education of Students Placed at Risk (CRESPAR) at Johns Hopkins University, is part of a larger trend in educational reform that aims to improve student performance and engagement through major changes to both the organizational structure and educational processes of middle and high schools. The Talent Development model for high schools encompasses five main features: small learning communities (a Freshman Academy and career academies for students in the upper grades); curricula leading to advanced English and mathematics coursework; academic extra-help sessions, including "catch-up" reading and math courses for ninth-graders; staff professional development strategies; and parent and community involvement in activities that foster students' career and college development.
- 7.27 MDRC (a non-partisan research group dedicated to working with practitioners in improving services) is conducting an independent, third-party evaluation of the Talent Development Model⁸⁰. This evaluation focuses on the first five high schools to begin using the model in the School District of Philadelphia. The evaluation is following 20 cohorts of ninth-grade students for up to four years of high school using a comparative interrupted time series research design. Initial findings were that the Talent Development Model produced substantial gains in attendance, academic course credits earned and promotion rates during students' first year of high school. There are also early indications that the Talent Development Model is improving graduation rates.
- 7.28 **AVID**, (Advancement Via Individual Determination), is a college readiness system for elementary through HE that is designed to increase school-wide learning and performance. According to their website, the AVID College Readiness System accelerates student learning, uses research based methods of effective instruction, provides meaningful and motivational professional learning, and acts as a catalyst for

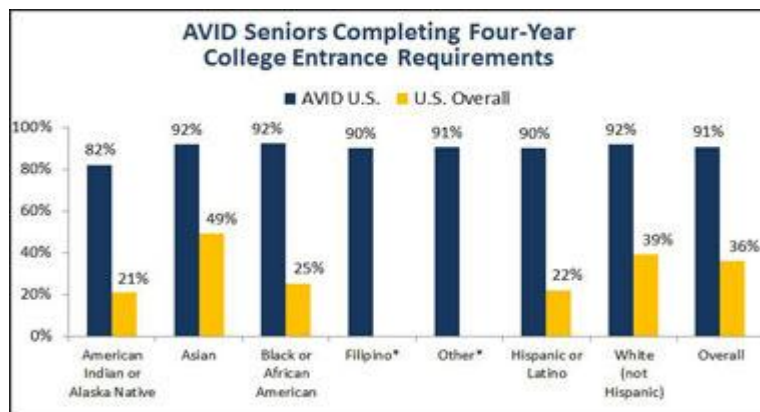
⁷⁸ Aspire, <http://oregonstudentaid.gov/aspire.aspx>

⁷⁹ Talent Development Program Description <http://www.mdrc.org/talent-development-high-school-model>

⁸⁰ Kemple J., Herlihy C., Smith T., (2005), Making Progress Toward Graduation Evidence from the Talent Development High School Model, MDRC

systemic reform and change⁸¹. AVID targets low-income, minority and first-generation students in the academic middle – B, C and even D students – who have the desire to go to college and the willingness to work hard. These are students who are capable of completing a rigorous curriculum but are falling short of their potential. AVID pulls these students out of their unchallenging courses and puts them on the college track. The focus is on acceleration instead of remediation. At the secondary grade levels (7th-12th grades), AVID is an approved elective course taken during the school day. Students enrolled in AVID are typically required to enroll in at least one of their school's toughest classes, such as honors or Advanced Placement, in addition to the AVID elective. The goal of AVID is that as students' progress in AVID their self-images improve, and they become academically successful leaders and role models for other students. AVID literature reports that one key to a successful AVID program is a site coordinator/teacher who is a respected site instructional leader who works well with secondary school personnel and college students and faculty, who can organize curricula as well as activities, and who is committed to serving the needs of target students. AVID students who continue their education in college often return to the program as tutors. School districts enter into agreements with the AVID Center for materials, membership and professional learning. Districts provide public school teachers and tutors. AVID reports on its website that students complete university entrance requirements at a much higher rate than their non-AVID peers (see figure 7.4 below).

Figure 7.4: AVID seniors completing 4-year college entrance requirements



Source: AVID Senior Data Collection. Study of 33,204 AVID Seniors (2011-2012). U.S. Overall. Greene J.P., Forster G. (2003) Public High School Graduation and College Readiness Rates in the US. Manhattan Institute, Education Working Paper 3.

7.29 Using data from the National Educational Longitudinal Study (NELS), a nationally representative sample of U.S. high school students, Horn and Chen found in correlational analysis that participation in any type of pre-college program doubled the

⁸¹ AVID Program Description <http://www.avid.org/>

odds for enrolment in a 4-year college after controlling for other factors known to be related to college entrance⁸².

⁸² Horn, L. and Chen, X., (1998), Toward Resiliency: At Risk Students who Make it to College, U.S. Department of Education, Office of Educational Research and Improvement, Washington D.C.

8| Retention, completion and progression

- 8.1 Recently there has been considerable interest in issues of student retention and increasing support service for college completion. The Federal longitudinal National Evaluation of the Student Support Services Program (SSS) conducted by WESTAT⁸³ found that the low-income and first-generation students who participated in the SSS program services and those getting more hours of support services were more likely to persist and graduate from their postsecondary program than a propensity matched comparison group. However, the study authors recommended further study to observe which strategies worked best. Methodological issues faced by the study included the fact that those selected for the comparison group were also those students most likely to receive services from other sources. In recent years there has been a shift from what have been called “black box evaluations” of programs as a whole to more detailed studies of specific strategies that may make the best use of program resources or innovations to the program to reflect changing postsecondary landscape. In 2012 the U.S. Department of Education convened a conference of practitioners and experts to gather information on promising strategies to increase college completion and following the conference the department initiated a website to which practitioners may submit promising and practical strategies to increase postsecondary success⁸⁴. There are currently about 103 strategies described on this site, along with results of any research studies of the strategies. We describe a few of those that are accompanied by research evidence in the sections below.
- 8.2 The follow-up publication based on the conference was titled *Evidence Meets Practice: Institutional Strategies to Increase College Completion*, and is organized around the following support areas: student support, learning communities, developmental education and advising, coaching and mentoring⁸⁵. The report states that the following were repeated themes appearing in the discussion.
- > Integrated – Student supports (e.g. bridge programs, learning communities) should be integrated and mutually reinforcing
 - > Sustained – One semester programs are not enough; sustained support should be provided through additional programs and continual interventions

⁸³ Channey B., Muraskin L., Cahalan M. & Rak R., (1997), National study of Student Support Services: Third-Year Longitudinal study of results and program implementation study update, Washington D.C., U.S. Department of Education; Channey, B., (2008), National Study of Student Support Services: Six Year Longitudinal Study Results, Washington D.C., U.S. Department of Education

⁸⁴ <http://www.ed.gov/college-completion/promising-strategies>

⁸⁵ U.S. Department of Education, (2012), *Evidence Meets Practice: Institutional Strategies to Increase College Completion*, available online at <http://www.edpubs.gov/document/ed005371p.pdf>

- > Systemic – Integrated and sustained supports must be rooted in a systemic plan focused on creating a culture that drives student success
- 8.3 In the sections below we first present descriptive information on the Federal programs and then include a few examples from the promising strategy research as described in the 2012 publication follow-up to the conference.

Federal access program descriptions and evaluation results

- 8.4 **The Student Support Services (SSS)** program was initiated in 1971. Nationwide there are about 1,028 SSS projects located at 2- and 4-year colleges and universities. Grants are awarded through national competitions held every 5 years to provide funding for support services for low-income, first-generation and disabled students at the institutions holding grants. The services are designed to provide opportunities for academic development, assist students with basic college requirements, and motivate students toward the successful completion of their postsecondary education. Student Support Services (SSS) projects also may provide grant aid to current SSS participants who are receiving Federal Pell Grants. The goal of SSS is to increase the college retention and graduation rates of its participants. All SSS projects must provide academic tutoring, which may include instruction in reading, writing, study skills, mathematics, science, and other subjects; advice and assistance in postsecondary course selection; and assistance with information on both the full range of student financial aid programs. SSS projects also provide benefits and resources for locating public and private scholarships and assistance in completing financial aid applications; and housing during breaks for students who are homeless youths and students who are in foster care or are aging out of the foster care system. As noted above the most recent National Evaluation found that the program increased student retention and graduation with a 7 percentage point increase in student graduation for those students receiving average hours of SSS services compared to those students not receiving services⁸⁶.
- 8.5 **McNair Post-Baccalaureate Achievement Program (McNair).** Through grant competitions every 5 years, funds are awarded to about 160 institutions of HE to prepare eligible participants for doctoral studies through involvement in research and other scholarly activities. Participants are from disadvantaged backgrounds and have demonstrated strong academic potential. Institutions work closely with participants as they complete their undergraduate requirements. Institutions encourage participants to enroll in graduate programs and then track their progress through to the successful completion of advanced degrees. The goal is to increase the attainment of Ph.D. degrees by students from underrepresented segments of society. In a descriptive study comparing rates of graduate school entrance and advanced degree attainment among low-income degree recipients, McNair participants were found to be more likely to

⁸⁶ Channey, B., (2008), National Study of Student Support Services: Six Year Longitudinal study of results, Washington D.C., U.S. Department of Education

enter graduate school and attain a degree than national rates obtained in the NCES Baccalaureate and Beyond (B&B) studies⁸⁷.

- 8.6 **College Assistance Migrant Program (CAMP).** This program was administered out of the Office of Migrant Education. The purpose was to assist students who are migratory or seasonal farm workers enrolled in their first year of undergraduate studies at an institute of HE. The program served about 2,000 participants in 2008, the last year for which Congress appropriated funds. Services include outreach to persons who are eligible, counseling, tutoring, skills workshops, financial aid stipends, health services and housing assistance to eligible students during their first year of college. Limited follow-up services are provided to participants after their first year.

Strategies to increase college completion

- 8.7 The Department of ED publication discussed in section 8.2, *included a number of examples of evidence-based strategies that researchers had found had improved retention and completion.*⁸⁸ Four major strategies that were highlighted as showing evidence of promise are summarized below in sections 8.8 to 8.11:

- 8.8 **Transform Developmental Education** – A key recognized obstacle to student completion in the U.S. is that a sizable proportion of students enter college unable to “place” into college level math or English, and instead, are required to first complete “remedial” or “developmental” courses. This often results in additional time to complete, as well as additional costs, and sometimes discouragement and non-completion. New models for developmental education were recommended including compression, pairing with college-level courses, and upward placement. The models encourage students to prepare for placement tests early and target specific skills to be addressed and modularize learning. A goal is on increasing student self-efficacy early on and enabling students to feel a part of the college from day one.

- > An example of a promising strategy was the **Texas Developmental Summer Bridge Study**. This program consists of a 4 to 5 week summer bridge program held prior to the start of college that includes accelerated instruction in developmental math, English and/or reading. Students are provided with strong student support services and are paid a \$400 stipend for successful completion. The target population was Hispanic and low-income students. The program was conducted at eight open admission institutions in Texas. The cost per participant was \$800 to \$2,300. The reported outcomes were that the programs helped students pass college level math (doubled the rate) and

⁸⁷ McCoy, A., Wilkinson, A., Jackson, R., Education and Employment Outcomes of the Ronald E. McNair Post-Baccalaureate Achievement Program Alumni, Decision Information Resources, Inc., U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, 2008

⁸⁸ U.S. Department of Education, (2012), Evidence Meets Practice: Institutional Strategies to Increase College Completion, available online at <http://www.edpubs.gov/document/ed005371p.pdf>

writing courses had a 5 percent increase. Programs that were course-linked were found to be more effective than freestanding programs⁸⁹.

- > The **Community College Research Center** has also conducted research that calls for rethinking developmental education. The program mainstreamed students while providing intensive integrated academic support through a linked course. This allowed for a shortened sequence to allow for “upward placement” of students who otherwise would have been placed at a lower level. The program has a compressed sequence of two developmental education courses in one semester and also includes additional supports. The program was targeted on students one to three levels below college level math and/or English. It was implemented in three community colleges. The cost was about \$250 to \$1,000 per student. The outcomes reported were a 32 percentage point increase in enrolling and passing English from mainstreaming. Upward placement alone improves progression but may slightly dampen course pass rates. There was a 14 percentage point increase in enrolling and passing math from compression⁹⁰.
- 8.9 **Bring Advising to Students.** These models are proactive, involving proactively initiating contact with students on a regular basis (more than once or twice a semester). They are holistic, meaning they extend advising to supporting students in their life situations outside the classroom that often impact their academic success. They are also personalized – using technology to implement and advise strategy and planning that is informed by real-time personalized data and monitors each student’s individual progress.
- > **College Coaching.** This program involved trained coaches who engage students through structured weekly one-on-one phone meetings with additional contact via text and email messages. Coaches probe and assess potential obstacles (more than just asking) and develop a plan for success (proactive). Coaches leverage existing campus resources to help students address problems and meet challenges. The coaching was offered for 6 to 12 months. The study was conducted with 13,000 students from eight universities across 17 sites between the 2003–04 and 2007–08 academic years. The cost was \$500 per student. The outcomes reported were that there was a 12 percent higher rate of retention than for the control group after 12 months. The impact persisted beyond the coaching period with a 14 percent difference after 24 months. Effects on male retention were reported to be 22 percent (twice the effect on females).

⁸⁹ Wathington, H., Barnett, E.A., Weissman, E., Teres, J., Pretlow, J., & Nakanishi, A., (2011), *Getting Ready for College: An Implementation and Early Impacts Study of Eight Texas Developmental Summer Bridge Programs*, New York, National Center for Postsecondary Research

⁹⁰ Jaggars, S., (2012), *Acceleration Research*, Presentation at the National Center for Postsecondary Research Conference on Developmental Education, New York, Teachers College, Columbia University; Bailey, T. (2008) *Challenge and opportunity: Rethinking the role and function of developmental education in community college*. Columbia University, Community College Research Center Working Paper No. 14. Bragg, D. D., Baker, E. D. and Puryear, M. (2010, December) *2010 follow-up of Community College of Denver FastStart program*. Champaign: University of Illinois, Office of Community College Research and Leadership; Edgecombe, N. (2011) *Accelerating the Academic Achievement of Students Referred to Developmental Education*. Columbia University, Community College Research Center Working Paper No. 30; Scrivener, S., Weiss, M. J., and Sommo, C. (2012) *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: MDRC.

For the campuses for which graduation data was available the graduation rate increase was 13 percent⁹¹.

- 8.10 **Create Structured and Coherent Pathways** to help students navigate towards timely degree attainment. This approach is holistic, in that students and advisors are provided with tools enhanced by on-line technology to be able to easily monitor progress on an academic pathway. Students are given meaningful choices that allow them to shape their own pathways around their unique goals and interests. An example is the “Life Mapping Process” in use at Valencia College and a similar on-line progress system in use at Arizona State through their Degree Audit Reporting Systems.
- 8.11 **Engage and Incentivize Faculty** in the development and implementation of institutional strategies. The focus is on bringing teaching to the foreground and rewarding and incentivizing faculty for their quality teaching and effective advising with attentiveness to student success. The emphasis is on encouraging faculty and staff to collaborate across campus in unity to better support student success.

Correlational and value added studies

- 8.12 Some researchers have explored what institutional characteristics make a difference in graduation rates and student success⁹². Consistently regression models have found that, while variations in institutional graduation rates are largely explained by the pre-college academic records of admitted freshman, mission driven institutions serving specific populations have higher than expected rates of completion controlling for student entering characteristics. For example, Mortenson (2011), using national graduation rate data from 1,100 4-year and above colleges found that when entering characteristics such as ACT and SAT scores and parent education are held constant, institutions such as Catholic institutions and Historically Black Colleges and Universities (HBCUs) typically graduate their students at higher rates than predicted given the entering academic records of the students they serve⁹³. These studies have also shown that smaller schools and schools with fewer part-time faculties generally graduate higher percentages than larger schools and those with high numbers of part-time faculty⁹⁴.

⁹¹ Bettinger, E. & Baker, R., (2011), The Effects of Student Coaching in College: An Evaluation of a Randomized Experiment in Student Mentoring, National Bureau of Economic Research, Working Paper No.16881

⁹² for example, Baily et. al., 2008; Mortenson, 2011, <http://www.postsecondary.org/presentationslist.asp>; Kelchen and Harris, 2012, http://www.hcmstrategists.com/contextforsuccess/papers/KELCHEN_HARRIS_PAPER.pdf

⁹³ Mortenson, T., Actual versus Predicted Institutional Graduation Rates, Access and Completion, White House Initiative on Historically Black Colleges and Universities, Washington D.C., September 19, 2011

⁹⁴ Bailey T., (2006), Is Student Right-to-Know All You Should Know? An Analysis of Community College Graduation Rates, *Research in Higher Education* 47, no. 5: 491-519; Kelchen, R., Harris D., (2012), Can “Value Added” Methods Improve the Measurement of College Performance?, *Empirical Analyses and Policy Implications*

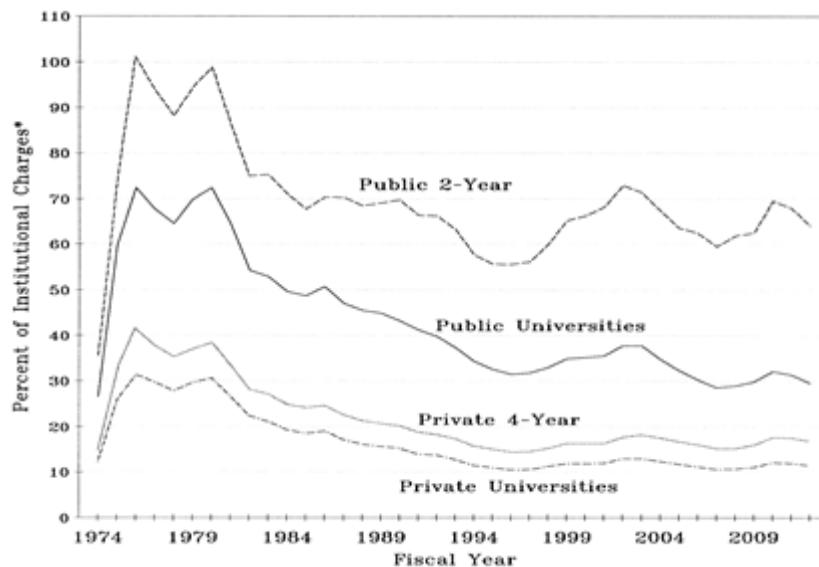
9| Financial support

- 9.1 As has been noted in section 3, without financial aid it would not be possible for low-income or most middle-income students to attend college. For the 2010–11 academic year, annual current dollar prices for undergraduate tuition, room and board were estimated to be \$13,600 at public institutions, \$36,300 at private not-for-profit institutions, and \$23,500 at private for-profit institutions. Between 2000–01 and 2010–11, prices for undergraduate tuition, room and board at public institutions rose 42 percent, and prices at private not-for-profit institutions rose 31 percent, after adjustment for inflation. The inflation-adjusted price for undergraduate tuition, room and board at private for-profit institutions was 5 percent higher in 2010–11 than in 2000–01.⁹⁵
- 9.2 As noted in previous sections, grants and loans are the major forms of Federal financial aid for degree-seeking undergraduate students. Federal grants, which do not need to be repaid, are available to degree-seeking undergraduates who qualify by economic need, whereas loans are available to all students. In addition to Federal financial aid, there are also grants from State and local governments, institutions and private sources. Given the costs of postsecondary education in the U.S., most students are receiving some form of aid and increasingly this is in the form of student loans. Federal student loans now account for the largest single asset category of the U.S. government, with over 1 trillion dollars in outstanding loan debt in the country.
- 9.3 Overall, about 46 percent of undergraduates have Pell Grants for which the maximum was recently raised to \$5,500; however, as previously noted, to have the same buying power as in 1978 a few years after they were initiated in 1972 by Congress the Pell Grant maximum amount would have to be \$13,500 and the percent of costs covered has decreased dramatically (see figure below)⁹⁶. As noted in Section 3 there has been a shift of payment of college costs from the State and local taxes to individual students and families.

⁹⁵ U.S. Department of Education, National Center for Education Statistics, (2012), Digest of Education Statistics 2011 (NCES 2012-001), http://nces.ed.gov/programs/digest/d11/ch_3.asp, Total tuition, room and board rates charged for full-time undergraduate students in degree-granting institutions, by type and control of institution: Selected years, 1980–81 to 2010–11; Archibald, R. B. and Feldman, D. H. (2010) Why does college cost so much? New York: Oxford University Press; Breneman, D. (2001) An Essay on College Costs. In Study of College Costs and Prices, 1988-89 to 1997-98, by Alisa F. Cunningham, et al, 13-20. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2001.

⁹⁶ U.S. Department of Education, Integrated Postsecondary Data System (IPEDS); Finance Surveys, various years; and Pell Annual Report, analysis by Tom Mortenson

Figure 9.1: Purchasing power of Pell Grant maximum award in public and private institutions FY1974 to FY 2011



Source: U.S. Department of Education, Integrated Postsecondary Data System (IPEDS); Finance Surveys, various years; and Pell Annual Report, various years, Graph prepared by Tom Mortenson

Variation between institution types

- 9.4 Citing U.S. Department of Education data, the Chronicle of Higher Education reported that in 2010 among full-time, first-time degree-seeking undergraduate students who attend 4-year institutions, 85 percent were receiving financial aid (including grants and loans from Federal, State or other sources) up from 75 percent in 2007. Of these 39 percent were receiving Pell Grants and about 60 percent were receiving Federal student loans. In the same year, among full-time, first-time degree-seeking undergraduate students who attended 2-year year institutions, 76 percent were receiving financial aid (including grants and loans from Federal, State or other sources) and 56 percent were receiving Pell Grants and 39 percent were receiving Federal student loans.⁹⁷
- 9.5 In 2009–10, in 4-year institutions, the average amount of student loan aid received was highest in private for-profit institutions (\$9,641). First-time, full-time undergraduate students at 4-year private non-profit institutions received an average amount of \$7,466, and students at 4-year public institutions received an average amount of \$6,063 in

⁹⁷ Share of Students Receiving Aid Climbs, (May 2012) Chronicle of Higher Education, <http://chronicle.com/article/Share-of-Students-Receiving/132016/>, data from U.S. Department of Education; Trend data is provided in: U.S. Department of Education, National Center for Education Statistics, (2009), 2007–08 National Postsecondary Student Aid Study (NPSAS:08), Student Financial Aid Estimates for 2007–08, Table 1, Table 2, Table 3, and Table 4

student loan aid. Similarly, among 2-year institutions, the average amount of student loan aid received was highest in private for-profit institutions (\$8,035)⁹⁸.

- 9.6 According to the Project on Student Debt, two-thirds of college seniors who graduated in 2011 had student loan debt, with an average of \$26,600 per borrower. Meanwhile, unemployment for young college graduates remained high at 8.8 percent in 2011⁹⁹.

Student loan defaults

- 9.7 About 4.1 million student aid borrowers enter into their repayment phase yearly and within two years about 9 percent (375,000) default.¹⁰⁰ Considerable concern is expressed in the public press and in Congress concerning the “college loan bubble” which is increasingly likened to the “real estate bubble” that burst in the U.S. in 2008. The “Great Recession of 2008” in the U.S. has led to rising levels of student loan defaults which are just beginning to be stabilizing after rising for several straight years. In part this increase occurred as more students from traditional non-profit universities had an increasingly difficult time paying off their college debt due to increased unemployment of recent graduates. For 2012 the U.S. Department of Education reported that the percentage of borrowers who defaulted within three years of their first payments was 13.4 percent, down slightly from 13.8 percent the previous year. Among the for-profit schools the average three-year default rate was 22.7 percent – the highest among all the types of institutions. Public colleges came next, with an average three-year default rate of 11 percent, and private non-profit institutions recorded a 7.5 percent rate¹⁰¹.
- 9.8 Borrowers are considered in default when they miss payments for 270 consecutive days. There are deferment and forbearance plans that allow borrowers to postpone payments in certain situations although this can result in the student paying more interest. Under a relatively recent new Federal repayment plan for some borrowers with high debt, their monthly payments can be capped at 15 percent of discretionary income, and any remaining balance is forgiven after 25 years. If a borrower’s income is at 150 percent of poverty they can pay \$0 each year and be forgiven in 25 years.
- 9.9 As the President of the National Association of Student Financial Aid Administrators (NASFAA), Justin Draegaer, noted in a Money magazine interview in 2012¹⁰²:

⁹⁸ Share of Students Receiving Aid Climbs, (May 2012), Chronicle of Higher Education, <http://chronicle.com/article/Share-of-Students-Receiving/132016/>, data from U.S. Department of Education

⁹⁹ Project on Student Debt, Institute for College Access and Success, *Student Debt and the Class of 2011*, includes average debt levels for the 50 states and District of Columbia and for more than 1,000 U.S. colleges and universities http://projectonstudentdebt.org/pub_home.php

¹⁰⁰ U.S. Department of Education, Office of Federal Student Aid, FY 2010 2-Year Official Cohort Default Rates by State/Territory National Calculated August 4, 2012, <http://www2.ed.gov/offices/OSFAP/defaultmanagement/2010staterates.pdf>

¹⁰¹ U.S. Department of Education, Office of Federal Student Aid, Three-year Official Cohort Default Rates for Schools, <http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>

¹⁰² Justin Draegaer, President of the National Association of Student Financial Aid Administrators (NASFA), as quoted in Money Magazine, <http://money.cnn.com/2012/09/28/pf/college/student-loan-defaults/index.html>

Many borrowers are so stressed about finding work or earning enough to make their payments that they fail to look into these options. The defaulter is [often] someone who has student loan debt who didn't complete school and falls off the face of the earth or puts their head in the sand and doesn't deal with any of the payments. It's a huge mistake. Federal student loans can't be discharged in bankruptcy and, when in default, will only accumulate fees and ruin your credit. Clearly those with a college education are better able to get jobs than those without one, but the unemployment rate even for college graduates has been sluggish. People say 'I don't have a job, how am I ever going to be able to make payments?'

- 9.10 An example of a student's predicament is given in an USA Today article in 2012. The article reports as follows:¹⁰³

Tiana Beatty, 25, said she received income-based deferral on one of her loans, but two other private lenders rejected her appeal. Beatty isn't counted in the default numbers this year, because she didn't graduate until 2011, but the former University of Charleston basketball player will be included in years to come, because she's already defaulted on most of the \$35,000 in student loans. Beatty has degrees in sports administration and business administration, but upon graduating from the private university was met with West Virginia's slumping economy. Despite applying for more than 100 jobs, she's only found part-time work making \$8 an hour. She volunteers as an assistant high school basketball coach on the side. "You think 'I'm going to get a job when I get out, I'm going to pay back these loans, I'm going to be set'," she said. "The next thing you know, I can't even find anyone to hire me. It's a lot of stress. It's scary. And all because you did the right thing – which was to go to school and get off the street."

- 9.11 To help students access the tools and resources they need to avoid the negative consequences of defaulting on their student loans, the Department of Education reported that it had increased its efforts to make borrowers aware of their student loan repayment options, including plans like Income-Based Repayment, which allows borrowers to cap their monthly student loan payments at 15 percent of their discretionary income. The department also recently released an interactive financial aid counseling tool that helps borrowers with their college financing decisions, including information on flexible loan repayment options¹⁰⁴.
- 9.12 In terms of schools, those with default rates above 25 percent for three consecutive years can lose eligibility for its students to be awarded Federal aid, including Pell Grants. The Office of Federal Student Aid of the U.S. Department of Education publishes lists of colleges and universities with high default rates. In 2012 there were 218 colleges that had three-year default rates of 30 percent or more putting the schools at risk of losing their Federal student aid. The department reportedly has not

¹⁰³ Hoyer M, 2012, College students defaulting at record rate, USA Today, <http://usatoday30.usatoday.com/news/nation/story/2012/09/28/college-students-defaulting-at-record-rate/57851078/1>

¹⁰⁴ U.S. Office of Federal Student Aid, <http://www.studentaid.gov>

yet sanctioned schools based on the newly established three-year default rates; however, it is requiring those schools to submit default management plans and create default prevention task forces¹⁰⁵.

- 9.13 A recent edition of the NCES report Statistics in Brief, *Federal Student Loan Debt Burden of Non-completers*, focuses on the Federal student debt burden accrued by students who do not complete a postsecondary credential within 6 years of enrolling¹⁰⁶. It is based on data from the two most recent NCES longitudinal surveys of entering college students, the Beginning Postsecondary Study (BPS). The two most recent BPS cohorts are of students who first enrolled in 1995–96 (as of 2001) and those who first enrolled in 2003–04 (as of 2009). The study found that in 2009, the median cumulative federal student debt for all non-completers amounted to 35 percent of their annual income; debt burden was highest for students in 4-year private non-profit institutions (median debt equaled 51 percent of borrowers' annual income). Debt burden among non-completers who started in for-profit institutions increased from 20 percent to 43 percent of annual income between 2001 and 2009.

The rise of for-profit educational institutions

- 9.14 The recent decade, especially with the growth of on-line education, has brought a mushrooming of publicly traded corporations that are in the for-profit postsecondary education business, going from about 6 percent of full-time equivalent (FTE) postsecondary enrolments in 2000 to about 12 percent by 2010.
- 9.15 In 2009–10, the sector received \$32 billion of Federal Student Aid funds, including 25 percent of the total Department of Education Pell Grant funds while enrolling about 12 percent of FTE students. This percentage was somewhat less in 2011 when the Pell percentage declined to 21 percent¹⁰⁷. In the prior periods the for profit sector was small and confined to certain private small business trade schools; however the growth in on-line technology has meant that large publicly traded for-profit corporations/institutions are now awarding larger numbers of all degrees including traditional 4-year and above degrees. The for-profits argue that they are widening participation with their open admissions and with their use of innovative educational methods, often reaching students that have been turned off by more traditional methods. They also argue that they can be flexible and responsive to the needs of rapidly changing career and work force requirements. They often employ experts from the specific fields as part-time instructors.
- 9.16 Concern with the use of Federal tax dollars with the Federal Student Aid programs as the chief source of revenue for these corporations combined with low completion rates and high default rates, led to the Senate Committee on Health, Education, Labor, and

¹⁰⁵ U.S. Department of Education, Office of Federal Student Aid, Default Rates by Institution. <http://studentaid.ed.gov/about/data-center/student/default>

¹⁰⁶ Wei C., Horn, L., (2013), *Federal Student Loan Debt Burden of Non-completers*, National Center for Education Statistics, NCES 20131552013, U.S. Department of Education, Statistics in Brief

¹⁰⁷ The College Board, (2012), Trends in Student Aid, <http://advocacy.collegeboard.org/sites/default/files/student-aid-2012-full-report.pdf>

Pensions to hold hearings in 2010 and 2011 and to commission a special report. This report¹⁰⁸ documented that Federal taxpayers are investing billions of dollars a year, \$32 billion in 2009, in the companies that operate for-profit colleges. Yet, more than half of the students who enrolled in those colleges in 2008–9 left without a degree or diploma within a median of four months. The committee also found that 54 percent of for-profit students dropped out without a degree during the 2008–09 school year. The committee further found that Bachelor's programs at for-profits cost 20 percent more than at public schools, while Associate's degrees cost four times more. The 3-year default data showed that nearly half the total borrowers in default in the U.S. had attended for-profit colleges, despite comprising only 28 percent of the total borrowing pool, and 13 percent of enrolled college students.

9.17 One of the most interesting and disturbing features of the for-profit industry revealed in the Senate report is the distribution of their expenditures and the shockingly low percentage spent on instruction and student support. The report found that for-profit colleges devote tremendous amounts of resources to non-education related spending including marketing, recruiting, profit and executive compensation, while spending relatively smaller amounts on instruction. In fiscal year 2009, the for-profit college companies examined by the Senate committee spent:

- > \$4.2 billion or 22.7 percent of all revenue on marketing, advertising, recruiting and admissions staffing.
- > \$3.6 billion or 19.4 percent of all revenue on pre-tax profit.
- > \$3.2 billion or 17.2 percent of all revenue on instruction.

9.18 This data seems to indicate that the companies together devoted less to actual instruction costs (faculty and curriculum) than to admissions, marketing and recruiting. The for-profit institutions, however, note that much of recruiting and admissions work is a form of student counseling and advising concerning options and encouragement of postsecondary education. Additionally, the Senate report noted the high salaries of the for-profit CEOs of the publicly traded for-profit education companies relative to the salaries of public and private non-profit institutions. CEOs from for-profit postsecondary institutions were reported to take home, on average, \$7.3 million in 2009. In contrast, the five highest paid leaders of large public universities averaged compensation of \$1 million, while the five highest paid leaders at non-profit colleges and universities averaged \$3 million in the same year.

9.19 Pell Grants flowing to for-profit colleges increased at twice the rate of the Pell program as a whole, increasing from \$1.1 billion in the 2000–01 school year to \$7.5 billion in the 2009–10 school year. Among the companies examined by the Senate committee, the share of revenues received from Department of Education Federal Student Aid programs increased more than 10 percent, from 68.7 in 2006 to 79.2 percent in 2010. Committee staff estimated that in 2009 when all sources of Federal taxpayer funds, including military and veterans' benefits, are included, the 15 publicly traded for-profit

¹⁰⁸ United States Senate Health, Education, Labour and Pensions Committee Report, For Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success, 2010, http://www.help.senate.gov/imo/media/for_profit_report/Contents.pdf

education companies studied in depth received 86 percent of their revenues from taxpayers.

- 9.20 For-profit colleges also receive the largest share of military educational benefit programs: 37 percent of post-9/11 GI bill benefits and 50 percent of Department of Defense Tuition Assistance benefits flowed to for-profit colleges in the most recent period. Because of the cost of the programs, however, they trained far fewer students than public colleges. Eight of the top 10 recipients of Department of Veterans Affairs post-9/11 GI bill funds are for-profit education companies¹⁰⁹.

Studies of the effectiveness of financial aid

- 9.21 It is difficult to study the impacts of financial aid due to a number of factors, not the least of which is that Federal legislation governs who is eligible for aid and this does not lend itself to the gold standard “random assignment” methodology. The other factor is that seldom are changes in financial aid unrelated to other changes that are occurring within the society such as economic recessions or changes in technology that may change the cost structure.
- 9.22 The National Association of Student Financial Aid Administrators (NASFAA) published in 2012 an Issue Brief on the topic of *The Role of Pell Grants in Access, Persistence & Completion*¹¹⁰. They concluded that “we may be able to say that financial aid can be a lever for access and completion, when it is provided adequately and when it is provided with additional support, such as counseling or academic support.” Below are highlights from some of the studies summarized in the report.
- > Baum, McPherson and Steele (2008) reported “powerful statistical evidence that large and simple programs to subsidize college costs have a measurable impact on both initial attendance and college completion¹¹¹.” The report also noted that improving the system of postsecondary finance alone would not meet all challenges. Nonetheless, they stated, “In a society with an educational system beset as ours is by severe and persistent economic inequalities, the system of student financial aid is a significant point of leverage, and one that, we believe, can influence preparation in the precollege years as well as success in college.”
 - > According to Pascarella and Terenzini (2005), the best predictor for college persistence and completion is high school grades; that is, the better a student performs academically, the more likely that student will stay in college and graduate¹¹². Research on the impact of student aid on persistence and completion shows a smaller

¹⁰⁹ United States Senate Health, Education, Labour and Pensions Committee Report, For Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success, 2010, http://www.help.senate.gov/imo/media/for_profit_report/Contents.pdf

¹¹⁰ The National Association of Student Financial Aid Administrators, (2011-12), Issues brief: The Role of Pell Grants in Access, Persistence & Completion, Washington D.C., Available at <http://www.nasfaa.org/WorkArea/DownloadAsset.aspx?id=8107>, Retrieved on April 19, 2013

¹¹¹ Baum, S., McPherson, M., & Steele, P., (2008), *The Effectiveness of Student Aid Policies: What the Research Tells Us*, New York, College Board, Retrieved on October 17, 2011, <http://professionals.collegeboard.com/profdownload/rethinking-stu-aid-effectiveness-of-stu-aid-policies.pdf>

¹¹² Pascarella, E.T., & Terenzini, P.T., (2005), *How College Affects Students*, San Francisco, Jossey-Bass

effect in comparison to the stronger effect of positive academic performance. However, several studies indicated that student aid does have a positive impact¹¹³. In particular, low-income students who receive adequate financial aid show an increase in their chances of persisting and completing college¹¹⁴.

- > Other studies have shown that when financial aid does not adequately meet need, there are no effects on persistence and completion¹¹⁵.
- > Bettinger and colleagues (2011) did not examine the impact of federal aid in itself; however, they examined if innovation in the process of financial aid application can influence the college access and completion¹¹⁶. The results of their study “suggest that simplifying the process and providing direct help with the application along with better information could be effective ways to improve college access. However, only providing aid eligibility information without also giving assistance with the form had no significant effect on FAFSA submission rates or college outcomes”. Recently the Department of Education simplified the Federal Application for Student Aid (FAFSA) and initiated direct links with the IRS system. This process, however, also has certain drawbacks in terms of timing of family filing and procedures. In recent years the U.S. Department of Education has commissioned studies testing versions of the applications and has attempted to simplify the form as much as possible. There are also recommendations that tax forms filed by families or independent students the previous year can be used directly to inform families and students in advance of how much Pell Grant money they will qualify for. For many this would be a great improvement; however, there are many citizen children of undocumented parents in the U.S. who are very often left out of the aid process.
- > Another issue raised is that “existing student aid was designed with a primary focus on traditional-age college students who are financially dependent on their parents. However a significant number of students are older and many attend part-time. There

¹¹³ Perna, L.W., ed., (2010), *Understanding the Working College Student: New Research and Its Implications for Policy and Practice*, Sterling, Va., Stylus; Perna, L.W., (1998), *The Contribution of Financial Aid to Undergraduate Persistence*, *Journal of Student Financial Aid*, 28(3), 25-40; Berkner, L.K., Cuccaro-Alamin, S., McCormick, A.C. & Bobbitt, L.G., (1996), *Descriptive summary of 1989-90 Beginning Postsecondary Students: 5 years later. With an essay on Postsecondary Persistence and Attainment*, Washington D.C., U.S. Department of Education, Office of Educational Research and Improvement, Retrieved November 22, 2011, <http://www.eric.ed.gov>

¹¹⁴ Dynarski, S., (1999), *Does aid matter? Measuring the Effect of Student Aid on College Attendance and Completion*, NBER Working Paper No. W7422, Cambridge, MA, National Bureau of Economic Research; St. John, E.P., (1990), *Price response in persistence decisions: An Analysis of the High School and Beyond Senior Cohort*, *Research in Higher Education*, 31, 387-403; Wei, C.C. & Horn, L., (2002), *Persistence and Attainment of Beginning Students with Pell Grants*, Statistical Analysis Report No. NCES 2002-169, Washington D.C., U.S. Department of Education, National Center for Education Statistics; Goldrick-Rab, S., Harris, D.N., Benson, J. & Kelchen, R., (2011), *Conditional Cash Transfers and College Persistence: Evidence from a Randomized Need-based Grant Program*, Discussion Paper No. 1393-11, Retrieved November 22, 2011, <http://www.irp.wisc.edu/publications/dps/pdfs/dp139311.pdf>

¹¹⁵ Coffey, J., & Somers, P., (1999), *An analytical approach to understanding student debt load response*, *Journal of Student Financial Aid*, 29(1), 25-44; Kaltenbaugh, L.S., St. John, E.P. & Starkey, J.B., (1999), *What Difference Does Tuition Make? An Analysis of Ethnic Differences in Persistence*, *Journal of Student Financial Aid*, 29(2), 33-44; The National Association of Student Financial Aid Administrators (2011-12) *Issues brief, The role of Pell Grants in access, persistence & completion*, Washington D.C., Online at <http://www.nasfaa.org/WorkArea/DownloadAsset.aspx?id=8107>, Retrieved on April 19, 2013

¹¹⁶ Bettinger, E. P., (2011, Feb), *Financial aid: A blunt instrument for increasing degree attainment*, Washington D.C., American Enterprise Institute for Public Policy Research, Retrieved October 30, 2011, Bettinger, E. P., Long, B. T., Oreopoulos, P. and Sanbonmatsu, L. (2009) *The role of simplification and information in college decisions: Results and implications from the H&R Block FAFSA experiment*. New York

are questions about the adequacy of the current systems and methods for measuring financial need among independent students¹¹⁷.” Some recent recommendations have been to separate the two systems (those for dependent students and those for independent non-traditional students). There are also various recommendations to financially incentivize completion¹¹⁸.

- 9.23 A number of recent publications have been critical of the financial aid policies of the most recent decades that they believe are increasing the “opportunity gap” and have pointed out that many of the current tax (college tax credits benefit middle class families not lower income families that do not pay enough taxes to qualify) and funding (decline in public funding) policies are benefiting middle and upper income students at the expense of low-income students.¹¹⁹ They point out that after exhausting all sources of grant aid the typical low-income student must come up with more than \$11,000 a year to attend a public or private non-profit college¹²⁰. For example, the State grants which are based more on merit have grown at a rate that is triple the rate of need-based grants over the past 10 years¹²¹. Likewise the tuition tax credit aimed at middle and upper class families costs \$19 billion yearly compared with the \$33 billion estimated cost of the Pell Grant program, now serving almost half of all students¹²².

¹¹⁷ Baum, S., McPherson, M. & Steele, P., (2008), The effectiveness of student aid policies: What the research tells us, New York: College Board, Retrieved October 17, 2011, <http://professionals.collegeboard.com/profdownload/rethinking-stu-aid-effectiveness-of-stu-aid-policies.pdf>

¹¹⁸ Gates Foundation, Reimagining Aid Design and Delivery, Bill and Melinda Gates Foundation Grants, Reports, 2013

¹¹⁹ The Pell Institute, (2013) Reflections on Pell, Washington DC. http://www.pellinstitute.org/downloads/publications-Reflections_on_Pell_June_2013.pdf

¹²⁰ Lynch M., Engle J. and Cruz J.. (2011), Priced Out: How the Wrong Financial-Aid Policies Hurt Low Income Students, The Education Trust

¹²¹ The College Board, (2011), Trends in College Pricing 2010, New York, College Board

¹²² National Association of State Student Grant Aid Programs (NASSGAP), (2010), Report on State-Sponsored Student Financial Aid–2008–2009 Academic Year 40th Annual Survey, Washington D.C.

The universal participation concept

10.1 As noted in the introduction to this document, within the U.S. there is a growing bi-partisan commitment to “universal participation” in postsecondary education among education leaders, politicians, policy makers and citizens. For some this commitment is related to social justice and core equity values related to the reality that those without some college education will find it increasingly difficult to have jobs with living wages, to be able to afford to raise families, and to be healthy contributing citizens. For others the commitment relates to global competitiveness, especially with regard to STEM fields in the workforce. Since President Obama gave the challenge in 2009, there has been a movement among States and local communities to set specific targets, to measure gains and to reach out ever wider in terms of encouraging participation. There is a movement to create a cultural shift toward having diverse students from all income levels and races/ethnicities assume that they will enter college and, indeed, high school surveys indicate that the vast majority of students from all income groups now aspire to attain a BA degree¹²³. There is a recognized cultural shift in which all persons will assume postsecondary entrance as a goal.

10.2 One of the features of “universal postsecondary education,” however, is that the face of postsecondary education itself is changing, with the growth of on-line programs, shorter certificate programs and competency based credentialing rather than credit-hour based credentialing. New structures to accommodate older students and more diverse students with diverse goals and learning styles are being implemented¹²⁴. For example, supported by Gates Foundation funding, the University of Southern New Hampshire has an experimental Associate’s degree program that moves away from the traditional time-based credit hours model and instead allows students to demonstrate competency in 120 areas for the degree. The on-line program was recently given approval from the Department of Education as eligible for Federal Aid funds. Universal participation will mean changes not just in student decisions but also in market-driven institutional program development to meet diverse workforce and student needs. As the for-profits show by allocating large portions of their budget to “recruitment” of students whom they argue would not enter postsecondary without their

¹²³ Cahalan, M, Ingles, S, Burns, L, Planty, M., (2006), United States High School Sophomores: A Twenty-Two Year Comparison, 1980–2002, Statistical Analysis Report, U.S. Department of Education, NCES 2006–327

¹²⁴ Leonardo Carrizo for The Chronicle (http://chronicle.com/article/The-Gates-Effect/140323/?cid=at&utm_source=at&utm_medium=en) writes about Southern New Hampshire University's competency-based program, which was begun with money from The Bill and Melinda Gates Foundation. He notes that low-cost, self-paced education lacks courses and traditional professors. Instead, students progress by showing mastery of 120 “competencies,” such as “can use logic, reasoning, and analysis to address a business problem.” He notes that the program is an important guinea pig. The U.S. Department of Education recently allowed Southern New Hampshire to become the first university eligible to award federal aid for a program untethered from the credit hour, the time-based unit that underlies courses and degrees. This “could signal a new era for higher education.”

reaching out, this concept is having a profound impact on what “postsecondary education” itself means in the U.S.

- 10.3 Massive open online courses (MOOCs) are online courses aimed at large-scale interactive participation and open access via the web. These have the potential to radically change the access to bodies of knowledge for which large amounts of money have and are being exchanged in postsecondary education in the U.S. A recent blog entry from the Chronicle of Higher Education summarized remarks from Bill Gates, in a recent keynote address to the July 2013 Microsoft Research Faculty conference. Mr. Gates called these times a “golden era” of learning, thanks to MOOCs and easy access to information. Mr. Gates also addressed the current discussion over the value of a college degree, predicting a “decoupling” of the degree from knowledge acquisition. Traditionally, a college degree was a badge indicating skills in certain areas that could be translated to employment. Mr. Gates said that may no longer be the case, largely because of online education. This will be “a global phenomenon,” he said. “We’re on the beginning of something very profound”¹²⁵.
- 10.4 It is still unclear, what this golden era of learning will mean for low-income and traditionally underrepresented groups in the U.S. HE system. There continues to be a strong verbalized bi-partisan commitment to reducing the measured gaps by race/ethnicity, income and disability status as manifest in the passage of *No Child Left Behind* a decade ago. As what were the minorities in the U.S. become (when taken together) the majority of the population, there is growing awareness that WP to these groups de facto is the major factor in achieving universal postsecondary education. As noted in Section 4, the measures of educational attainment for minority populations (Blacks, Hispanics, American Indians, and Alaska Natives) have had the fastest rates of increase in attainment over the period since 1970. Although rates have slowed and gaps remain, considerable progress has been made since 1970 in this area. Nevertheless, income levels and parent education remain the strongest predictors of educational attainment in the U.S. and increasingly the costs to individuals and the country of this unequal system are being discussed.¹²⁶ Also, as noted, educational attainment has become a major predictor of income differences in the U.S. and is used to justify extreme wage differentials among U.S. workers. In this way education functions both as the engine of social mobility and as the engine of income inequality in the country.¹²⁷ In international comparative research researchers Wilkinson and Pickett from the Equality Trust in England have explored the negative influence that a high level of inequality in a society, in itself, may have on health, education and welfare

¹²⁵ Bill Gates Discusses MOOCs at Microsoft Research’s Faculty Summit, Chronicle of Higher Education Blog http://chronicle.com/blogs/wiredcampus/bill-gates-discusses-moocs-at-microsoft-researchs-faculty-summit/44809?cid=at&utm_source=at&utm_medium=en

¹²⁶ Advisory Committee on Student Financial Assistance, (2010) *The Rising Price of Inequality*. Washington, DC. Retrieved on October 29, 2011 from <http://www2.ed.gov/about/bdscomm/list/acsfa/acsfarpiune2010.pdf>

¹²⁷ Cahalan M. (November 2011) AEA presentation, Anaheim California, Treating the US Educational System as a Complex Adaptive System and Investigating Computational Simulation of Federally-Funded Access Program Impacts <http://www.slideshare.net/chearsdotorg/us-college-access-programs-complex-adaptives-system-nov2011>

indicators. They argue and present evidence that the higher the levels of inequality in a country the more frequent will be the incidence of negative health and education indicators¹²⁸. Some U.S. economic researchers see universal postsecondary education as the only way to reduce inequality in the country given the market driven U.S. wage structure. They hypothesize that if there is a larger proportion of the population with BA degrees the positive wage differential for a BA degree will decline and we will have more equality¹²⁹.

- 10.5 As noted in Section 6, target groups for Federal programs, periodically shift somewhat. Among the TRIO programs they remain legally defined by income and parent education. The *No Child Left Behind* act (NCLB) has a focus on reducing gaps by race/ethnicity, economic status of family, limited English proficiency and disability status. Recently, there is also renewed concern with the fact that boys are entering into and completing college at lower rates than girls. There is also a renewed and increased concern with returning veterans and with older persons returning to school - sometimes after losing their jobs - since what is known as the Great Recession of 2008. The rapid rate of technology driven change in workforce requirements means that non-traditional and older persons make up an increasing proportion of postsecondary enrolments, and postsecondary institutions are also rapidly changing to meet the needs of the workplace and of the non-traditional students.
- 10.6 In addition the two recent decades saw a shift from focus on educational “attainment” that characterized the Civil Rights movement to an increased focus on the K-12 achievement test scores and rigorous academic course taking indicators rather than “attainment levels” per se, leading to what is called the “raising standards” and “high school reform movements.” The major college entrance testing group, ACT, yearly publishes data that asserts that less than a third of U.S. students taking their test are “college ready” and persistently, there are large gaps by race/ethnicity and by income reported.¹³⁰ By 2013 there are some indications of a renewed focus on attainment indicators and recognition of the negative impacts of what some view as an over-focus on testing, competitive achievement measures, and district, school and teacher accountability.
- 10.7 **Early Childhood Preparation.** The Obama administration has had a clear emphasis on the importance of early childhood education and in a tight funding situation has called for increases in these programs much more so than the college access support programs such as TRIO. There is some push back in early childhood and also in the K-12 community concerning the over-emphasis on competitive “academic achievement” too early and there is some indication that some students may get burned out and reject the repeated calls for them to prepare for their future and college readiness.

¹²⁸ Wilkinson R.G. and Pickett K.E., (2007), *The Problem of Relative Deprivation: Why Some Societies Do Better than Others*. Social Science and Medicine, 65 (9) 2007; Wilkinson R.G. and Pickett K.E., (2009), *The Spirit Level*, Equality Trust, 2009

¹²⁹ Carnevale A. and Strohl J., *How Increasing College Access is Increasing Inequality and What to Do About it?* In *Rewarding Strivers*, 2009

¹³⁰ ACT, (2012) *The Condition of College Readiness 2012*, Iowa City, Iowa: ACT

Supplemental services strategies for college access

- 10.8 As noted in Section 7, within the U.S. there are classic Federal college access programs and many newer similar private non-profit programs that provide voluntary supplemental pre-college services to interested low-income, first-generation, and disabled potential college students. Key services of these programs consist of college and financial aid awareness, counseling, academic tutoring, mentoring, summer bridge programs, cultural enrichment, college visits and assistance to plan high school courses, to apply to colleges and to complete financial aid applications. Generally speaking, evaluations have found that these programs are effective with larger average effect sizes occurring for the more intensive services¹³¹. Most notably participation in Upward Bound, the most intensive of the Federal pre-college programs, was found to result in a 50 percent higher BA attainment rate in 6 years among students randomly assigned in middle school or early high school to Upward Bound and who entered the program¹³².
- 10.9 The recent “policy conversation” around college access has stressed the need to provide “whole school” services to all students and not only to those traditionally served who volunteer for the program and are already interested. There is also recognition of the importance of services keyed to transition points such as entrance from middle to high school with focus on 9th grade services and summer bridge programs between 8th and 9th grade. Another transition point is that of the 12th graders in the college application period; helping students make the right choices for them is deemed important. Similarly programs such as summer bridge programs for entering college freshman, especially those that will need special services, are deemed as very important. A summer bridge program can sometimes reduce the need for remedial courses and also give students a leg up on being successful in that first year of college which for many is a stumbling block.
- 10.10 A synthesis of work published by the Department of Education reported that the most effective strategies are: 1) encouraging and supporting strong academic course taking preparation for college; 2) using data to assist students in planning; 3) surrounding students with strong support mentors and peers supporting college attendance; 4) helping students engage in the practical steps to college (course completion, application for aid, college visits, applications); and 5) increased financial literacy and aid awareness¹³³.

¹³¹ Horn L. and Chen, X., (1998), Toward Resiliency: At Risk Students who Make it to College, U.S. Department of Education, Office of Educational Research and Improvement, Washington D.C.; Constantine, Seftor, Martin, Silva, Myers, A Study of the Effect of Talent Search on Secondary and Postsecondary Outcomes in Florida, Indiana, and Texas, U.S. Department of Education, 2006; Cahalan Margaret, Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change? can be accessed at <http://www.pellinstitute.org/publications-Do the Conclusions Change 2009.shtml>

¹³² Cahalan M., Addressing Study Error in the Random Assignment National Evaluation of Upward Bound: Do the Conclusions Change? can be accessed at <http://www.pellinstitute.org/publications-Do the Conclusions Change 2009.shtml>

¹³³ Tierney, W.G., Bailey, T., Constantine, J., Finkelstein, N. & Hurd, N.F., (2009), Helping Students Navigate the Path to College: What High Schools Can Do: A Practice Guide, (NCEE #2009-4066), Washington D.C., National Center for Education Evaluation

Strategies for college support after entrance into college

10.11 As noted in Section 8, participation in Student Support Services programs by early college students has been found to increase college completion rates in national studies¹³⁴. A recent government publication on effective strategies to increase college retention and completion noted that services should be: 1) integrated – building and reinforcing each other; 2) sustained – one semester is not considered enough; and 3) systematic – having an overall plan and promoting a culture of success¹³⁵. Strategies that have evidence of effectiveness from recent research in the U.S. context include: 1) direct efforts to reduce the need for remediation in the first year of college, including “upward placement” strategies with support and summer bridge programs for entering freshman especially those targeted to specific upcoming freshman courses or those designed to avoid remediation; 2) proactive or intrusive, advising of students that may be at risk and possibly involving college coaches calling or contacting students each week, working with students ahead of time before failure happens to plan strategies to deal with challenges, and specific contracts with students; 3) creating structured pathways to success for students that are clear and attainable and providing data and information to support the pathways; and 4) engaging faculty in creating a culture of fostering student success. In addition, correlational studies that use aggregate completion rates relative to the characteristic of entering students consistently find that colleges with a mission or particular historical focus (for example, Historically Black Colleges or Catholic Colleges) generally have higher than expected completion rates given the characteristics of entering students¹³⁶.

10.12 **Stigmatization for targeted services.** The information above suggests that programs that foster mainstreaming students as soon as possible with supports in place have more success than the traditional procedure of requiring less prepared students to successfully complete several remedial non-credit courses prior to entrance into regular college courses. As noted compressed remediation with upward placement in some courses and summer bridge programs that are targeted in preparation for a regular college course seem to show potential, as well as proactive support for the upward placement. In the current climate, student services for low-income students do not have the stigma once associated with them, especially as students are encouraged to form associations to foster equality of educational access among their peers.

10.13 **Reasons for leaving college – academic vs. financial.** Generally speaking while having to take remedial courses in the first year of college because of poor academic preparation is regarded as a factor in discouraging some students, poor academic preparation is not a major factor cited by students who have left college. Most students

¹³⁴ Channey B., Muraskin L., Cahalan M. & Rak R., (1997), National Study of Student Support Services: Third-Year Longitudinal Study of Results and Program Implementation Study Update, Washington D.C., U.S. Department of Education; Channey, B., (2008), National Study of Student Support Services: Six Year Longitudinal Study Results, Washington D.C., U.S. Department of Education

¹³⁵ U.S. Department of Education, (2012), Evidence meets practice: institutional strategies to increase college completion, Available at <http://www.edpubs.gov/document/ed005371p.pdf>

¹³⁶ Mortenson, T, Actual versus Predicted Institutional Graduation Rates, Access and Completion, White House Initiative on Historically Black Colleges and Universities, Washington D.C., September 19, 2011

site the stress they have in juggling work and college at the same time as the major factors. These may lead to poor grades. Many students do cite factors such as the college not caring about them, change in career plans, thinking it is not worth the money, and desire not to go into more debt as reasons for leaving.

Financing HE strategies

- 10.14 As noted in Sections 5 to 9, there is not a consensus about how to finance postsecondary education and how much financial and support services assistance should be provided by the Federal government. In fiscal years 2005 and 2006, Republican President Bush sought to eliminate funding for the TRIO college access programs (Talent Search, Upward Bound, Upward Bound Math Science and GEAR UP) and replace them with his administration's own programs focused on "high school reform" increasing accountability and achievement testing focus. In Congress, which controls appropriations, both Democrats and Republicans did not go along with President Bush's request and Congress restored the funding for TRIO and GEAR UP in their budgets. However, funding for these programs has been level or has decreased over the past decade, in a period in which there were large increases for education funding largely for the K-12 *No Child Left Behind* (NCLB) testing and accountability mandates. President Obama has been supportive of TRIO programs verbally; however, he also has not submitted budgets that have had significant increases for TRIO and GEAR UP.
- 10.15 Within the U.S. context, with the current cost of college and wage structure for families, financial aid is critical to WP and it is clear that college entrance rates and completion rates would be much lower without Federal aid to low-income students. It is also probable that the decline in buying power of the Pell Grants combined with rising costs have slowed college entrance and completion rates among low-income students in the country. Generally speaking, Republicans oppose increases in the Pell program and would like to see more of a merit-based system as manifest the now defunct program that they initiated. As discussed in Section 5, rather than increase the Pell allocations for all, in 2005 they legislated Academic Competitiveness Grants (ACGs) as Pell supplements to encourage rigorous study in high school to promote success in college, and the National SMART (Science and Mathematics Access to Retain Talent) Grants which encourage Pell recipient college students to major in subjects in high demand in the global economy, such as science and engineering. This program, begun in 2006, was discontinued in 2011 – too early for there to have been a clear evaluation of whether it achieved its intended purpose of increasing rigorous course taking, motivating trying for good grades, and increasing STEM majors. The reports¹³⁷ noted that early participation rates varied by State, but that those with AC grants were retained at higher rates than those without the grants. There was no evidence manifest in the short period of implementation of increases in science and technology majors.
- 10.16 The increases for all Pell recipients asked for by President Obama in 2009 and subsequently appropriated by Congress, raised Pell Grants from about \$4,000 to

¹³⁷ <http://www2.ed.gov/rschstat/eval/highered/acsmna>, Choy S., Berkner, L., Lee J. and Topper A., Academic Competitive Grants and National Smart Grants, Implementation Reports, 2009, 2011

\$5,500 at maximum. This increase was considered a victory for the Democrats. Funding however still lags far behind the levels they were in 1980. As noted the proportion of the costs borne by students and families has been increasing and the State and local shares of postsecondary education funding have been decreasing. Funding by State and local public sources were at historically low levels by 2012. This has contributed to rising costs and many low-income students are simply being “priced out” of a traditional 4-year college education.

10.17 Recent decades have seen a mushrooming of use of student loans to cover education both among low- and middle income-students. As indicated in Section 9 student debt burden is a major issue in the U.S., as are student default rates now estimated to be about 13 percent overall, and up to 22 percent in for-profit institutions¹³⁸. The rise in unemployment since 2008, especially among younger job seekers, has led to higher default rates, despite Department of Education plans for “pay as you earn” programs.

10.18 In addressing the question of whether it is better for students to stay out of postsecondary education than to leave without a degree and a high debt burden, or even to leave with a degree and a high debt burden in a field that does not have employment prospects, most policy makers would perhaps point to the fact that those with some college education on average earn more than those without. They might also point to the recent “pay as you earn” programs for federal loans that provide a program where the payments are never more than 10-15 percent of income and in which if you earn less than 150 percent of the poverty level you can make zero payments in that year and the debt is forgiven after 20 years for all in the program regardless of how much of the debt has been paid. Virtually all college counselors would caution students against taking out “private college loans” that will not have such terms for repayment. Some for-profit colleges in response to criticism that they recruit and carry students who have no hope of completion for too long, have implemented programs in which if a student is failing a course and withdraws they do not have to pay for the course. They have also implemented programs in which students who are not able to pass any of the first courses in which they enroll have to withdraw. Most college access policy makers would recommend focusing on helping students be clearer about their career goals, keeping them fully informed about the job prospects for their program, and providing supports to increase retention.

10.19 The growth of interactive on-line college programs in all fields and for all types of degrees and credentials is viewed by many as a major force in WP and is changing the face of postsecondary education structure and teaching. While all postsecondary sectors and types of colleges are increasingly using on-line technology, the for-profit sector has been in the lead in developing on-line only programs and support systems for non-traditional students. As discussed in Section 9, while there is considerable criticism of this sector and calls for increased regulation, it remains the fastest growing sector in postsecondary education in the U.S.

¹³⁸ U.S. Department of Education, Office of Federal Student Aid, Three-year Official Cohort Default Rates for Schools, <http://www2.ed.gov/offices/OSFAP/defaultmanagement/cdr.html>

10.20 . Recently there have been efforts to simplify the financial aid process and to provide information about eligibility in a more-timely manner throughout the U.S. Every year there are a substantial number of students who enter college and would be eligible for Pell support if they applied. There are also pilot programs that provide low-income high schools with weekly reports about who has and has not applied for aid from their high schools in the hope that counselors and teachers will engage in “intrusive encouragement” for students to apply for aid. As the Financial Aid Form is used by all students (high income to low income) there is no stigma to applying for aid. This year was the first year of the direct links with IRS forms and there were some issues related to timing of filing which reportedly have been addressed.

Evaluation methods

10.21 The past two decades have been ones in which there has been considerable pressure for Federal and State, local or foundation funded programs to demonstrate that they are “effective” in reaching their goals and also that they are the most “productive” and cost-effective use of funds. As noted in Sections 7 to 9, it is difficult to measure whether a competitive Federal program that funds diverse and ever changing group of grantees to engage in legislatively defined services is on average an effective tool to achieving legislatively mandated goals. After two decades of attempting these “black box” overall national evaluations, there is currently an emphasis on smaller in-depth studies of individual strategies that may be attempted and used across programs by practitioners that show promise. There is a clear attempt to understand the link between the intervention and the impact being observed. Some of these studies are discussed in Sections 7 to 9. To the extent possible these studies try to use a random assignment or an interrupted time series method; however, even with studies of specific strategies this method is not always possible, and these often have limited validity outside of a particular context. The other issue is that factors impacting postsecondary access and completion are systemic, dynamic and ever changing in time and context. Recently there are new methods of evaluation (Participatory Action Research, Collaborative, and Empowerment Evaluation; Systems Dynamics Analysis¹³⁹) being developed that encourage practitioners and even the clients (students) to be a part of the evaluation design and to continually engage in self-study of the best methods to improve services and goal achievement.

¹³⁹ Information about these newer evaluation methods can be obtained at: (Action Research) http://en.wikipedia.org/wiki/Participatory_action_research; (Empowerment Evaluation) Fetterman D., Wandersman A., (2005), Empowerment Evaluation, Principles in Practice; (Systems Evaluation) Trochim W. The Evaluation Facilitators Guide to: Systems Evaluation Protocol, Cornell Office for Research on Evaluation, NSF grant 0535492 2009, <https://core.human.cornell.edu/research/systems/index.cfm> ; Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>.

11| Conclusions

11.1 In summary, the widening access policies embodied in the HEOA of 1965 and its six re-authorizations (most recently in 2008) has succeeded in making college participation a national goal for all U.S. citizens. It has also provided grant and increasingly loan resources for those lacking income and social capital to attend college. Large gains have been made, but large gaps by income remain and are getting larger as are income inequality levels within the U.S. Currently lack of adequate funding of postsecondary education is a major issue and some would say that the current situation, with low- and middle-income students forced to go into large debt to be educated to qualify for jobs that pay a living wage, is unsustainable and no doubt is depressing the rates of educational attainment in the U.S. The other major issue is that it is not clear that the current job structure dominated by the large corporations of the U.S. economy can absorb new entrants into the system at living wages. Current estimates are that about 33 percent of the new and replacement jobs by 2018 will require a BA college degree; about 30 percent an Associate's degree or some college certificate; and about 36 percent a high school degree. Many of these latter jobs requiring a high school degree are increasingly paid less than a living wage¹⁴⁰. Creative work is needed by all to address working toward educational and economic/work systems in which each person has equal access to an education that will address each person's learning needs and facilitate development of his or her talents to the fullest. This is critically needed, so that each person can be a healthy and productive citizen, with adequate income, contributing to the common good and addressing key local, national and global issues such as climate change and environmental degradation faced by all citizens¹⁴¹.

¹⁴⁰ Carnevale, A., Smith, N. & Strohl, J., (2010), Help Wanted: Projections of Jobs and Education Requirements Through 2018, Washington, D.C., Georgetown University Center on Education and the Workforce; Carnevale A. and Strohl J., (2009), How Increasing College Access is Increasing Inequality and What to Do About it?, in Rewarding Strivers

¹⁴¹ OECD, (2011), Assessing Environmental Literacy A Proposed Framework for the Programme for International Student Assessment (PISA) 2015, Submitted to the Organization for Economic Co-operation and Development (OECD), August 28, 2011

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<http://www.slideshare.net/chearsdotorg/exploring-demographic-and-selected-state-policy-correlates-of-state-level-educational-attainment-and-achievement-indicators-aera2007-cahalan>
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Appendix 2 | List of abbreviations

ACE	American Council on Education
ACG	Academic Competitiveness Grant
AYP	Adequate yearly progress
AEA	American Education Association
AP	Advanced Placement (classes)
B&B	Baccalaureate and Beyond (study)
BEOG	Basic Education Opportunity Grant
BPS	Beginning Postsecondary Study (study)
COE	Council for Opportunity in Education
CRESPAR	Center for Research on the Education of Students Placed at Risk
EDS	Economically disadvantaged student
EOC	Educational Opportunity Centers
ESEA	Elementary and Secondary Education Act
ETS	Educational Talent Search
FAFSA	Federal Application for Student Aid
FTE	Full-time equivalent
GPA	Grade Point Average
HE	Higher Education
HEI	Higher Education Institution
HBCUs	Historically Black Colleges and Universities
HHS	Health and Human Services Department
HEOA	Higher Education Opportunity Act of 2008
IRS	Inland Revenue Service
IPEDS	Integrated Postsecondary Data System

LEA	Local Educational District
LEP	Limited English proficiency
MDRC	MDRC is the name of the organization
MOOC	Massive open online courses
MSI	Minority-serving institution
NASFAA	National Association of Student Financial Aid Administrators
NCAS	Nation College Access Network
NCCEP	National Council for Community and Education Partnerships
NCES	National Center for Education Statistics
NELS	National Educational Longitudinal Study
NPSAS	National Postsecondary Student Aid Study
NCES	National Center for Education Statistics
NPEC	National Postsecondary Education Cooperative
NSC	National Student Clearinghouse
OSAC	Oregon Student Access Commission
QA	Quality Assurance
SMART	Science and Mathematics Access to Retain Talent
SSS	Student Support Services
STEM	Science, technology, engineering and math
UB	Upward Bound
UBMS	Upward Bound Math Science