

Impediments to Increasing Diversity in Post-secondary Education¹

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Abstract

Due to the increasing complexity in the financial aid process and the movement of available financial aid up the economic scale, poor people and minorities have less access to college, including engineering programs. Some impediments are lack of access to knowledge about college, increasing complexity and up-front costs in the application process and a gradual legislative and judicial change to provide aid to wealthier families. The latter changes include the weakening of the Pell Grant, increasing reliance on student loans, loans granted regardless of need, tax breaks for college savings, “merit” based aid, early-admissions politics and the anti-trust decision that resulted in a lack of consistency in creating financial-aid formulas. A rededication to need-based financial aid would increase the number of minorities attending and graduating from college.

Introduction

In the United States, we occupy a unique position in that our educational system was largely set up, from the beginning, to serve the public. At first it was an act of local communities as towns collected money, built schools and hired teachers. In the second half of the 19th century, the common school system expanded to include secondary education – high schools – that were also open to the public.¹ Post-secondary education, although it began with a few private schools (Rensselaer Polytechnic Institute, Columbia in downtown Manhattan, Queens College, etc.), took a leap forward with the Morrill Land Grant act of 1862 which gave each state land that could be sold for a college endowments, specifically for colleges of agriculture and mechanical arts. Thus, the federal government laid the foundation for public post-secondary education in the United States. Historically, the federal government contributed to the strength of post-secondary education in many other ways as well, including the GI Bill and the Higher Education Act. Today “federal programs generate nearly three-fourths of all aid available to help students and families pay the tuition, living costs, and related expenses of post-secondary education.”² Thus, we have a history of both local and federal support for education for people of all classes. Even though post-secondary education is not equally accessible to all people – the poor and minorities do not attend college as frequently as wealthier people do – we still have a solid foundation upon which to build.

However, over the past forty years, the gap between the rich and the poor attending college has increased and the number of minorities entering fields such as engineering has decreased. In the interests of openly discussing this problem, I will describe some of the impediments to diversity in post-secondary education. The impediments that I will discuss in this paper are a) a lack of knowledge about college in less wealthy environments; b) increasing complexity and up-front costs in the college application process; and c) a general social movement away from providing financial aid based on need towards providing financial aid to wealthier families. Overall, the gap between the rich and the poor attending college is

¹ This paper was first published in the digital proceedings of the Spring 2007 ASEE (American Association for Engineering Education) Mid-Atlantic Section Conference at New Jersey Institute of Technology April 14, 2007.

increasing and the information literacy required to navigate the labyrinthine system of college education is reinforcing the gap. A return to the need-based system of financial aid would increase the number of poor and minorities attending college and increase the talent pool overall.

Lack of Knowledge about the Colleges, Applications and Scholarships

Many poorer people living in poorer sections of cities or rural areas don't know much about college, don't know anyone who goes to college and thus how you apply remains a mystery. Guidance counselors, who may be too few or overwhelmed with work, may or may not help. This lack of access to knowledge is due, in part, to institutionalized racism that, although it is not part of post-secondary terminology, is part of the fabric of our society. It's not individuals who are racist (although they may be), but "a basic feature of the entire society, being structured into its political, social, and economic institutions."³ Indeed, in institutionally racist societies such as the U.S., there is not even a need for racist individuals to exist for there to be racism since the country's social system automatically functions to put racially oppressed groups at a disadvantage. We can speak also of institutionalized classism, where those of lower socioeconomic classes are automatically at a disadvantage. Thus, the world encountered by poorer families operates in a very different way than the world encountered by middle-class and wealthy families – it is harder to find housing, food, jobs, entertainment, clean air, etc. It is also harder to find information about post-secondary education. People who have had the access to basic resources often can not imagine their absence and thus such a concept as "institutionalized racism" seems exaggerated. People who benefit from it, by having access to jobs, better housing, transportation and medical care, are functioning quite logically when they don't want to admit it exists – it would be against their own best interests to do so.³ Members of lower and lower-middle class families experience difficulties that are hard to imagine for middle and upper-middle class families. This paper is an attempt to explicate some of those difficulties in gaining access to higher education.

It is difficult for poor people to navigate the often inexplicable labyrinth of academic forms, scholarship applications and online loan offers, a trail that is fraught with danger as for-profit businesses pay for prominent web listings and offer to expedite loans and applications for a fee. A significant amount of information literacy is necessary in order to navigate these complex webs. For instance, you need to know that www.fafsa.com and www.fafsa.us are not www.fafsa.ed.gov - the first two charge money in order to process a free application and the last one is the official site. As the need for information literacy in the college application process has increased, the information literacy of wealthier parents has increased, so that they are able to keep abreast of the myriad details of changes and requirements in the forms, tests and scholarship applications necessary for admission and aid. The same is not true of poorer people who sometimes have to use the internet in the library. Thus the poor are more prone to scams, the damage of which cannot be undone. Businesses with names such as the "College Funding Center" cost inexperienced families a \$975 consultation fee and much more in money in un-dischargeable loans when they promise to find students 100% funding.⁴ Titles of articles such as "Top Dollars for Black Scholars" and "How to get Your Share of the \$90 Billion Scholarship Jackpot"^{5, 6} make it seem as if this 100% funding is an apple waiting to be plucked from a tree. For-profit scholarship agencies have stepped into the gap between the wealthy and the poor and they are difficult to stop because once they are caught they simply change their names, move to another state, or "tweak their pitches."⁷

Poorer and inner-city schools do not have the same resources as do wealthy schools. This is another instance of institutionalized racism that is generally invisible to those who benefit. For example, at a recent Science Olympiad here at NJIT, I helped run the "Write It, Do It" competition, where one team member, in a separate room, sees an object built of Knex™ and writes directions to recreate it. The disassembled Knex™ and directions are then brought to the next room, where the other team member assembles it. As I was speaking to the kids who were waiting for directions, I discovered that most of them from the wealthy neighborhoods had been practicing with Knex™ for months whereas none of the

students from the poorer neighborhoods had practiced with Knex™. Thus, the outcome of this contest, like many others, was decided in advance by the training that the contestants had received and yet we tell ourselves that this is a fair contest. This is an example of institutionalized racism and classism – it is much, much more difficult for people with fewer resources to compete in nearly every arena.

In higher education, as elsewhere, people have access to formal and informal resources and sources of information. Formal sources, such as guidance counselors, published literature, college training in AP courses, etc., are often widely available at wealthier schools and are scarce at poorer schools. But informal knowledge networks may be even more powerful.³ In wealthier neighborhoods, both students and parents have access to an informal network of knowledge about the steps in the college application process, the steps necessary to take the tests and find and fill out financial aid forms, and how to search and apply for private and public scholarships. Parents who are college graduates can easily lead the way for their children, peers can help provide extra knowledge and the impetus of competition and thus the student enters the situation with social support and clear expectations. This informal network is weaker or even absent in poorer neighborhoods. Their parents probably have not attended college, their siblings may or may not have attended college and their peers may openly deride their efforts. Thus, one main impediment is a simple lack of information about the college application process, simply from being outside the network.

Increasing Complexity and Up-front Costs in the College Application Process

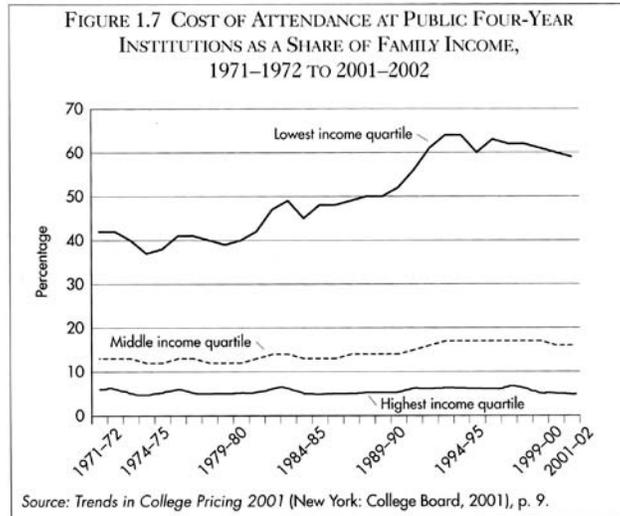
Many low and moderate-income students are unaware of available aid and/or are deterred by the rules, forms, and procedures required to obtain it.² Although the FAFSA (Free Application for Federal Student Aid) form has been simplified over the years, filling it out requires still requires considerable information literacy. The student's parents must collect tax forms, bank statements, proof of income and other data which they may not have, for instance, if they work under the table. The FAFSA also requires that male applicants disclose whether they have submitted their names to the selective service, a detail that makes some students suspicious.⁸ Moreover, if you look for the FAFSA online, paid services such as www.fafsa.com, www.fafsa.us, and www.fafsaonline.com compete with the federal site, <http://www.fafsa.ed.gov>, and it requires information literacy to analyze the sites to find which is the correct one. After completing the FAFSA, students receive no indication of the results or of their eligibility for aid and thus the eventual outcome remains a mystery.

A recent article in the *Chronicle of Higher Education* reported on a study done at Harvard that shows that nearly all of the FAFSA's questions are already answered on annual tax forms. The study suggests that the FAFSA could be dispensed with – all that is necessary is adding a checkbox to the tax returns as to whether the family is seeking financial aid for college. Then students could look up their total grant eligibility by using a chart indexed to family income, which would demystify the situation for poorer students and their families.⁹ If this simple advice were followed thousands of poorer students would be encouraged to apply to college. However, this would be a radical change in our society and radical efforts would be required to enact it; institutionalized racism and classism will stand in the way.

Some colleges require another financial aid form, the "PROFILE" administered by the College Board. The PROFILE includes more detailed information than the FAFSA, such as total family equity, information from non-custodial parents, etc., and it has a base cost of \$5 with an additional \$18 fee for every college that you apply to. This separate form was established in 1954 to create a common formula to help institutions determine the financial need of their applicants and originally it led to private institutions awarding scholarships based solely on financial need.¹⁰ In its original form, it helped to simplify the process since multiple colleges could use it to judge need. However, now it is one more component in a bewildering array of forms, scholarship applications and costs. The burden of patching together sources of funding has shifted from the College Board and the colleges who used its original "Financial Needs Analysis Report" to students and parents who do not know the rules of the game.

Another stumbling block for students from poorer communities is standardized testing. The major entrance exam, the S.A.T., has several factors that work against poor students and minorities. First, it costs money. There are fee waivers, but they are dependent on guidance counselors filling out forms and there is a limit to how many times the test can be taken. Wealthier students live in a culture that discusses the S.A.T. for several years prior to applying to college, have ample time to take practice tests and can take the test as often as they wish. They are automatically in an advantageous position. Some of the most selective colleges have stopped requiring S.A.T. scores as part of the application package because it is more of an indicator of economic status than of student ability.¹¹ Moreover, it is fairly well-known that the S.A.T. scores can predict *only* first-year performance and “even then, they explain less of the variation in grades than does high-school class rank or parents’ education.”¹² Nevertheless, the S.A.T. is a cornerstone of the application process. Advanced Placement courses are also unevenly distributed between wealthy and poor communities and the cost of each subject-matter exam is presently \$80. Although it is argued that AP courses and exams improve education overall, thus far the National Center for Education Statistics has found that reading and math levels in tests given to high school seniors have fallen significantly between 1992 and 2005 despite the more rigorous curriculum.¹³ AP courses and the SAT are hurdles for the wealthy and gatekeepers for the poor.

Roger E. Studley, an institutional researcher at the University of California, created a new conceptual model for admissions that “distinguishes students’ realized achievement from their underlying ability (inclusive of effort and motivation) and relates achievement differences to both ability and socioeconomic circumstance.”¹¹ He created this new formula because the University of California system was precluded from considering race in admissions as the result of a constitutional amendment passed by Californians in 1996.¹⁴ In creating this model he discovered “that an admissions policy that systematically accounts for the relationship between circumstance and achievement can significantly increase the representation of socio-economically disadvantaged and minority students.”¹¹ A similar alternative was proposed by Anthony Carnevale, Jeff Strohl and others at the Educational Testing Service (ETS). Their research had shown “that it was theoretically possible for selective colleges to maintain or increase their black and Hispanic enrollments without giving extra consideration to applicants based on their ethnicity or race.”¹⁴ Carnevale and his associates had identified a type of student that they called a “striver,” who, if they had survived school in a poor neighborhood and still had decent grades, was a good candidate for future success. However, the problem with this formula was that it required entering financial data about the family, including accumulated family wealth. Discussing and disclosing accumulated family wealth is nearly taboo in our society. Carnevale’s study was rejected on the grounds that it was bad research. Nancy Cole, who was then president of ETS, remarked that “This country does not discuss class very well.”¹⁴ If formulas such as those created by Studley, Carnevale and others were used on a broad scale, diversity in post-secondary education would increase.

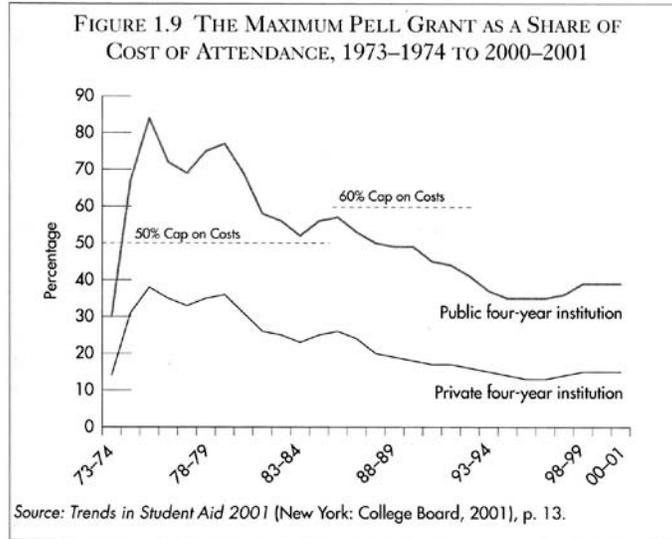


The percentage of family income, exclusive of financial aid, that attending college takes from poorer people is so high, as seen in the graph above, that the commitment that poorer families must make and the deprivations they must suffer bear no relation to the somewhat straightforward process experienced by middle-class and wealthier families. This is the simple fact that we tend to forget when discussing accessibility to college education: it takes money to go to college and poor people don't have money. If you want to have more diversity in college, there must be more accessible funding for the poor and minorities.

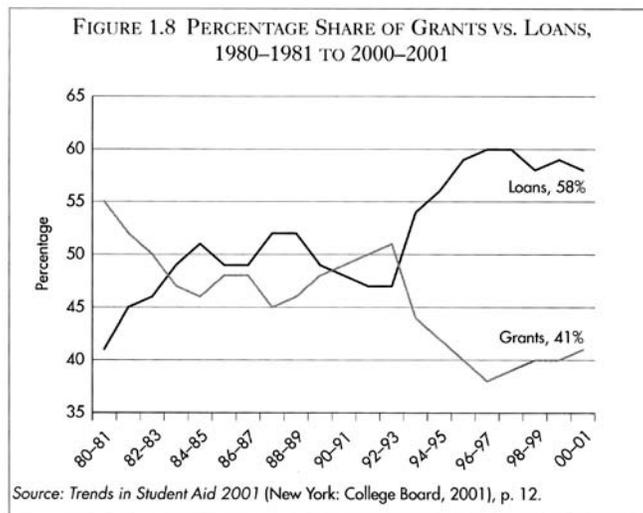
A General Social Movement Away from Providing Financial Aid Based on Need

Over the past thirty years, there has been a general movement away, in our society, from providing financial aid based on student need. The original federal aid, so useful to so many, has stagnated and any new forms of aid have crept up the economic scale. In *America's Untapped Resource: Low-income Students in Higher Education*, Lawrence Gladieux gives an overview of the changing structure of financial aid in higher education. The high-point of financial aid for lower-income students was when the Pell Grant was enacted in 1972 enabling people who had previously not been able to afford college to do so. Several factors have been in play since 1980, however, that have eroded financial aid for the poor and shifted it to the wealthy. This, of course, has also lowered the number of low-income students completing college and widened the gap that is consistently discussed in *The Chronicle of Higher Education* and other magazines and newspapers. These include the lessening of the buying power of the Pell Grant and the increase in student loans, loans granted regardless of need, tax breaks for college savings, "merit" based aid, various early-admissions agreements and the anti-trust decision that resulted in a lack of consistency in formulating need-based aid.

The first change has been that "Over the past quarter century, student aid has drifted from a grant-based toward a loan-based system."² The spending power of the original Pell Grant has not increased whereas college tuition has increased significantly – private colleges that once cost \$6,500 for room, board and tuition, now cost \$40,000 to \$50,000 per year. Thus, the Pell Grant has become insufficient to adequately help poorer students through college. If, as is often the case, the difference is not met by scholarships from their own institutions, students have to take out loans as well as work one or more jobs. The following graph shows the change in the relation of the Pell Grant to overall college costs.



One of the reasons that the power of Pell grants available to poorer students has eroded is the “Middle Income Student Assistance Act” of 1978 that guaranteed loans to any student regardless of income or need.² This act siphoned off the money available for need-based financial aid and put it into the bank accounts of wealthier people. I knew one family who took out the full amount possible for each of their children in college and banked it – as their children graduated they repaid the loans and made a profit. Overall, the share of loans in financial aid packages has risen to fill the gap left by the weakening of the Pell Grant, as seen in the following figure.



Other legislative changes have pushed eligibility for federal student aid up the economic ladder in the past thirty years. For instance, the Taxpayer Relief Act of 1997 gave tax credits to middle and upper-middle income taxpayers. State governments followed similar patterns, creating plans that encourage parents to save. Although this ostensibly provides the same advantages to all taxpayers, in reality poor people don’t have any money to save – they need it in order to survive. This fact is conveniently overlooked in the presumptions behind these acts. States have also introduced various merit scholarships, tied to SAT scores, grade-point averages or class ranking, that are available to all students regardless of need. Although it could be said that these changes do not take money away from poorer students,

cumulatively they add to the ideology that financial aid is widely available and remove social responsibility from those who could help.

Another problem has been that more colleges are focusing on merit-based aid and preferential packaging.² Although they are used only at about a third of colleges, race-conscious admissions politics are always subject to lawsuits and debate⁷ and thus they divide and anger the American public. Many different researchers, even if they are supporters of affirmative action, have concluded that the actual outcome has not helped poor minorities. One report states that “86 percent of black students who enrolled in the 28 selective universities they studied were middle class or upper-middle class.”¹⁵ Another study found that, at selective colleges, 27% of the black students were first- or second-generation immigrants.¹⁶ Like the tax credits discussed above, the volatility of this issue functions as an ideological smokescreen, keeping attention away from real underlying financial issues.

Early admissions has also benefited wealthier students. In *The Early Admissions Game: Joining the Elite*, the authors demonstrate that “Early Action” and “Early Decision” programs benefit privileged students and cheat disadvantaged students by using knowledge of the “game” to push less-qualified students through the admissions process before more-qualified can students apply.¹² If you know what college you want to attend and can pay for it, you apply early and are accepted early. This is an automatic advantage to anyone who can afford the college fees. The book named above was published by the Harvard University Press and thus it is not surprising that Harvard recently dropped the “Early Admissions” program, rapidly followed by Princeton.^{17 18} This has set a precedent which may or may not be followed by other colleges and universities.

Probably the most “invisible” change that has pushed financial aid up the income scale was the 1990s Justice Department antitrust investigation of the “Overlap Group,” a group of colleges that collectively considered financial aid applications and determined how much aid should be awarded to each student. This group served the same purpose as the College Scholarship Service of the College Entrance Examination Board and its original “Financial Needs Analysis Report.” Colleges could confer to create formulas that would offer each student approximately the same amount of financial aid. The justice department investigated this practice as if it were a business monopoly, a destructive “trust” that had to be “busted.” In reality, it fairly (and predictably) distributed the financial aid to those who had financial need. This act of the Justice Department was one more “catalyst in the splintering of need-based standards in the higher education community at large.”² While the stated aim of this action was to protect the rights of consumers, what happened, in reality, was that the distribution of financial aid returned to a standard marketplace ideology in which the wealthy benefit and the poor remain poor.

Current Successes

Presently there is underway an “antitrust exemption” for colleges to be able to meet to discuss and agree on need-based policies, but it has, as yet, produced no success to offset the damage done by the 1990s act. If it succeeds, this would allow the colleges, once again, to decide on a standardized system of offering financial aid so that students who truly need financial aid can receive it. There are other successes as well. Although affirmative action has not benefited the poor, it has increased diversity on elite campuses and this is an important beginning. And we have to remember that our success in sending people to college in general is a fairly recent phenomenon – in 1940 only 5% of people completed 4 years of college and in 2000, 25% did.² In addition, there are some colleges that are individually dedicated to recruiting the poor and increasing diversity, such as the University of California, Smith College, Stevens Institute, Syracuse University, the University of Florida, Rutgers, Pitzer College, Mount Holyoke College, Knox College, College of the Atlantic, and Brigham Young University, all of which have 20% Pell Grant recipients.¹⁹ In terms of engineering students, there are a some universities who are “minority-serving,” including the Historically Black Colleges and “public and private research universities, such as

Georgia Tech, North Carolina State, Texas A&M, MIT, NJIT, and Colorado-Boulder.”²⁰ Thus, we have made advances and we can continue to make advances.

Conclusion

We have to remember that some of our success will not come from us but from the students themselves who have been able to navigate the labyrinthine college and financial aid system or have chosen to go attend institutions they can afford. They are the ones who are sending themselves to college despite the impediments outlined above. The growing number of years that it takes a student to attain an undergraduate degree is often attributed to the laziness of today’s students or their lack of preparation. It probably has more to do with the fact that they need to work two or three part-time jobs in order to finance their education, if not work full-time and attend school full-time, as some of my students do. It’s much easier to say that “today’s students are not as smart as we were” than to say “today’s students work two or three times as hard as we did.” Students are managing to push themselves through the educational system despite all of the difficulties outlined above.

We had success in sending poorer students to college on a broader scale in the 1970s and we can have that success again if we reverse some of the damage done by the recent acts that have transferred the aid up the economic scale. I feel that it is a worthwhile effort because I was one of those students who was able to attend a selective college due to the Federal Pell Grant. I am thankful for it and I always will be. I know how important it is to bring a diversity of students to an institution – at Mount Holyoke I encountered a number of students who were only there because it pleased their parents and thus their work was uninspired. By recruiting the “strivers,” such as myself, the college or university can guarantee a brain-trust that will carry it forward.

Endnotes

1. Reese, W.J., *American Public Schools: From the Common School To "No Child Left Behind"*, Baltimore: Johns Hopkins University Press, 2005.
2. Gladieux, L.E., "Low-Income Students and the Affordability of Higher Education," in *America's Untapped Resource: Low-Income Students in Higher Education*, R.D. Kahlenberg, ed., The Century Foundation: New York, p. 17-57, 2004.
3. Spears, A.K., "Institutionalized Racism and the Education of Blacks," *Anthropology and Education Quarterly* 9(2): p. 127-136, 1978.
4. Hsu, C., "Not Worth the Price," in *U. S. News & World Report*: Washington, 2003, p. 70-71.
5. "How to Get Your Share of the \$90 Billion Scholarship Jackpot," in *Ebony* 2003, p. p. 83A, 84, 84A, 84B, 85, 85A, 86, 86B.
6. "Top Dollars for Black Scholars: How to Finance Your Educational Choice," in *Ebony* 2006, p. p. 178, 180, 182-176.
7. Hoover, E., "Pushing the Envelope," in *The Chronicle of Higher Education*: Washington, 2003, p. 39-42.
8. Bayiokos, C., "Uncle Sam Wants You! To Apply for FAFSA," in *The Vector*: Newark, 2007, p. 1.
9. Keller, J., "Scholars Urge Halt of Use of Aid Form," in *The Chronicle of Higher Education*: Washington, 2007.
10. Heller, D.E., "The Changing Nature of Financial Aid," in *Academe*, 2004.
11. Studley, R.E. (2003) "Inequality, Student Achievement, and College Admissions: A Remedy for Underrepresentation," DOI: Research & Occasional Paper Series: CSHE.1.03.
12. Menand, L., "The Thin Envelope: Why College Admissions Has Become Unpredictable," in *The New Yorker*, 2003, p. 88-92.
13. Schmidt, P., "High-School Students Aim Higher without Learning More, Federal Studies Find," in *The Chronicle of Higher Education*: Washington, 2007.
14. Schmidt, P., "ETS Accused of Squelching New Approach on Racial Bias," in *The Chronicle of Higher Education*: Washington, 2006.

15. Kahlenberg, R.D., "Toward Affirmative Action for Economic Diversity," in *The Chronicle of Higher Education*: Washington, 2004.
16. Glenn, D., "At Selective Colleges, Many Black Students Are Immigrants, Study Finds," in *The Chronicle of Higher Education*: Washington, 2007.
17. Hoover, E., "Harvard Plans to End Policy of Admitting Students Early," in *The Chronicle of Higher Education*: Washington, 2006.
18. Farrell, E.F., "Princeton Drops Its Early-Admission Option," in *The Chronicle of Higher Education*: Washington, 2006.
19. Heller, D.E., "Pell Grant Recipients in Selective Colleges and Universities," in *America's Untapped Resource: Low-Income Students in Higher Education*, R.D. Kahlenberg, ed., The Century Foundation Press: Washington, 2004. The Pell Grant is a good proxy for estimating family income, since, as of 2000, 90% of all dependent Pell Grant recipients come from families with incomes below \$41,000 and 75% from incomes below \$32,000. In a list of "most selective" institutions, none of them have a percentage of Pell Grant recipients above 18.4 (Barnard College) and the mean is 10.37%
20. Chubin, D.E., G.S. May, and E.L. Babco, *Diversifying the Engineering Workforce*, Annals of Research on Engineering Education 2005 January 25, 2007; Available from: <http://www.areeonline.org/?id=4616>.

This paper was first published in the digital proceedings of the Spring 2007 ASEE (American Association for Engineering Education) Mid-Atlantic Section Conference at New Jersey Institute of Technology April 14, 2007.

The images in this article were taken from Kahlenberg's *America's Untapped Resource: Low-Income Students in Higher Education*, The Century Foundation, New York, 2004.