

**U.S. Senate
Committee on Health, Education, Labor and Pensions**

Full Committee Hearing:

***Ensuring Access to Higher Education:
Simplifying Federal Student Aid for Today's College Student***

November 14, 2013

Written Statement of:

Dr. Bridget Terry Long, Ph.D.

**Xander Professor of Education and Economics
Academic Dean, Harvard Graduate School of Education
Research Associate, National Bureau of Economic Research**

Chairman Harkin, Senator Alexander, and Members of the Committee, thank you for the opportunity to appear before you today. As we consider the state of access to higher education in the United States and ways we might improve our federal system, my testimony aims to provide information about:

- The current state of college access in the United States;
- Barriers to College Access and Persistence;
- What we know from research about improving college access and success; and
- What more could be done to improve the system.

Finally, I close with recommendations about how to improve the federal financial aid system.ⁱ

The State of College Access Today

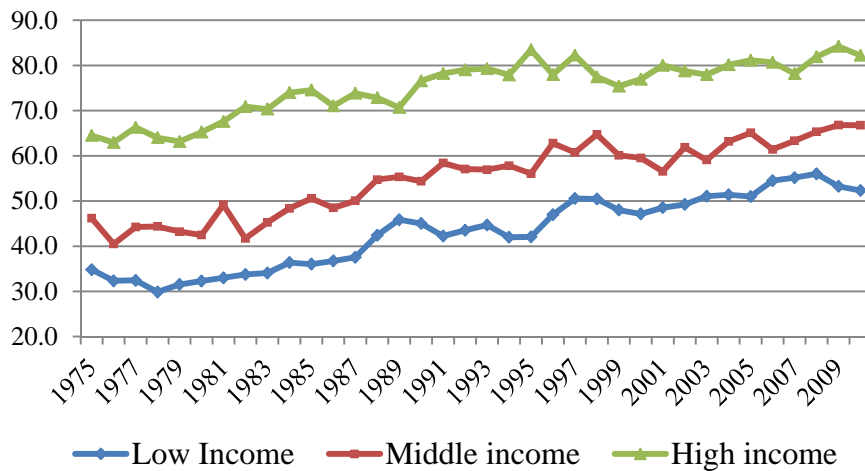
- ***There are major and persistent gaps in college access by family income and race.***

As shown in Figure 1, the percentage of high school completers enrolled in college (either two-year or four-year) the October immediately following high school completion continues to vary widely by family income level.ⁱⁱ By 2010, 82.2 percent of students from high-income families attended college in comparison to only 52.3 percent of students from low-income families. The gap between the high- and low-income families has not gotten smaller during the last 35 years (29.7 percentage points in 1975 and 29.9 percentage points in 2010). Even after controlling for academic achievement, low-income students have a lower probability of enrollment than do more affluent students (Ellwood & Kane, 2000). These patterns suggest that low-income students continue to face greater barriers to college access than other students.

Similar gaps in enrollment by race are also evident. As shown in Figure 2, although there is an upward enrollment trend for each of the three groups from 1955 to 2010, White students attend college at much higher rates than those for Black and Hispanic students.ⁱⁱⁱ Focusing on 18- to 24-year-old high school completers attending degree-granting institutions, the data suggest

there may have been recent progress in closing the gaps between Black and White students, but in the case of Hispanic students, racial gaps have been widening. For example, in 1967, the gap between Black and White students was 13.9 percentage points; in 2009, it was 7.3 points. Meanwhile for Hispanic students, the gap with White students increased from 13.8 percentage points in 1972 to 17.5 points in 2009.

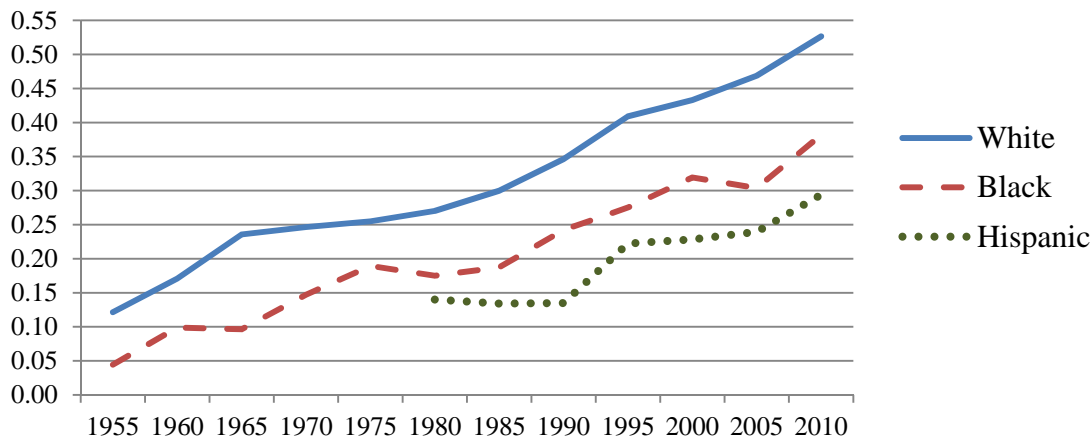
Figure 1: Percentage of high school completers enrolled in college the October immediately following high school completion, by family income: 1975–2010



Source: Long (2013). U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1975–2010. Reported by the National Center for Education Statistics.

Notes: *Low income* refers to the bottom 20 percent of all family incomes, *high income* refers to the top 20 percent of all family incomes, and *middle income* refers to the 60 percent in between. The low-income figures are a three-year moving average due to small sample size. For 1975 and 2010, a 2-year moving average is used.

Figure 2: Percentage of Persons Age 18-24 in College, 1955-2010



Notes: Long (2013). Calculations by author using population estimates and college enrollment figures. Population estimates are for the resident population plus armed forces overseas age 18-24. Sources: U.S. Census Bureau, Population Division, *National Population Estimates by Age, Sex, and Race: 1900 to 1979* and *U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin*. College enrollment figures are for the civilian non-institutionalized population of 18-24 year olds. U.S. Census Bureau, Current Population Survey, 1947 to 2010. Table A-6. Data for Black in 1955 and 1960 are for Black and other races. From 2003 onward, data represent those respondents who indicated only one race category. Hispanics may be of any race.

- ***Rates of college completion also differ by family income and race.***

There are also major gaps in baccalaureate attainment by background. Only 36 percent of low-income students who were academically-qualified for college^{iv} completed a bachelor's degree within eight years, while 81 percent of high-income students did so (Adelman, 2006). Stark differences also exist by race. Graduation rates at four-year institutions among first-time, full-time, degree-seeking undergraduates were highest for Asian/Pacific Islander students (65 percent) followed by White, non-Hispanic students (58 percent) for cohorts entering in fall of 1998. Black and Hispanic students in this cohort graduated at much lower rates (40 percent and 46 percent, respectively) (Knapp, Kelly-Reid, & Whitmore, 2006).

The Barriers to College Access and Success

Although there are many barriers to college access and success, most can be grouped into three major categories.

- ***The first set of major barriers relates to cost.***

During this school year, the average total in-state tuition and fees at public, four-year colleges and universities is \$8,893, with average total charges amounting to \$18,391 (College Board, 2013a). Meanwhile, median family income in 2012 was \$62,241, suggesting that, without financial aid, the median family would have to pay nearly 30 percent of their annual income to cover the costs of a public, four-year college or university. Many families in the bottom 20 percent of the income distribution make less than that amount all year with the mean income of this group being only \$15,534.^v Concerns about affordability are even greater at private four-year colleges and universities, which charged an average list tuition price \$30,094, or \$40,917 including room and board (College Board, 2006a). The current situation is the result of skyrocketing prices during the last several decades. Meanwhile, the median family income has not kept pace with growing tuition costs. Such trends led the federal Commission on the Future of Higher Education, which was appointed by Secretary of Education Margaret Spellings, to conclude, "There is no issue that worries the American public more about higher education than the soaring cost of attending college" (2006, p. 19).

- ***A second major set of barriers to college enrollment and persistence is academic preparation.***

Students are increasingly finishing high school with below grade-level competency, and this has affected their ability to access and succeed in higher education (Bettinger and Long, 2009; Bettinger, Boatman, and Long, 2013). Greene and Foster (2003) estimate that only 32 percent of all students leave high school ready to study college-level material. The proportion academically prepared for higher education is even smaller among Black and Hispanic students (20 and 16 percent, respectively).^{vi} There are also significant gaps in test scores by race and income (Jencks and Phillips, 1998), which contribute to access inequality. For example, students from families that made \$20,000 to \$30,000 per year scored 474 on average on the math SAT, while students from families making more than \$100,000 had a mean score of 564 (College

Board, 2006b). Therefore, while academic preparation is a problem for many students, it is a problem that especially affects low-income students and students of color.

- *The third major impediment for many students, particularly those from low-income families, is the complexity of the college admissions process and financial aid systems, as well as a lack of accurate information.*

College attendance is the culmination of a series of steps and benchmarks, and the process is too complex and difficult for many families, especially low-income families, to decipher and navigate. First, students must aspire to attend college or derive aspirations from their parents, teachers, and/or mentors. Additionally, students must prepare academically for college by taking the proper classes and getting a sufficiently high grade point average, particularly if they wish to attend selective schools. To gain entry into a four-year college, students must also register for a college admissions exam (i.e. the SAT or ACT). Students must also fulfill the requirements for high school graduation.

While there are numerous resources to help students understand and improve their preparation for college, there are far fewer tools or aids to help families navigate the college selection process. With little help, consumers must sort through a complex menu of postsecondary institutions that differ in terms of level, sector, and focus as well as costs, admissions standards, and credentials and majors offered. Then they must put this information in perspective with their own personal situations and preferences. Families must also discern differences in quality, or the likelihood that the school will impart learning, support student success, and result in future benefits. Such differences are hard to detect as measurements of quality in higher education tend to rely more on the characteristics of the entering student body rather than the value added by the institution or the benefits realized by graduates. Difficulty sorting colleges by characteristics and quality is coupled with complicated pricing structures, in which the net price each student pays often differs due to government and institutional financial aid.

Another part of the complexity problem is the financial aid system. To determine eligibility, students and their families must fill out the Free Application for Federal Student Aid (FAFSA). Not surprisingly, students and their families are often confused and even deterred by the form (ACSFA, 2005). An American Council on Education (ACE) study found that 850,000 students who would have been eligible for federal financial aid did not complete the necessary forms to receive such aid (King, 2004). Other research demonstrates that students, particularly those from low-income backgrounds, have very little understanding of college tuition levels, financial aid opportunities, and how to navigate the admissions process (Kane and Avery, 2004; Horn, Chen, & Chapman, 2003). In 2006, the Spellings Commission on the Future of Higher Education acknowledged problems with the current aid process by concluding that some students “don’t enter college because of inadequate information and rising costs, combined with a confusing financial aid system” (2006, p. 7). Therefore, while cost and academic preparation are important hurdles for students, the role of information is also substantial in determining college access and persistence.

Improving College Access and Success: What Do We Know from the Evidence?

(1) Financial Aid Matters for College Access

Researchers have consistently found that grants have positive effects on college enrollment (Deming and Dynarski, 2010; Dynarski and Scott-Clayton, 2013). For example, Kane (2003; 2004) found that two state need-based aid programs, the Cal Grant and the D.C. Tuition Assistance Grant, each had positive effects on college access for low-income students. The former provides grants for students to attend four-year colleges in California, while the latter allowed D.C. residents to pay in-state tuition rates at public universities across the country. Dynarski (2000; 2004) found even larger effects (4 to 6 percentage-point increases) among a set of state aid programs. As shown by these studies and others (e.g., Long, 2007), grants can increase college enrollment.

(2) Financial Aid is also an Important Determinant of Degree Completion

While financial aid can be an important policy lever for increasing college enrollment, it also influences the likelihood of student success and college degree completion. In my study of the Florida Student Access Grant (FSAG), a need-based grant that gave low-income students an additional \$1,300 in support, we found financial aid to have a positive impact on a host of short-, medium-, and long-term college outcomes. The additional \$1,300 in grant aid eligibility (in 2000 dollars) increased the probability of immediate enrollment at a public, four-year university by 3.2 percentage points while also increasing the probability of staying continuously enrolled through the spring semester of students' freshman year by 4.3 percentage points. Most importantly, the additional \$1,300 in aid eligibility increased the probability of earning a bachelor's degree within six years by 4.6 percentage points, or 22 percent (Castleman and Long, 2013).

It is important to note that the FSAG was awarded on top of the Pell Grant—eligible students would have qualified for both the \$1,300 FSAG and at least a \$1,750 Pell Grant. As such, our results relate to current debates about whether increasing the size of current aid awards would have large positive effects (as opposed to answering questions about the effects of some aid versus no aid). Overall, our results suggest that not only does need-based aid have a positive effect on persistence and degree completion, but also that increasing the award amounts of current aid programs could have beneficial, cost-effective results.

In other research, Dynarski (2008) found that the introduction of state merit-based scholarships in Arkansas and Georgia led to increases in the share of the population in each state with college degrees within 10 years of when the programs were introduced. Scott-Clayton (2011) found that students who were just above the cut-off in the ACT exam score that determined whether students were eligible for the West Virginia PROMISE scholarship were 6.7 and 4.5 percentage points more likely to earn a bachelor's degree within four or five years, respectively, than students just below the eligibility threshold.

(3) All Aid Programs are Not Equally Effective: When designing an aid program, information and simplicity are important

While the existence of aid programs was once thought to be enough to enable the enrollment of low-income students, the visibility and design of the program also matter a great deal. Research suggests that aid programs are most successful when they are well-publicized and relatively easy to understand and apply for (Dynarski, 2000 and 2002; Cornwell, Mustard, and Sridhar, 2006). Seemingly small differences in sign-up procedures and marketing have also

been shown to matter for other social programs (Currie, 2006, Beshears *et. al.* 2006, Hastings and Weinstein 2008).

(4) The Financial Aid Application Process Can be a Major Barrier for Students and Information Alone is not Enough

As noted above, lack of information and the complexity of the financial aid application process are major barriers to college access. While there have been calls to improve awareness and simplify the policy for years, my research documents just how detrimental the aid process can be on students and their families. In 2008 and 2009, using a random assignment research design, my research team designed and implemented an intervention to provide low- to moderate-income families receiving tax preparation help free additional assistance in completing and filing the FAFSA (Bettinger *et al.*, 2012). The just-collected tax information was used to pre-populate the FAFSA, and then individuals were guided through remaining questions to complete the form in less than 10 minutes (including completely the research consent form and background survey). Families were also given an immediate estimate of their eligibility for government aid as well as information about local postsecondary options.

The results suggest that streamlining and providing assistance with the FAFSA had a substantial positive impact on the likelihood of submitting an aid application. The FAFSA treatment substantially increased college financial aid applications, improved the timeliness of aid application submission, increased the receipt of need-based grant aid, and ultimately increased the likelihood of college attendance and persistence.

- Assistance with the FAFSA increased the likelihood of submitting the aid application substantially.
 - FAFSA submissions increased 39 percent for seniors in high school, from 40 percent for the control group to 56 percent for the treatment group.
 - Aid application submissions increased 186 percent, from 14 percent to 40 percent, among independent students (those age 24 and above or who were married, a parent, or a veteran) who had never been to college before. This translates to an almost *tripling* of the number of potential students who submitted an aid application.
 - FAFSA submissions increased 58 percent for independent students who had previously attended college, from 35 percent for the control group to 56 percent for the treatment group. This suggests there are large numbers of students in college who are foregoing financial aid they are eligible to receive because they have not completed the FAFSA.
 - Compared to the control group, FAFSA's were filed over one month earlier for high school seniors and almost three months earlier for independent students. This has implications for the treatment group in terms of increased eligibility for state and institutional financial aid programs.
- Receiving assistance on the FAFSA significantly increased college enrollment.
 - Among graduating high school seniors, there was a substantial increase of 7 percentage points in college going (34 percent compared to 27 percent among the group who did not receive any FAFSA help or information).

- Among older, independent individuals who had completed high school or a GED but not attended college previously, the number enrolled in college and receiving financial aid increased by about 2 percentage points. Given that only 10 percent of the control group did this, the program effect represents a 20 percent increase.
- The effect seems to be concentrated among those with incomes less than \$22,000. This corresponds to the point at which individuals are not expected to contribute anything to college expenses (i.e., they have EFCs of zero).
- The program also increased the percentage who received a federal student grant.

These results suggest that streamlining the aid application process could be an effective and efficient way to improve college access for low-income students. The effects of the FAFSA treatment are large, especially relative to the intervention's low marginal cost in terms of resources and time—providing FAFSA assistance took only 8 minutes, on average. It is also important to emphasize that once they entered college, the students persisted. Three years after the intervention, we found that students who attended college after receiving assistance with the FAFSA were persisting at higher levels and had higher educational attainment than their counterparts who had not received the streamlined process. In other words, they were able to succeed in college even though the barrier of the FAFSA process would have kept them out of school. These findings suggest other opportunities for streamlining processes and providing quick assistance could increase greatly participation in programs that require filling out forms to become eligible.

While the project above emphasizes the benefits of providing assistance and a streamlined process to complete the FAFSA, we did not similarly find positive effects from just giving families information about their aid eligibility. In the context of the FAFSA project, we told a random subset of families the amount of a Pell Grant they were eligible to receive if they completed the FAFSA by themselves. Unfortunately, families who received aid information but no assistance with the FAFSA did not experience improved outcomes. This suggests information alone is not enough to help families overcome barriers in the college enrollment process, and the complexity of the FAFSA and/or the burden of navigating through the application process alone are significant barriers. However, it is possible that earlier information could generate more positive effects.

The Context Today: What More Could be Done?

- *While there have been recent improvements to the FAFSA, these efforts do not fully address the needs of many students, and there is still significant room for improvement*

Given the many critiques of the FAFSA, there have been numerous calls to simplify the financial aid process. The Department of Education has made some headway into simplifying the existing online FAFSA, including introducing skip-logic to minimize the number of questions and allowing applicants and parents to import IRS income tax data. While these changes are likely helping many students, they are not reaching all students, and low-income students in particular, continue to face major barriers. The recent improvements to the FAFSA still require families to be aware of the form and process. Moreover, to benefit from the simplified form and process (i.e., skip logic and pre-population using data from the IRS), student must have access to

a private, online computer, preferably with high-speed internet, a problem for many low-income families.

While there have been improvements to the process, these efforts do not fully address the needs of many students, and there is still significant room for improvement. Some of the remaining problems include:

- *Low visibility and Misinformation:* Many families still do not know that the FAFSA exists and how to access it. No amount of simplification will help if individuals do not actually access the form. Additionally, many individuals, particularly low-income students, often greatly overestimate the cost of higher education) and so do not bother completing form because they do not think they can afford college or will qualify for financial aid.
- *Missed deadlines:* King (2004) found that of those who did file a FAFSA, more than half missed the April 1st deadline to be eligible for state and institutional aid programs.
- *Complicated Tasks:* Research in behavioral psychology shows individuals tend to put off complicated or menial tasks. Minimizing time and effort in completing forms may therefore make individuals more likely to spare the time. For example, corporate savings plans that make participation the default while requiring employees to take action to opt-out have dramatically higher participation rates than plans that require employees to deliberately opt-into the plans.
- *Need to Revisit the FAFSA Multiple Times:* An additional impediment is the number of times a family must revisit the FAFSA to complete it.^{vii} As shown in our FAFSA Project, streamlining the process by allowing participants to submit the FAFSA immediately had large, positive effects. With each additional delay, families are less likely to fully complete the process.

- ***There is increasing evidence that college can be a high-risk investment.***

It is also worth emphasizing how the higher education context has changed in recent years. With increasing information about high debt burdens and low graduation rates at some college, it is clear that the college investment can be a high-risk proposition. While the average return to a postsecondary credential is substantial and justifies the cost in most cases, there is wide variation in the returns to a degree based on the specific college attended and the major completed. Moreover, nearly half of college entrants do not graduate at all and so forfeit the potential returns to a degree.

- ***The college decision process is only becoming more complicated.***

In addition to being a costly and uncertain endeavor, attending college also requires one to make a complicated set of decisions that must be done in the appropriate order and at the right times. These decisions include whether and how to prepare, where to apply, which institution to choose, and how to finance the costs. Overall, the process of college choice involves simultaneously ranking options along multiple dimensions while having only incomplete, uncertain information and little support on how to interpret the facts that are available. These

choices carry on throughout the enrollment experience as students must constantly reevaluate if their enrollment decision is likely to pay off.

There are many negative and far-reaching repercussions due to the complexity of the college investment combined with the lack of clear information. This translates to keeping some students out of higher education. Among those who do decide to attend, there is an over reliance on bad or incomplete sources of information, often at the peril of the student. Oppressive loan burdens and rising student loan defaults also suggests evidence of bad college choices. Some companies have also exploited the heightened need for information by charging families excessive amounts for college facts that are freely available elsewhere if one knew how to navigate through the multiple sources that focus on higher education.

- ***The Need Analysis Calculation does not reflect accurately the financial situations of many college students***

While the current financial aid system was created with the idea of determining the need of recent high school graduates who are dependent on their parents and attend college full-time, college students are a much more diverse group. Most would be considered “nontraditional,” meaning someone who fits at least one of the following criteria:

- Delays enrollment after high school
- Attends part-time
- Works full-time while enrolled
- Considered financially independent
- Has dependents other than a spouse
- Does not have a regular high school diploma (i.e., a GED or other certificate)
- Is a displaced workers or unemployed
- Is a welfare recipient
- Is an immigrant

According to Choy (2002), nearly three-fourths of all undergraduates are nontraditional. The nontraditional group includes working adults, parents, welfare recipients, immigrants, displaced workers and the unemployed, and single, financially independent students.

Given the disconnect between how the financial aid system was designed and the profile of many college students, many suggest that the current financial aid system does not adequately meet the needs of many, particularly nontraditional, students.

There are several major criticisms of the way federal need analysis is applied to nontraditional students. First, it is assumed that the earnings of the potential student are relatively minor (i.e., the result of a summer job) and should be taxed highly to cover college expenses. Moreover, the calculation assumes that the parents’ income, the main source of support for the child, will continue even while the student is in college and should be used to help cover expenses. In contrast, independent students do not have other major sources of support to rely upon. Most nontraditional students are formally engaged in the labor market when applying for financial aid, and while the government assumes this income level will remain the same even after college enrollment, the nontraditional student is actually likely to experience a reduction in earnings while pursuing a degree. Therefore, assumptions about the amount of earnings available to them while in school are incorrect. As an extension of this, the EFC for many nontraditional students may be too high as they are penalized for their earnings the year before starting school.

Ways to Improve the Effectiveness of our Financial Aid System

There are many opportunities for improving the federal financial aid system. Below I make several recommendations.

(1) When Designing Aid Program, Learn from the Examples of Successful Policies

As noted above, research suggests that aid programs are most successful when they are well-publicized and relatively easy to understand and apply for. These findings have important implications for our federal aid programs as the research lends credibility to the notion that the Pell Grant could be more effective if it had greater visibility and were easier to understand and access. A program that was much better publicized and easy to obtain had large positive effects on enrollment. This program, the Social Security Student Benefit (SSSB) Program, gave the 18 to 22-year-old children of dead, disabled, or retired Social Security beneficiaries monthly support while they were enrolled full-time in college. At its peak, it provided grants totaling \$3.3 billion annually to one out of ten students, but it was phased out because of the major overlap with the relatively new (at the time) Pell Grant program. However, in contrast to the Pell Grant, awareness among potential SSSB beneficiaries was high due to notification from the government and the extremely simple application process. Dynarski (2002) examined the impact of eliminating the SSSB in 1982 and estimates that doing so reduced the college access and attainment of former beneficiaries significantly. This suggests that it had been very effective as a policy, and duplicating some of its design would improve the effectiveness of the Pell Grant.

(2) Proactively Disseminate Clear Information with Families Early and Often

Proactively disseminating the information is my second recommendation. Additional effort must be taken to translate and circulate it to an audience that may understand little about higher education offerings, pricing, financial aid, or quality. Therefore, the federal government should actively reach out to potential students where they live, study, and work rather than putting the responsibility on the individual to seek out the information on their own. This should be done through a series of partnerships with educational, social services, and employment organizations along with other government agencies. For instance, the government should work with college access programs and youth organizations to reach students.

One specific idea would be to send students and their families information about possible aid eligibility as early as elementary school. Using information from tax returns, an estimate could be made, and these reports could be similar to old Social Security projected benefits letters that working adults received. A related idea would be to summarize financial aid eligibility in a table with family income on one side and family size on the other. Research suggests those two variables give a very good estimate of aid eligibility (Dynarski and Scott-Clayton, 2006), and such simple, early information could help combat misperceptions about college costs and the availability of aid.

(3) Use and Enable Multiple Pathways for Families to Complete the Aid Application Process

As noted above, while there have been improvements to FAFSA on the Web, students without access to a private computer with high-speed internet access are not able to use the tool. Moreover, awareness of the FAFSA remains low. Therefore, I encourage maintaining the paper FAFSA as a submission method while also enabling community-based organizations, which help students and families complete the FAFSA free-of-charge, to submit batches of FAFSA once receiving consent from families. This would increase the opportunities for interacting with the form and help the many organizations working in the field to streamline their FAFSA assistance

by interacting directly with the Department of Education (rather than having to take each individual family through the FAFSA on the Web or paper form). In my FAFSA project, having electronic submission directly from the tax site to the Department of Education reduced the amount of time and effort needed on both the part of the family and the tax professional.

(4) Minimize the Burden on Families when Completing the FAFSA

The FAFSA is a significant barrier to accessing college financial aid, or even just determining eligibility level. The barrier is so large that even informing families of \$4,000 of grant eligibility was not enough to have them overcome the burden of navigating through the aid application process. Therefore, as much as possible, the process should limit the amount of work a family needs to do to complete the form.

Most importantly, we should eliminate steps that could be accomplished other ways. For instance, families should not be required to supply information available elsewhere. To some degree, this is the purpose of having IRS data populated into the FAFSA on the Web. However, another step forward would be to have this match happen behind the scenes automatically. As we have demonstrated, for most families, one could complete approximately two-thirds of the FAFSA using tax information. As a result, it took less than ten minutes to complete the rest of the form (Bettinger, *et al.*, 2012). If a family wanted to opt out of the system or question the validity of their matched data, they could do so, but for the vast majority of families, they would be able to skip a burdensome step, especially for those who are not able to use FAFSA on the Web. Information on family background and income is also available from other sources, including the Free and Reduced-Price Lunch system and other government programs, and these sources could also be used to determine family aid eligibility.

Making a shorter form (simplification) would likely increase FAFSA submissions. Moreover, such a change would make it easier to develop programs that could help families to fill out and submit the form. By streamlining the form and process, community-based organizations would be able to serve students more easily as fewer pieces of information would be required, and their outreach and assistance could be more effective.

We should also limit the number of interactions and steps needed to complete the FAFSA. In my research on the effects of simplifying the FAFSA process, we found the largest effects associated with individuals who used both simplification to complete the form and then took advantage of automatic filing or assistance in filing. These individuals for whom assistance and simplification were most prominent (and the FAFSA was completed in the office) appear to be the ones most affected by the treatment.

(5) Improve How Aid and College Information is Reported

Information is a major barrier, and the challenges do not end with the completion of the FAFSA and college applications. The information reported to students can take many forms, and often it is not clear what is a grant versus a loan. When comparing institutions, it can be very difficult to make an apples-to-apples comparison. Therefore, I recommend standardizing a significant part of aid award letters so that it is clear to students how to interpret their aid packages. Pell Grants and other grants should be clearly delineated while the terms of loans and work study funds should be treated separately. However, given the great diversity of institutions

and students, colleges and universities should be given the freedom to customize their messaging after the required standard language about the aid package.

This recommendation is just one step towards helping students and their families sort through important information to help with their choices and so that they can avoid unrealistic debt and low-performing schools and majors. While I recommend providing clear, simplified information, it is clear that we need to think much more carefully how information is provided. There are other tools geared towards serving potential students, such as the online College Navigator from the Department of Education. However, the families most in need of these types of resources have little awareness about the existence of these tools and limited online access. Moreover, these tools are overwhelming by offering hundreds of pieces of information on one page as if they are all equally important. Such tools are also missing key pieces of information relevant to college enrollment decisions, such as employment and earnings outcomes. While earnings are not a complete picture of the return to a college degree, schools with similar resources, student bodies, and admissions standards can have vastly different returns (Carey, 2004; Hess, *et al.*, 2009).

(6) Pilot an Expansion of the Work Study Program at Colleges Serving Many Low-Income Students

Due to rising costs and declining affordability, most students have to work while attending college. There are major concerns that such activities detract from their academic pursuits. According to the National Survey of Student Engagement (2012), 60% of college students working 20 hours or more a week believe that work interferes with their school work, but the majority of these students also report asking employers about increasing their work hours in order to pay tuition and living expenses. However, it is also possible that labor market experience may help students prepare for future jobs and careers. It is possible that working a reasonable number of hours gives students skills that make them more competitive and capable when they enter the labor market after college, and on-the-job training is an important way to increase one's human capital. Furthermore, it is possible that off-campus and on-campus employment have different effects on students' academic performance and persistence, as Work Study jobs recognize the individual's primary function is to be a student.

The federal government spends over \$1 billion on the work-study program to subsidize the wages of college students. Recent research suggests receipt of work-study funds has a positive effect on the number of credits completed during the first year (Soliz and Long, 2013). While much more research is needed to fully understand the program, funds are limited at many of the colleges that serve significant numbers of low-income, eligible student. As working while in college is necessary for most students, it is worthwhile to explore how the federal government could support this work in a way that still enables a student to make progress towards a degree or credential.

WORKS CITED

Bettinger, Eric, Angela Boatman, and Bridget Terry Long. (2013) "Student Supports: Developmental Education and Other Academic Programs." Cecilia Rouse, Lisa Barrow, and Thomas Brock, Eds. *Future of Children: Postsecondary Education in the U.S.*, vol. 23, no. 1, Spring.

- Bettinger, Eric and Bridget Terry Long. (2009) "Addressing the Needs of Under-Prepared College Students: Does College Remediation Work?" *Journal of Human Resources* 44(3): 736–771.
- Bettinger, Eric, Bridget Terry Long, Philip Oreopoulos, and Lisa Sanbonmatsu. (2012) "The Role of Application Assistance and Information in College Decisions: Results from the H&R Block FAFSA Experiment." *Quarterly Journal of Economics* 127(3): 1-38.
- Carey, Kevin. (2004) *A Matter of Degrees: Improving Graduation Rates in Four-Year Colleges and Universities*. Washington, D.C.: The Education Trust.
- Castleman, Benjamin and Bridget Terry Long. "Looking Beyond Enrollment: The Causal Effect of Need-Based Grants on College Access, Persistence, and Graduation." National Bureau of Economic Research (NBER) Working Paper No. 19306 (August 2013).
- College Board. (2013) *Trends in College Pricing*. New York: Sandy Baum and Jennifer Ma.
- Commission on the Future of Higher Education. (2006). Commission Report 08/09/06. Accessed from: <http://www.ed.gov/about/bdscomm/list/hiedfuture/reports/0809-draft.pdf>.
- Cornwell, C., Mustard, D., & Sridhar, D. (2006). The enrollment effects of merit-based financial aid: Evidence from Georgia's HOPE scholarship. *Journal of Labor Economics* 24 (2006) 761-786.
- Currie, Janet. (2006). "The Take Up of Social Benefits." *Poverty, the Distribution of Income, and Public Policy*, Alan Auerbach, David Card, and John Quigley, eds. New York: Russell Sage.
- Deming, David and Susan M. Dynarski. (2010). "Into College, Out of Poverty? Policies to Increase the Postsecondary Attainment of the Poor." In Philip Levine and David Zimmerman, eds., *Targeting Investments in Children: Fighting Poverty When Resources Are Limited*, Chicago: University of Chicago Press.
- Dynarski, Susan M. (2000). "Hope for whom? Financial aid for the middle class and Its impact on college attendance." *National Tax Journal* 53(3): 629-661.
- Dynarski, Susan M. (2002). "The Behavioral and Distributional Implications of Subsidies for College." *American Economic Review* 92(2): 279-285.
- Dynarski, Susan M. (2004). "The new merit aid." In Caroline Hoxby, ed. *College choices: The Economics of Where to Go, When to Go, and How to Pay for It*. Chicago: University of Chicago Press.
- Dynarski, Susan M., and Judith Scott-Clayton. (2006) "The Cost of Complexity in Federal Student Aid: Lessons from Optimal Tax Theory and Behavioral Economics." *National Tax Journal* 59 (2): 319–56.
- Dynarski, Susan M., and Judith Scott-Clayton. (2013). "Financial Aid Policy: Lessons from Research." In *Future of Children vol. 23, no. 1*, edited by Cecilia Rouse, Lisa Barrow, and Thomas Brock, Princeton, NJ: The Trustees of Princeton University.
- Ellwood, D. T., & Kane, T. J. (2000). Who is getting a college education? Family background and the growing gaps in enrollment. In S. Danziger, & J. Waldfogel (Eds.), *Securing the future*. New York: Russell Sage.

- Hess, Frederick M., Mark Schneider, Kevin Carey, and Andrew P. Kelly. (2009) *Diplomas and Dropouts: Which Colleges Actually Graduate Their Students (and Which Don't)*. Washington, D.C.: American Enterprise Institute.
- Horn, Laura J., Xianglei Chen, and Chris Chapman. (2003). *Getting Ready to Pay for College: What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out*. National Center for Education Statistics Report No. 2003030. Washington, D.C.: National Center for Education Statistics.
- Kane, Thomas J. (2003) "A quasi-experimental estimate of the impact of financial aid on college-going." National Bureau of Economic Research Working Paper 9703. Cambridge, MA: National Bureau of Economic Research.
- Kane, Thomas J. (2004) "Evaluating the impact of the D.C. Tuition Assistance Grant Program." National Bureau of Economic Research Working Paper 10658. Cambridge, MA: National Bureau of Economic Research.
- Kane, Thomas J. and Christopher Avery. (2004). "Student Perceptions of College Opportunities: The Boston COACH Program" in Caroline Hoxby (ed.) *College Decisions: The New Economics of Choosing, Attending and Completing College*. Chicago: University of Chicago Press.
- King, Jacqueline E. (2004). "Missed Opportunities: Students who do not Apply for Financial Aid," American Council on Education Issue Brief.
- Long, Bridget Terry. (2007) "The Contributions of Economics to the Study of College Access and Success." *Teachers College Record*, vol. 109, no. 10.
- Long, Bridget Terry. (2013) "Supporting Access to Higher Education." *Legacies of the War on Poverty*. Martha Bailey and Sheldon Danziger, Eds. The National Poverty Center Series on Poverty and Public Policy. New York: Russell Sage Foundation.
- Soliz, Adela and Bridget Terry Long. (2013) "The Causal Effect of Federal Work-Study on Student Outcomes in the Ohio Public University System." Harvard University mimeo.
- U.S. Census Bureau, Population Division, *National Population Estimates by Age, Sex, and Race: 1900 to 1979*. Retrieved from <http://www.census.gov/popest/data/national/asrh/pre-1980/PE-11.html>.
- U.S. Census Bureau, Population Division, Population Estimates Program, *U.S. Population Estimates by Age, Sex, Race, and Hispanic Origin*. Retrieved from <http://www.census.gov/popest/index.html>.
- U.S. Census Bureau, Current Population Survey, 1947 to 2010. Table A-6. "Age Distribution of College Students 14 Years Old and Over, by Sex: October 1947 to 2010." Retrieved from <http://www.census.gov/hhes/school/data/cps/historical/index.html>.
- U.S. Department of Commerce, Census Bureau, Current Population Survey. 2012. *Current population survey data on educational attainment*. Retrieved from <http://www.census.gov/hhes/socdemo/education/data/cps/1960/cp60pcs1-20/tables.html>
- Venegas, Kristan M. "Low-income urban high school students' use of the internet to access financial aid," *NASFAA Journal of Student Financial Aid*, 36 (2006) 4-15.

ⁱ Note: The views expressed are those of the author and should not be attributed to Harvard University or the NBER.

ⁱⁱ Source: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October Supplement, 1975–2010. Low income refers to the bottom 20 percent of all family incomes, high income refers to the top 20 percent, and middle income refers to the 60 percent in between. The low-income figures are a three-year moving average due to small sample size. For 1975 and 2010, a 2-year moving average is used: data for 1975 reflect an average of 1975 and 1976, and data for 2010 reflect an average of 2009 and 2010. Includes high school completers ages 16–24, who account for about 98 percent of all high school completers in a given year.

ⁱⁱⁱ Source: *Digest of Education Statistics*. (2010), Table 212. Data Source: U.S. Department of Commerce, Census Bureau, Current Population Survey (CPS), October, 1967 through 2009.

^{iv} Students were judged to be "college qualified" if they met any of five criteria that would place them among the top 75 percent of four-year college students for that criterion. The minimum values for "qualified" were: a class rank of the 46th percentile, an academic GPA of 2.7, an SAT combined score of 820, an ACT composite score of 19, or a NELS-88 test score of the 56th percentile (Berkner and Chavez 1997)

^v College Board (2013a). U.S. Census Bureau, Current Population Survey, 2013 Annual Social and Economic Supplement, Table F-1, Table F-3, Table F-5, and FINC-01; calculations by the authors.

^{vi} Greene and Foster (2003) define being minimally "college ready" as: (i) graduating from high school, (ii) having taken four years of English, three years of math, and two years of science, social science, and foreign language, and (iii) demonstrating basic literacy skills by scoring at least 265 on the reading NAEP.

^{vii} Venegas (2006) describes student frustration from having to pause and revisit the online FAFSA multiple times: "...at first I had to go on-line to get a PIN [personal identification number] for myself. Then later I went back to fill out my FAFSA. When I was at the end of the form, I saw that I had to get a PIN for my parents... I got a PIN for my parents and then I went back to complete the form... then I had to go back again and look at my SAR [Student Aid Report]" (p. 9).