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# Improving College Access and Completion for Low-Income and First-Generation Students: The Role of College Access and Success Programs

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Testimony Provided to the Subcommittee on Higher Education and Workforce Training Committee on Education and the Workforce United States House of Representatives

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## **Disciplines**

Accessibility | Education | Higher Education

## **Comments**

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For Low-Income and First-Generation Students:  
The Role of College Access and Success Programs**

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Laura W. Perna  
April 30, 2015

Thank you for the opportunity to comment on best practices for helping low-income and first-generation students access and complete college. As I have devoted my career to conducting research on related issues, I am honored to have the opportunity to speak with you today.<sup>1</sup>

Improving college access and completion for low-income and first-generation college students is one of the most important challenges facing our nation. In our global, technologically-driven economy, available jobs increasingly require some education beyond high school (Carnevale, Smith, & Strohl, 2013). Drawing on data from the Bureau of Labor Statistics and research about the continued “upskilling” of current jobs, Anthony Carnevale and his colleagues project that 65% of jobs will require education beyond high school by 2020, up from 28% in 1973. At the current rate of degree production, the demand for workers with at least an associate’s degree will exceed the supply by 5 million by 2020 (Carnevale et al., 2013).

The U.S. cannot achieve the level of educational attainment that is required for workforce readiness or international competitiveness without closing the considerable gaps in higher education attainment that persist across demographic groups (Perna & Finney, 2014). Attention only to the nation’s overall average attainment masks the considerably lower rates of attainment for students from low-income families, students who are first in their families to attend or complete college, and students from racial and ethnic minority groups. In 2012, college enrollment rates were about 30 percentage points lower for high school graduates from the lowest family income quintile than from the highest (Baum, Ma, & Payea, 2013). When they do enroll, students from low-income families tend to attend less selective postsecondary educational institutions and complete degrees at lower rates (Cahalan & Perna, 2015). In 2013, 77% of dependent students from families in the highest-income quartile had attained a bachelor’s degree, compared with just 9% of dependent students from the lowest family income quartile (Cahalan & Perna, 2015).

Closing gaps in higher education attainment across groups is important for reasons of national economic competitiveness as well as social mobility. Higher education produces countless benefits for individuals, including higher earnings, better working conditions,

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<sup>1</sup> I am grateful for the comments and feedback that Roman Ruiz, Kata Orosz, and Lorelle Espinosa provided on an earlier draft of this testimony.

higher rates of employment, lower rates of unemployment and poverty, better health, and longer life expectancies (Baum et al., 2013; Carnevale et al., 2013). Our society also benefits, as with higher educational attainment comes greater economic productivity, less reliance on social welfare programs, greater civic engagement and charitable giving, and higher rates of voting (Baum et al., 2013).

Improving college access and success for low-income and first-generation students requires a multi-faceted, comprehensive approach, and commitment from multiple players (Perna & Jones, 2013). Only with a comprehensive approach and involvement of multiple stakeholders will we address the multiple forces that limit college enrollment especially for students from groups that are historically underrepresented in higher education. This comprehensive approach must ensure that: all students have the necessary financial resources to pay college costs; all students are adequately academically prepared for college-level requirements; and all students have the information and knowledge required to understand college-related requirements and processes, make appropriate college-related choices, and navigate the complicated pathways into, across, and through higher education institutions.

The federal government plays an important role in reducing the financial barriers to college attendance through the financial aid programs authorized under Title IV of the Higher Education Act. The importance of the Federal Pell Grant program for increasing college access and completion for students from low-income families cannot be understated. About 9.2 million undergraduates received a Federal Pell Grant in 2013-14 (College Board, 2014).

Over time, however, increases in the Federal Pell Grant award have not kept pace with the growing costs of attending college. At public four-year colleges and universities, the maximum Pell Grant covered 30% of the average published charges for tuition, fees, room and board in 2014-15, down from 35% in 1994-95. The average Pell Grant covers an even smaller share of costs, as the average award is considerably lower than the maximum allowable (\$3,678 versus \$5,645 in 2014-15, College Board, 2014). Providing sufficient funding so as to at least maintain the purchasing power of the Pell Grant is important to preserving the affordability of higher education for students from low-income families. Research consistently demonstrates the negative implications for college enrollment when college prices increase and grant aid decreases; the negative effects are particularly large for the enrollment of students from low-income families (Perna, 2010). As a form of financial aid that does not need to be repaid and that is specifically targeted to students from low-income families, the Federal Pell Grant is an essential lever for increasing college access and completion for students from low-income families.

Although essential, the federal government's investment in need-based grant aid is insufficient. The federal TRIO programs and other college access and success programs also make necessary contributions to the goal of improving higher education attainment for students from underrepresented groups. These programs cannot create the type of large-scale systemic and structural changes that are required to level the playing field in

our nation's K-12 and postsecondary education systems.<sup>2</sup> Yet these programs do provide the support and assistance that many students – especially low-income and first-generation students – require in the absence of these changes. Moreover, even if large-scale changes were to occur, these programs would continue to play an important role in supporting students who are not well served by the prevailing system.

Research demonstrates the positive effects of TRIO programs on students' college-related outcomes (Maynard et al., 2014). Methodologically rigorous research studies conducted by Westat and Mathematica Policy Research show that: Student Support Services promotes persistence in college, college credit accrual, and college grades; Talent Search increases applications for financial aid and postsecondary enrollment; and Upward Bound Math-Science has positive effects on enrollment in selective four-year institutions and completion of a bachelor's degree in a math or science discipline (The Pell Institute, 2009). In a meta-analysis of research that used experimental or quasi-experimental research designs, Maynard et al. (2014) found that, on average, the studied TRIO and other college access programs increased college enrollment by 12 percentage points.<sup>3</sup> Other research demonstrates the cost-effectiveness of Talent Search, especially relative to other dropout prevent programs, in promoting high school completion (Levin et al., 2012).

Understanding the particular programmatic features of TRIO and other programs that promote students' college-related outcomes is complicated by the many variations across programs. For instance, programs that fall under the TRIO umbrella collectively serve students from middle school into post-graduate study and offer varying services. Talent Search emphasizes the provision of information about college and financial aid to students in grades 6 through 12, whereas Upward Bound emphasizes academic preparation, mentoring, and assistance with college and financial aid processes for high school students. Veterans Upward Bound helps veterans improve academic readiness for college and obtain other services targeted to veterans. Educational Opportunity Centers assist displaced and underemployed adult workers from low-income families with college-going processes. The McNair program serves undergraduates who are preparing for doctoral studies and emphasizes undergraduate research experiences, mentoring, and preparation with graduate school admissions processes.

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<sup>2</sup> One area where large-scale structural change is required pertains to academic readiness for college. To improve college access and success and reduce gaps in higher education attainment we must ensure that all students – regardless of where they live or what high school they attend – are academically prepared to enroll and succeed in college (Perna, 2005; Perna & Finney, 2014). One indicator of the failure to ensure adequate academic readiness for all students is the high rate of participation in remedial or developmental coursework. In 2007-08, 24% of first-year undergraduates attending public two-year colleges and 21% of first-year undergraduates attending public four-year institutions took at least one remedial course (National Center for Education Statistics, 2013).

<sup>3</sup> This meta-analysis includes a controversial study that found that Upward Bound has “no detectable effect” on college enrollment (Seftor, Mamun, & Schirm, 2009). Reevaluations of data from this study show that, when design flaws of the Seftor et al. study are taken into account, Upward Bound has positive effects on college enrollment, college completion, and applications for financial aid (Cahalan & Goodwin, 2014; Harris, Nathan, & Marksteiner, 2014). Including the reevaluation of Upward Bound rather than the original Upward Bound study in the Maynard et al. meta-analysis increases the pooled effect of the studied programs on college enrollment from 11.9 percentage points to 12.2 percentage points.

Drawing from my understanding of available research, I offer five recommendations to guide the Committee's consideration of college access and success programs: 1) target students with the greatest financial need; 2) assist students with navigating pathways into and through college, with particular attention to financial aid processes; 3) adapt services to recognize the relevant context and characteristics of targeted students; 4) leverage spending on federal TRIO programs to serve greater numbers of students; and 5) encourage research and evaluation of college access and success programs to improve understanding of what works.

**Target students with the greatest financial need.** A strength of the federal TRIO programs is the targeting of services to students from low-income families and first-generation college students. Targeting services and resources to these groups is appropriate, given the continued positive relationship between family income and parents' educational attainment and a host of college-related outcomes.

To create meaningful improvements in college access and completion for students from underrepresented groups, we must recognize and address the many ways that inequality is structured into the pathways into and through college. Students from low-income families have fewer financial resources to pay both the direct costs of college attendance, and the many less-visible costs of college access and completion including costs of college admissions tests and college application fees. Research suggests that, in recent years, upper-middle and upper-income families have been increasing their investments in their children's academic readiness, a pattern that will only further widen the gap in higher education opportunity and outcomes across demographic groups (e.g., Reardon, 2012; Weis, Cipollone, & Jenkins, 2014). Students from low-income families also typically attend high schools and postsecondary educational institutions with fewer resources to invest in and support students' college-related outcomes.

Unlike their peers from higher-income families or whose parents have completed college, students from low-income families and first-generation college students generally do not have family members with direct relevant knowledge of how to traverse college-related processes and make optimal college-related decisions (Engle & Tinto, 2008). By targeting programs to low-income and first-generation students, college access and success programs help to level the playing field for higher education opportunity.

**Assist students with navigating pathways into and through college, with particular attention to financial aid processes.** Consistent with the economic theory of human capital, research demonstrates that students make college-related decisions based on a comparison of the benefits and costs (Perna, 2006). Human capital theory does not assume that students have complete or perfect information about all potential postsecondary educational choices but rather that students use the information that they have. But, many students – and especially students from low-income families or who are the first in their families to attend or complete college – have limited or incomplete information about the benefits and costs of different higher education options, the

availability of and processes for receiving financial aid, or the ways to successfully navigate pathways into and through college to degree completion.

Many assume that high school counselors are available to adequately provide this type of guidance and assistance. And research shows the positive relationship between the availability of high school counselors and four-year college enrollment rates (Hurwitz & Howell, 2013).

Yet at most high schools, and especially at high schools serving large shares of low-income and first-generation students, counselors are not available to provide the needed assistance. The number of students per counselor is high at most schools – averaging 553 at public elementary schools and 421 at public high schools nationwide in 2010-11 (Clinedist, Hurley, & Hawkins, 2013). The number of students per counselor increases, on average, with the number of students enrolled at the school, and varies considerably across states, ranging to a high of 1,016 students per counselor in California in 2010-11. The number of students per counselor has remained virtually unchanged over the past decade (Clinedist et al., 2013). In the face of budget shortfalls, some school districts have cut counseling staff (Hurwitz & Howell, 2013).

High school counselors report that “helping students plan for and prepare for postsecondary education” is a top priority (Clinedist et al., 2013). Other responsibilities, however, often limit the time that counselors have available to advance this goal. Even when available, high school counselors typically have many responsibilities other than, or in addition to, assisting students with the postsecondary enrollment process. On average, counselors report spending only a third of their time on postsecondary admission counseling, as they also are responsible for such tasks as high school course scheduling (21% of time, on average), personal needs counseling (19% of time), and academic testing (12% of time) (Clinedist et al., 2013).

Available data and research suggest that “counseling” is a particularly beneficial component of college access and success programs.<sup>4</sup> From their comprehensive review and synthesis of relevant rigorous research, Tierney and colleagues offered five recommendations for high school staff to improve college access. The two recommendations with the strongest support from research are: “engage and assist students in completing critical steps for college entry” and “increase families’ financial awareness, and help students apply for financial aid” (p. 6).<sup>5</sup>

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<sup>4</sup> Understanding whether a particular program component causes improvements in college-related outcomes is difficult, as college access programs vary in countless dimensions including the array of services offered. Of the 18 studies included in the rigorous examinations of the effects of college access programs on college enrollment by Maynard et al. (2014), 13 included “counseling” as well as assorted other components (e.g., academic enrichment, mentoring, parental involvement, social enrichment). Seven of the 13 studies of programs with counseling components found positive effects on college enrollment (Maynard et al., 2014); this number increases to 8 of 13 when Cahalan and Goodwin’s (2014) reevaluation of Upward Bound is considered.

<sup>5</sup> The other three recommendations are: “Offer courses and curricula that prepare students for college-level work and ensure that students understand what constitutes a college-ready curriculum by 9<sup>th</sup> grade; Utilize assessment measures throughout high school so that students are aware of how prepared they are for

The benefits of counseling to college-related outcomes are not surprising, given the complexity of college preparation, enrollment, and completion processes. As others (e.g., Tierney et al., 2009) have concluded, “Many students do not take the necessary steps during high school to prepare for and enter college because they are not aware of these steps or because they lack the guidance or support needed to complete them” (p. 5). Educational attainment is a longitudinal process with many important steps, including aspiring to attend college, gathering information about potential college choices and college application processes, taking college-preparatory courses and college entrance examinations, applying for admission, completing financial aid applications, deciphering financial aid award letters, weighing costs and benefits of different forms of financial support (especially loans and paid employment), identifying the best institutional “fit,” determining the courses required to graduate from the first institution attended and/or will be granted academic credit by another institution, obtaining academic and other assistance when personal, academic, financial, social, and other challenges arise, etc.

Although much “information” about college-going and financial aid processes is available via the Internet and other sources, simply making information available is insufficient.<sup>6</sup> Students (and their families) need to be able to determine which information is most useful and relevant given their financial resources, academic preparation, goals, and interests (Perna, 2010). Low-income and first-generation students especially need guidance with the many steps that promote college entry, including preparing for and taking college admissions exams, searching for colleges and universities that are well-suited to their goals and interests, visiting college campuses, and submitting college admission applications (Tierney et al., 2009). Low-income and first-generation students also need to understand the availability of financial aid and the processes for obtaining aid, and often require assistance with completing financial aid application forms (Bettinger, Long, Oreopoulos, & Sanbonmatsu, 2009; Tierney et al., 2009).

In too many high schools, school staff are not able to provide the assistance that students – especially low-income and first-generation students – need to navigate the complex process of entering college and obtaining financial aid. College access and success programs are an important mechanism for helping to fill this void. College access and success programs also provide much needed assistance with these processes for adults who have no formal connections to a K-12 school.

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college, and assist them in overcoming deficiencies as they are identified; and Surround students with adults and peers who build and support their college-going aspirations” (Tierney et al., 2009, p. 6).

<sup>6</sup> One of the clearest demonstrations of the need to do more than simply provide generic OR individualized information is the “H&R Block-FAFSA experiment” conducted by Bettinger and colleagues (2009). In this study, individuals with low- and moderate-incomes and with at least one family member between the ages of 17 and 30 without an undergraduate college degree were randomly assigned to receive: 1) personalized estimates of financial aid eligibility and assistance with completing the FAFSA; 2) personalized estimates of financial aid eligibility but no assistance; or 3) generic information about college costs and financial aid. The study found improved college-related outcomes only for individuals who received both assistance with completing the FAFSA and personalized information about financial aid eligibility; these individuals were more likely than individuals in the other two groups to submit a financial aid application, enroll in college, and receive need-based financial aid.



**Adapt programs to recognize the state, regional, and local context and characteristics of students served.** Students' college-related decisions and behaviors do not occur in a vacuum. Instead, college-related decisions occur within, and depend on, the contexts in which students are embedded (Perna, 2006; Perna & Jones, 2013). For instance, whether a student aspires to attend college is influenced by the college-going norms and behaviors of other individuals in the community in which the student lives and the school the student attends. A student's knowledge and beliefs about college-going processes are influenced by the college-going beliefs of the student's family members, teachers, and peers as well as the availability of college-related information in the school a student attends.

Whether an individual is academically prepared for college is influenced by the availability of and the opportunity to participate in academically rigorous courses at the high school a student attends.<sup>7</sup> Academic readiness is also influenced by the policies pertaining to academic readiness and high school graduation in the state in which a student lives. Whether a student persists in college to finish a degree program is influenced by the resources available to promote academic and social success at the higher education institution a student attends. Whether an individual has the financial resources to pay the costs of higher education depends on the student's family income and savings, the tuition charged by the higher education institution, and federal, state, and institutional policies pertaining to student financial aid.

To have a meaningful effect on students' college-related outcomes, college access or success programs need to adapt the delivery of services to recognize the state, regional, and local context in which the programs are embedded. Particularly important are characteristics of state policies pertaining to high school graduation and assessment requirements and the higher education options that are available in the state, region, and locality.

Programs also need to recognize and address the characteristics of the students served. TRIO programs collectively serve students across the educational pipeline. About half of TRIO participants are middle and high school students (49% of all TRIO participants), 26% are current college students, 24% are adults aspiring to enter higher education, and 1% are veterans. Clearly middle and high school students require different types of support and assistance than veterans and unemployed adults who aspire to complete college.

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<sup>7</sup> Differences in academic readiness for college-level work can be attributed to two forces: 1) differences in the availability of academically rigorous courses across high schools; and 2) differences in participation in available courses (Perna et al., 2015). Academically rigorous courses are not only less available in the schools attended by students from low-income families and racial/ethnic minority groups than in other schools, but even when rigorous courses are available, students from these groups are less likely to participate (Perna et al., 2015). This pattern of findings points to the structural barriers that limit academic preparation for college, and raise questions about the extent to which students are aware of the academic requirements for college-level work (Tierney et al., 2009) and are formally and informally discouraged from participating in academically rigorous coursework (Perna et al., 2015).

**Leverage federal spending to serve greater numbers of students.** Although the federal government’s investment in TRIO programs enables the provision of services to some students, clearly many more low-income and first-generation college students also require assistance. TRIO programs serve only a very small fraction – less than 5% – of the nation’s total population of low-income and first-generation college students (Mortenson, 2011). In FY 2014 there were about 785,000 students participating in 2,800 grant-funded TRIO programs (U.S. Department of Education, 2015).

Federal dollars invested in college access and success programs yield considerable returns, given the many economic and non-economic benefits of improving college access and completion to individual students and our nation as a whole. Although the annual federal appropriation for TRIO programs has fluctuated somewhat over the past decade, the \$828.6 million allocated in 2014 was virtually unchanged (in current dollars) from the amount a decade earlier (\$828.6 million in 2005 dollars) (U.S. Department of Education, 2015). This pattern of federal funding represents a decline in funding after taking into account inflation (an 18% decrease in constant dollars between FY 2005 and FY 2014). With greater federal investment, the TRIO programs would be able to serve more students and, consequently, improve college access and completion for more students.

Given constraints on the availability of additional federal dollars, the federal government should consider ways to leverage its investment to encourage greater support for college and success programming from other entities, as well as partnerships among the many existing college and success programs that are sponsored not only by the federal government but also by state governments, colleges and universities, philanthropic organizations, and other entities.

With the goal of maximizing program impact, many TRIO programs are now engaged in different types of partnerships. For instance, Upward Bound programs can apply for grants from the U.S. Department of Agriculture to cover the costs of nutritious meals for their summer programs. Student Support Services programs partner with their home institution’s academic support programs (e.g., tutoring, supplemental instruction) to maximize project funds. Some privately-funded scholarships (e.g., Dell Scholars Program) require recipients to have participated in a college readiness program, such as Upward Bound. The federal government should consider ways to encourage or incentivize partnerships that magnify the positive effects of federal TRIO funding on college access and completion.

**Encourage research and evaluation to improve understanding of what works.** To maximize the return on investment in college access and success programs, we need to know more about what components and services work, for which groups of students, in which contexts (Perna, 2002). In their comprehensive meta-analysis of research on the effects of college access programs on college readiness and/or college enrollment, Maynard and colleagues (2014) found only 34 studies that were published between 1990 and 2013 that used experimental or quasi-experimental research designs. Of the 34 studies, 18 provided sufficient information to conduct a cross-study review of effects of

targeted interventions on college readiness and/or enrollment (Maynard et al., 2014). This is a remarkably low number, given the large number of college access programs that are operating across the nation (Maynard et al., 2014). Even fewer studies have attempted to identify the effects on college-related outcomes of particular program components and services (Maynard et al., 2014).

The federal government should not only support the delivery of college access and success programs but also encourage research that improves understanding of best practices. More information is needed about best practices for promoting college-related outcomes for low-income and first-generation students along the college-going pipeline, from middle-school into post-graduate study, and for both traditional-age students and adults who aspire to attend and complete college. Such research will help ensure that finite resources are used to most effectively improve college-related outcomes for low-income and first-generation college students.

### **Conclusion**

Higher education attainment is the result of a complex, cumulative and longitudinal process that begins at an early age – arguably at (or even) before birth (Perna, 2006). There is no silver bullet to raising overall attainment and closing gaps in attainment across groups, given the many systemic and structural forces that limit college access and completion, especially for low-income and first-generation students. To achieve this goal, we must ensure that all students have the ability to pay college costs, the academic preparation required for college-level work, and the knowledge and assistance required to navigate pathways into and through college (Perna, 2006; Perna & Jones, 2013).

The federal government recognizes the reality that “financial aid is not enough” by supporting college access and success programs. These programs should: target students with the most financial need; assist students with navigating pathways into and through college, with particular attention to financial aid processes; and adapt services to recognize the relevant context and characteristics of targeted students. The federal government should also consider ways to leverage spending on federal TRIO programs to serve greater numbers of students and encourage research and evaluation of college access and success programs to improve understanding of what works.

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## Laura W. Perna

Laura W. Perna is James S. Riepe Professor and founding Executive Director of the Alliance for Higher Education and Democracy (AHEAD) at the University of Pennsylvania. She is currently President of the Association for the Study of Higher Education (ASHE) and past-Vice President of the American Educational Research Association's Division J (Postsecondary Education). Dr. Perna's research examines the ways that social structures, educational practices, and public policies promote and limit college access and success, particularly for individuals from lower-income families and racial/ethnic minority groups. Her scholarship is published in a variety of outlets, including books, journal articles, and policy reports. Recent books include *The Attainment Agenda: State policy leadership for higher education* (with Joni Finney, 2014, Johns Hopkins University Press) and *The state of college access and completion: Improving college success for students from underrepresented groups* (with Anthony Jones, 2013, Routledge). Her research has been featured in the *New York Times*, *Wall Street Journal*, *Washington Post*, *Philadelphia Inquirer*, *The Atlantic*, *Education Week*, and *Huffington Post*, as well as on National Public Radio programs and in other outlets. In 2003, Dr. Perna received the Promising Scholar/Early Career Achievement Award from the Association for the Study of Higher Education. In 2010, Penn honored her with Christian R. and Mary F. Lindback Foundation Award for Distinguished Teaching. In 2011, she received the Robert P. Huff Golden Quill Award from the National Association of Student Financial Aid Administrators. In 2014, she was named a Fellow of the American Educational Research Association, a Penn Fellow, and the inaugural James S. Riepe Professor at the University of Pennsylvania.