Developing and Disseminating Strategies that Can Help Raise Academic Achievement of Underrepresented Minority Students at Selective Liberal Arts Colleges

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Over the past thirty-five years, many of the nation's selective private liberal arts colleges have made considerable efforts both to increase the enrollment of students from underrepresented racial and ethnic groups at their institutions and to help ensure that these students are academically successful. These efforts have produced some valuable results on many campuses. Notably, many more African Americans, Latinos, and Native Americans are currently enrolled as undergraduates at selective liberal arts colleges than was the case in the late 1960s and early 1970s. The graduation rates of these students also appear to be good at many institutions.[1]

Still, these groups continue to be heavily underrepresented among undergraduates at selective private liberal arts colleges relative to their share of the student-age population. For example, among the private liberal arts colleges ranked among the top 50 nationally by *U.S. News & World Report* in 2005, African Americans, Latinos, and Native Americans account for only about 9%, on average, of their student bodies, even though these groups constitute over one-third of the student-age population in the United States. At only four of these highly regarded institutions did the three groups account for 15% or more of the students. At ten of the fifty colleges, these groups constituted 5% or less of the student bodies.[2]

Also, while there are no regularly published data on the grade point averages (GPAs) of students from different racial/ethnic groups at selective private liberal arts colleges, available evidence indicates

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[1] This chapter draws heavily on Miller, L. S. with Ozturk, M. D. and Chavez, L. (2005). *Increasing African American, Latino, and Native American Representation among High Achieving Undergraduates at Selective Colleges and Universities.* Berkeley, CA: University of California, Berkeley, Institute for the Study of Social Change. See also, Bowen, W. G. and D. Bok (1998). *The Shape of the River: Long-Term Consequences of Considering Race in College Admissions.* Princeton, NJ: Princeton University Press.

[2] Editors of U.S. & News Report (2005). *America's Best Colleges: 2005 Edition.* Washington, DC : *U.S. News and World Report.*

that they have much lower GPAs than their White and Asian counterparts. One of the most visible sources of information on this topic is the influential book published in 1998, *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions*, by William Bowen and Derek Bok. In it, Bowen and Bok reported that, among the students who enrolled in 1989 in the 28 selective colleges and universities in their study, the average White student graduated with a GPA of 3.15 and had a class rank at the 53rd percentile, while the average Black student graduated with an average GPA of 2.61 and had a class rank at the 23rd percentile. Bowen and Bok also found very large differences in class rank between African American and White students with high SAT scores: Black students in their study with an SAT score of 1300 graduated, on average, at the 36th percentile, while their White counterparts graduated, on average, at the 60th percentile. Although less information was provided on Hispanics, they reported that the average Latino student in the study graduated at the 36th percentile.[3] More recently, in the 2003 book, *Increasing Faculty Diversity: The Occupational Choices of High Achieving Minority Students*, Stephen Cole and Elinor Barber presented data showing severe underrepresentation of Blacks and Hispanics among high GPA undergraduates at selective colleges and universities.[4]

In my own work over the past several years, much of which has focused on identifying strategies that may help increase the number and percentage of high-achieving undergraduates at selective colleges and universities, I have had the opportunity to see a great deal of GPA data from several institutions. Although these data are not in the public domain, they consistently show that much smaller percentages of underrepresented minority students graduate with a high GPA than is the case for Whites and Asians. For example, the data that I have encountered suggest that it is not uncommon for the percentage of Whites and Asians that graduate with a GPA of 3.5 or higher on a 4.0 scale to be three or more times greater than for students from underrepresented groups.[5] Since African Americans, Hispanics, and Native Americans are

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[3] Bowen and Bok (1998).

[4] Cole, S. and E. Barber (2003). *Increasing Faculty Diversity: The Occupational Choices of High Achieving Minority Students.* Cambridge, MA: Harvard University Press.

[5] Miller, L. S. with Ozturk, M. D. and Chavez, L. (2005). *Increasing African American, Latino, and Native American Representation among High Achieving Undergraduates at Selective Colleges and Universities.* Berkeley, CA: University of California, Berkeley, Institute for the Study of Social Change.

heavily underrepresented among students at selective institutions, their lower percentages graduating with a high GPA means that they are accounting for few of the high GPA bachelor's degree recipients at the nation's leading institutions.

Disturbingly, a number of studies also have found that African American, Hispanic, and Native American undergraduates at selective colleges and universities often have considerably lower GPAs than would actually have been predicted, based on their high school records and college admission test scores.[6] For example, among Black and White students with similar SAT scores at selective institutions—including at private liberal arts colleges—the Black students tend to have lower grades, on average, than the White students. (This pattern is often referred to as the "overprediction" phenomenon, in the sense that one would predict or expect that, on the basis of high school grades and SAT scores, the college grades of these students would be higher than they actually turn out to be.) Bowen and Bok reported that the previously noted half-GPA-point difference in average GPAs between Whites and African Americans in their study was about twice as large as predicted by differences in the academic preparation for college between these two groups of students.[7]

Although large GPA differences and the overprediction phenomenon are not confined to selective private liberal arts colleges, they are, nonetheless, very disappointing findings. Many of the nation's selective private liberal arts colleges are understandably thought to provide some of the finest undergraduate learning environments in higher education. Thus, one would have hoped that underrepresented students would generally enjoy higher levels of academic achievement at these institutions than traditional measures of academic preparation for college might predict, rather than lower levels of achievement.

The shortage of top bachelor's degree recipients from these groups is a very serious matter, as it contributes to the underrepresentation of African Americans, Latinos, and Native Americans in professional and executive leadership positions in high human capital sectors across our society.[8] For instance, there are

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[6] Klitgaard, R. (1985). *Choosing Elites.* New York: Basic Books; Ramist, L., Lewis, C., and McCamley-Jenkins, L. (1994). *Student Group Differences in Predicting College Grades: Sex, Language, and Ethnic Groups.* College Board Report 93-1. New York: College Board.

[7] Bowen and Bok (1998).

[8] National Task Force on Minority High Achievement (1999). *Reaching the Top.* New York: College Board.

relatively few bachelor's degree recipients in engineering from these groups who can compete for entry-level engineering positions at leading technology-based corporations. There also are relatively few African American, Latino, and Native American bachelor's degree recipients who are fully competitive for admissions to top professional schools and graduate programs in a wide range of fields, e.g., in medicine, law, economics, biology, and computer science. This, in turn, is limiting their presence among professional and doctoral degree recipients, including among those most sought after by highly competitive employers in the public, private, and independent sectors.[9]

For example, nearly six times more Whites and Asians were accepted to medical school in 2001 than underrepresented minorities (14,523 versus 2,219). Among those who were accepted, the average undergraduate science and math GPAs were 3.59 for Whites and 3.57 for Asians, while they were 3.21 for Blacks, 3.31 for Native Americans, 3.24 for Mexican Americans, 3.21 for mainland Puerto Ricans, 3.41 for Commonwealth Puerto Ricans, and 3.45 for other Hispanics. Furthermore, among those *not* accepted, the average undergraduate science and math GPAs were 3.25 for Whites 3.18 for Asians, 2.75 for Blacks, 2.90 for Native Americans, 2.77 for Mexican Americans, 2.82 for mainland Puerto Ricans, 2.87 for Commonwealth Puerto Ricans, and 3.02 for other Hispanics.[10]

Obstacles to Progress

Looking forward, even if selective private liberal arts colleges redouble their efforts to diversify their campuses and to raise the academic achievement of their underrepresented minority students, there are at least seven reasons why progress might be slow in both areas over the next decade and, possibly, for a much longer interval.

First, these groups continue to be markedly underrepresented among high school seniors who are academically well prepared for selective colleges and universities, and their share of these students

[9] For a study that describes the situation in law, see Sander, R. H. (2005). "A Systematic Evaluation of Affirmative Action in American Law Schools," *Stanford Law Review, 57(3): 376-483.*

[10] Association of American Medical Colleges (2001). *Minority Students in Medical Education: Facts and Figures XII.* Washington, DC: Association of American Medical Colleges, Division of Community and Minority Programs.

seems to be growing fairly slowly. Moreover, the shortage of Black, Latino, and Native American students who are among the academically very best prepared for the most selective institutions is particularly acute.[11] Under these circumstances, selective institutions probably will continue to find it necessary to admit many underrepresented minority students who are much less well prepared than most of their other students. (Many may have much lower SAT scores, lower high school GPAs, and/or have attended high schools that were not able to offer challenging curricula.) Consequently, selective institutions will probably continue to find that many of these underrepresented students will need a great deal of extra help if they are to be academically successful.

This leads to the second reason why progress may be slow: there are few strategies with strong evidence that they help raise achievement of underrepresented students at selective private liberal arts colleges—or at selective colleges and universities in general. This is especially true with regard to increasing the number of high GPA undergraduates from underrepresented groups and eliminating the overprediction problem.

By lack of strong evidence, I mean that very few programs are "proven" in the sense that meaningful academic achievement benefits have been documented via one of two kinds of rigorous evaluation: by random assignment of students to the program and to a control group or by a well designed quasi-experimental test in which participants are compared to a group of students who are similar in several important respects.

Moreover, the lack of strong evaluation evidence also means that it is often unclear which program components are potentially most valuable, or which mixes of components are most beneficial. This is a very important reality for the focus of this booklet—the potential value of bridge programs at selective liberal arts colleges and strategies for maximizing the effectiveness of such programs.

The third reason why progress may be slow is that, even among the few strategies and programs with fairly strong evidence of effectiveness, virtually none have been tested rigorously at several campuses. So, little is known about whether, and under what circumstances, these strategies "travel."

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[11] Miller, L.S. (2004). *Promoting Sustained Growth in the Representation of African Americans, Latinos, and Native Americans Among Top Students in the United States at All Levels of the Education System.* Storrs, CT: University of Connecticut, the National Research Center for the Gifted and Talented.

The lack of high quality evaluations leads to a fourth reason why progress may be slow: there is little money available from external or internal sources to pay for rigorous tests of promising strategies. Unless more money becomes available for this purpose, substantial growth in the number of proven strategies in the years ahead seems unlikely.

The fifth reason to expect slow progress is that, among the programs that do seem to help raise achievement, strong leadership is often a characteristic. Yet, little is known about how to identify or train people to provide such leadership. In a related vein, the documentation of how programs work is typically limited. Thus, when there is turnover in a key position, there is a very good chance that hard-won knowledge accumulated by the departing person will not be transferred to his or her replacement. If the program staff is small—which is often the case—the potential for loss of key knowledge with staff turnover is substantial.

The sixth reason to be concerned that progress will be slow is that many programs are at least partially funded by soft money from external sources. Thus, reductions in external funding can quickly do real damage to a program. Fewer students may be admitted to the program. Some services may be curtailed. Or, there may be reductions in staff.

Finally, there is the issue of trust. In *Increasing Faculty Diversity*, Cole and Barber found that the overprediction pattern was most pronounced among the African Americans and Latinos with the highest SAT scores. They also found that the overprediction pattern varied for Black students by the type of institution that they attended. It was largest at the most highly selective private colleges and universities, considerably smaller at the state universities, and did not exist at all at the historically Black colleges and universities (HCBUs). This led them to suggest that differences in experiences that African American students have at these different types of institutions were the sources of the variations.[12]

Cole and Barber also believe that their data provide some support for Claude Steele's theory of "stereotype threat." Steele, a social psychologist at Stanford, has suggested that African American students who are strongly committed to doing well academically (and who have a history of doing well) are nonetheless vulnerable to a fear that, if they do not do well, they may confirm the (old) negative stereotype that Blacks are not as innately intelligent as

[12] Cole and Barber (2003).

Whites and some other racial/ethnic groups. Through a series of experiments with undergraduates, Steele and several colleagues have been able to suggest some of the mechanisms through which stereotype threat might operate. Specifically, they found that situations in which intellectual tasks are very difficult might trigger the fear of the stereotype in ways that erode the academic performance of some able African American students.[13] They also have developed some evidence that one of the reasons that the fear may be triggered in such circumstances is that the students might not trust the fairness of the environment in which they will perform academic tasks. For instance, the students may interpret negative feedback from a professor as reflecting doubts about their abilities instead of being a sincere effort to help them do better.[14]

Cole and Barber believe that the some of the nation's most prestigious liberal arts colleges and universities may have conditions under which it is quite likely that stereotype threat will be triggered for some African Americans students. Each year, these institutions admit freshmen classes that include large numbers of students who are among the academically best prepared for college in the nation. Yet, a substantial percentage of the African American matriculants at these institutions (as well as many of the Latinos and Native Americans) are in the bottom quarter or lower in the freshmen class in terms of traditional measures of academic preparation. In these small, highly competitive academic settings, these circumstances could conceivably feed academic insecurities or concerns about trust among a considerable number of these students.[15] Still, it is unclear to what extent this is the case at elite liberal arts colleges (and at other selective colleges and universities), or how much such conditions may vary between and within them.

Among the seven reasons mentioned here, it must be underlined that two directly involve money. If selective private liberal arts colleges are to have more effective strategies in place a decade from now for raising the academic achievement of underrepresented minority students, they will have to find ways to ensure that much more money is available to mount rigorous tests of strategies and to maintain program quality over time.

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[13] Steele, C. M. (1997). "A Threat in the Air: How Stereotypes Shape Intellectual Identity and Performance." *American Psychologist*, 52: 613-629.

[14] Steele, C. (2003). "Stereotype Threat and African American Student Achievement," in *Young, Gifted, and Black*, by Perry, T., Steele, C., and Hillard, A. G., III. Boston, MA: Beacon Press, pp. 109-130.

[15] Cole and Barber (2003).

Building on Promising Programs and Strategies

Although there are several reasons why the rate of progress is likely to be slow in the years ahead, this does not mean that nothing can be done to accelerate it, at least somewhat. A genuinely positive feature of the current situation is that, while there are few strategies that can demonstrate their effectiveness with data generated through rigorous evaluation, there are some that look promising in several important respects. If over the next 5-10 years, several selective private liberal arts colleges tested some of the most promising approaches thoroughly, a fairly robust set of proven strategies for producing meaningful improvements in academic achievement for underrepresented minority undergraduates on their campuses might well be available for widespread use by the end of the period.

Such testing, however, will need to be done not only in an empirically rigorous manner, but also "unromantically." That is to say, it should be expected that some apparently very promising strategies will not pan out, and even those that do prove to provide substantial benefits will have important limitations. Strategies that are eventually "proven" to be effective also are likely to be fairly costly and require considerable quality control management.
Let us turn now to a discussion of two existing programs that currently show sufficient promise to be tested and evaluated at several institutions over the next decade.

The Meyerhoff Scholars Program at the University of Maryland Baltimore County (UMBC)

In the late 1980s, Dr. Freeman Hrabowski, III (who was then executive vice president of the University of Maryland Baltimore County and would later become its president) concluded that it was imperative to find a way to address the chronically low academic performance of African American students at UMBC in science, engineering, and mathematics (SEM) courses and majors. With funding from the philanthropists Robert and Jane Meyerhoff, Dr. Hrabowski planned and launched the Meyerhoff Scholars Program in 1988, with the objective of creating a cadre of African Americans who would be high academic achievers in SEM majors at UMBC, go on to excel in selective graduate and professional

schools in these fields, and pursue successful careers in them as well.[16]

The emphasis on high academic achievement led Dr. Hrabowski to design Meyerhoff to serve an academically very well prepared group of African American students. Meyerhoff students have usually earned A's in high school in math and science courses and have SAT math scores from the high 600s to the maximum score of 800.[17] This has been in sharp contrast to many, if not most, minority-oriented SEM programs, which serve substantial numbers of students who entered college significantly underprepared academically for those majors (which often is still the case). In addition, Meyerhoff's capacity to address students' needs from the pre-freshman summer through the senior year was (and is) in sharp contrast to most SEM programs, which have tended to focus heavily on the freshman year (probably owing to resource constraints in most cases).[18]

When describing the program, Dr. Hrabowski and his colleagues list twelve components: 1) recruitment of high achieving underrepresented minority students in math and science; 2) a summer bridge program that provides academically challenging courses, promotes group study, and offers social and cultural events; 3) a merit/performance-based financial aid system that is able to provide virtually full support for many students; 4) extensive faculty participation via student recruitment, teaching, and mentoring; 5) sustained emphasis on strong "programmatic values," such as the importance of superior academic achievement by traditional measures, studying extensively in groups, collegiality among peers, and a focus on getting ready for graduate school; 6) student participation in research during the summer; 7) strong encouragement of students to use tutoring services to maximize academic performance; 8) support from UMBC's administration, both internally and externally (the latter by seeking outside funding and public recognition); 9) strong academic

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[16] Maton, K.I., Hrabowski, F.A. III, and Schmitt, C. L. (2000). "African American College Students Excelling in the Sciences: College and Postcollege Outcomes in the Meyerhoff Scholars Program." *Journal of Research in Science Teaching*, 37(7): 629-654; Hrabowski, F. A., III and Maton, K. I. (1995). "Enhancing the Success of African American Students in the Sciences: Freshman Year Outcomes." *School Science and Mathematics*, 95(1): 19-27.

[17] Hrabowski, F. A., III (2001). "Meyerhoff Scholars Program: Producing High-Achieving Minority Students in Mathematics and Science," *Notices of the AMS*, 48(1): 26-28.

[18] Miller, L. S. with Ozturk, M. D. and Chavez, L. (2005).

advising and personal counseling; 10) a mentoring system that draws on SEM academics and professionals; 11) promotion of a sense of community among the students; and 12) promotion of active involvement of parents and relatives.[19]

A few of these components deserve brief elaboration. Regarding student recruitment, as Meyerhoff's national recognition has grown, so has the number of academically very well prepared students who seek admission to the program. In a recent year, the program received 1,500 nominations for 50 freshman openings, whereas only 40 nominations were received for the initial freshman class.[20] Thus, UMBC is currently able to be very selective about the students it admits into the Meyerhoff Scholars Program, and full advantage is being taken of that opportunity.

Meyerhoff students are taught and encouraged to study with others and fortunately have many well-prepared students with whom to study within the program. The Black students in Meyerhoff also see many able, high achieving students from their group in the program. Moreover, the president and faculty members recognize their academic achievements (often in a research context).[21] In other words, as a result of Meyerhoff, participating students are integrated, not isolated academically in very practical terms—they always have excellent students with whom to study, if they wish—and they see the negative intellectual stereotype bring contradicted regularly by a large number of visibly high-achieving Meyerhoff Scholars in their classes and on campus.

Some comments also need to be made about the monitoring and advising function of Meyerhoff. The information system is designed to provide a great deal of crucial academic data about the students to the staff in a timely manner so that they can take pragmatic steps to help students do as well as possible. For example, they know when students are not achieving at high levels in a course and need tutoring assistance. They know whether

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[19] Ibid.

[20] Building Engineering and Science Talent, *A Bridge for All: Higher Education Design Principles to Broaden Participation in Science, Technology, Engineering and Mathematics*; Maton, Hrabowski, and Schmitt (2000).

[21] For a very extensive, rich, insightful description and discussion of Meyerhoff, see Gordon, E. W. and Bridglall, B. L. (2004). *Creating Excellence and Increasing Ethnic-Minority Leadership in Science, Engineering, Mathematics, and Technology: A Study of the Meyerhoff Scholars Program at the University of Maryland-Baltimore County*. Naperville, Illinois: Learning Point Associates.

students need to retake a course and encourage them to do so in order to ensure that they have the mastery needed to do well at the next level. (Students are specifically encouraged to retake courses in which they earn a C.) In addition, they monitor course-taking plans to ensure that students do not take a combination of courses during a particular semester that might make it difficult for them to excel.[22]

Meyerhoff has been extensively evaluated using a quasi-experimental approach in which Meyerhoff participants from the first three coeducational classes—which were exclusively African American males and females—have been compared to a number of constructed comparison groups. Two of the comparison groups are African American and two are White and Asian. One of the African American control groups is a sample of Black students in SEM majors at UMBC prior to the creation of Meyerhoff that had academic preparation profiles comparable to the Meyerhoff participants. In addition to this historical control group, the Meyerhoff participants were compared to a second group made up of Black students who had been accepted into the Meyerhoff Program but decided to attend other institutions. One of the two White and Asian control groups is a historical sample of SEM majors with comparable preparation profiles. The second is a sample of White and Asian students with comparable profiles who pursued SEM majors at UMBC at the same time as the Meyerhoff students. The comparisons were made after five years of college.

In almost all respects, the Meyerhoff students were found to outperform the four constructed control groups. Notably, the Meyerhoff students had SEM and overall GPAs that were a half point higher than those of the historical African American control group. For example, their SEM GPAs were 3.16 and 2.64, respectively. The Meyerhoff students had higher SEM and overall GPAs than the historical White and Asian control groups as well as the current White and Asian controls. For instance, the SEM GPAs for the current White and Asian controls were 2.79 and 2.92, respectively, versus the 3.16 for the Meyerhoff Scholars. And the SEM GPA of the Meyerhoff students also was higher than the 2.89 SEM GPA of the Blacks who declined to participate in Meyerhoff and attended other institutions.[23]

[22] Ibid.; even the president of UMBC is quite well versed in the use of the information system and has discussed its capacities a some length with the author of this chapter.

[23] Maton, Hrabowski, and Schmitt (2000).

The Meyerhoff participants graduated in SEM majors at much higher rates than the control groups and had commensurately higher admissions rates to SEM graduate school programs as well. For example, 90% of the Meyerhoffs had graduated in a SEM major in the five-year period, compared to 42% of the matched current Asians and 29% of the matched current Whites.[24]

Although the results of the evaluation of Meyerhoff are generally very positive, it is always possible that the selection process produced a group of participants who were markedly different (in unidentified ways) from the controls that account for much of the differences in outcomes that were found. The only way to answer that question would be to mount a test of Meyerhoff that involved randomized assignment to the participant group and to a control group.

Some other reservations need to be noted here as well. One is that it is possible that the leadership of Dr. Hrabowski, who has been UMBC's president for over a decade, is contributing a great deal to the program's success and that the kind of leadership he is providing would be difficult to reproduce at most other selective institutions. In addition to being a tireless advocate for the program, he provides extensive and intensive personal leadership to the Meyerhoff students and staff. As one researcher has noted, Dr. Hrabowski is also a charismatic individual, which adds to his capacity to lead.[25] Furthermore, he is an African American—so he is a true model of what he is encouraging the Meyerhoff Scholars to become.

Another concern is that, owing to Meyerhoff's substantial financial aid packages and extensive support services, the program is very expensive, possibly too expensive, to be used at a large number of institutions. (Of course, it may be that the Meyerhoff Program would still be successful even if participating students received much less financial aid, on average.)

Also, because the pool of high achieving Black high school graduates that Meyerhoff taps is still small, it would be difficult to mount SEM (or other discipline-focused) programs with similarly large numbers of very well prepared African American students at a high percentage of selective college and universities. For instance, as recently as 2000 only 746 African Americans scored 700+ on the SAT math section (along with 555 Mexican

[24] Ibid.

[25] Gandara, P. and Maxwell-Jolly, J., *Priming the Pump: Strategies for Increasing the Achievement of Underrepresented Minority Students*.

Americans, 165 Puerto Ricans, 793 other Latinos, and 195 Native Americans), yet 41,449 Whites and 15,496 Asians did so.[26]

Recognizing the limited number of high-achieving high school graduated from these groups, one possible approach to adapting Meyerhoff to the circumstances of small selective private liberal arts colleges might be for a number of these colleges to try to specialize in serving a relatively small number of top students from these groups in only one or a few closely related majors. Such "mini-Meyerhoff" clusters of students (say, 10 or so freshmen each year) might make it feasible for the colleges to target them. For instance, one selective liberal arts college might decide to focus on recruiting some top underrepresented minority students interested in economics, while another might focus on biology.

The Opportunity Programs at Skidmore College

There is another promising strategy, described in considerable detail in another chapter in this volume, that might prove to more replicable/adaptable to selective liberal arts colleges: Skidmore College's Opportunity Programs: the Higher Education Opportunity Program (HEOP) and the Academic Opportunity Program (AOP). The Opportunity Programs serve an economically disadvantaged student clientele (mostly from underrepresented minority groups) that is quite underprepared for the academic demands of selective institutions by traditional measures. Indeed, based on their high school records and college admissions test scores, they are inadmissible to Skidmore under the normal admissions decision process. Nevertheless, since the middle 1990s, Skidmore's HEOP/AOP have demonstrated a capacity to help almost all of their students graduate and to do so with an average graduating GPA for each racial/ethnic group that is close to that of the regularly admitted students from their respective groups. Furthermore, many students in the Opportunity Programs have graduated with very high GPAs and earned academic awards and honors.[27]

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[26] College Board (2000). *2000 College Bound Seniors: Ethnic and Gender Profile of SAT and Achievement Test Takers for the Nation.* New York: College Board.

[27] Layden, S. (undated). *The Opportunity Programs at Skidmore College.* Handout provided by Dr. Layden for her presentation on the Opportunity Programs at the November 15, 2004 meeting of the Consortium for High Academic Achievement at UC Berkeley.

The two programs differ only in their sources of funding. Otherwise, they are really one program operationally. Similar to some other promising programs, HEOP/AOP are the product of a strong leader with a firm vision of academic excellence for the participating students—the director, Dr. Sue Layden. Under her leadership, the program has been designed with an eye toward giving all participants a genuine opportunity to excel academically by traditional measures, including earning a high GPA. This focus can be seen in such key areas as student recruitment, academic and social integration, knowledge and skill development, support and motivation, and academic monitoring and advising.[28]

For example, although students in the Opportunity Programs are much less well prepared academically for Skidmore than most of the regularly admitted students, they were among the best students in the mostly urban and rural high schools that they attended. Thus, they are generally highly motivated to perform well academically at Skidmore and willing to work hard to do so, despite the fact that their high schools typically were not able to offer them challenging college prep programs.[29]

The HEOP/AOP summer bridge is a key element of the program. Notably, it has a rigorous academic focus tied to the specific challenges that the students will encounter in the fall. This means preparing the students to do well at a very selective liberal arts college that emphasizes interdisciplinary coursework and writing across the curriculum. Students take writing and math courses designed to prepare them in those domains for the fall semester as well as a pre-liberal studies course designed to prepare them for a key interdisciplinary course that all Skidmore students take in the fall of their freshman year.[30]

Because HEOP/AOP students typically have significant gaps both in content knowledge and learning skills, the bridge program is designed to address both. It does so by making maximum use of the time available during the four-and-one-half-week program. Students are in class virtually all day Monday through Friday. They also must meet with tutors each evening for assistance with their work.

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[28] See chapter on the Opportunity Programs at Skidmore in this volume.

[29] This summary is based on conversations between Dr. Susan Layden and L. Scott Miller at Skidmore College in July 2004 and on a written (undated) communication from Dr. Layden to Mehmet Dali Ozturk.

[30] See chapter on the Opportunity Programs at Skidmore in this volume.

The enormous amount of time that the HEOP/AOP bridge program allocates to mandatory tutoring is very unusual. Even more unusual is who does most of the tutoring: the Opportunity Program's four-person professional staff. All four members have academic backgrounds that enable them to provide tutoring services in a wide range of courses. When one observes them doing so, however, one sees that they do not simply function as (very knowledgeable) tutors in the ordinary sense of the term. They also are modeling intellectual approaches, notably critical thinking skills, needed to be successful students at Skidmore and to become well-educated individuals in general. For example, when working with students in the evening on their pre-liberal studies assignments, the staff members (working one-on-one) demonstrate how to engage in close reading and analysis of challenging texts, such as those written by Plato or Darwin.

In addition to commenting on drafts of written work that the students have prepared, the staff members ask questions about the text that help the students learn to probe the material deeply. Staff members may offer alternative interpretations of the material as well. They also give very high priority to helping the students learn how to take good notes, in part by offering examples of good note-taking for the actual courses. For instance, during tutoring sessions, the staff members may review the students' notes and offer feedback. Furthermore, during the bridge program, Dr. Layden attends the pre-liberal studies course and takes notes, which she shares with the students. This allows them to see what good notes look like for one of their classes on an ongoing basis.[31]

The amount of time allocated to this kind of one-on-one academic contact with students outside of class during the bridge program is substantial—about 7 hours per student each week. As a result, in addition to the regular staff, some other professional tutors are employed for the summer, but no students are hired as tutors.[32]

By acting as the students' main tutors during the bridge program, the HEOP/AOP staff is able to establish the relationships that will permit them to play a similar role effectively throughout the freshman year (and on through the sophomore year as well). During the academic year, the Opportunity Programs staff members find themselves tutoring students in courses as diverse as

[31] Observations by L. Scott Miller of Dr. Lewis Rosengarten, Monica Minor, and Susan Layden conducting evening tutoring sessions during the Academic Summer Institute in July 2004. The sample course notes given to Mr. Miller by Dr. Layden are very clear and thorough.

[32] See chapter on the Opportunity Programs at Skidmore in this volume.

those in economics, religion, and biology. By having the HEOP/AOP professional staff act as the students' main tutors and academic advisors at the beginning of their college careers, the students have four well-educated adults guiding their development. These four professionals also establish personal relationships needed to help the students with non-academic matters throughout their four years at Skidmore.[33]

This, of course, is very time-consuming work during the academic year. Each of the four professionals averages about 25 hours of contact each week with students, the majority of which is spent with freshmen.[34]

The decision to have a four-person professional staff recruited explicitly to play such an extensive, direct role in the students' academic development is a well-conceived (and realistic) response to the academic underpreparation of the students that they serve. This decision has given the Opportunity Programs the capacity to make an enormous human capital investment that the students need in a short period of time—and to do it with quality control.[35]

It also is worth noting that, similar to Meyerhoff, the Opportunity Programs give a great deal of emphasis to monitoring students' academic progress, so that early intervention can take place, when required. Students are also encouraged to study together. Social events are scheduled frequently that help the students become a more cohesive group and, in some cases, introduce them to faculty members in non-academic settings.[36] Beyond that, via their extensive time with the four HEOP/AOP professionals, the students become members of an intellectually very demanding adult and student community that also is good humored, civil, honest, helpful, and caring. In that regard, when first observing the Academic Summer Institute, one is initially inclined to think of it as an academic "boot camp." However, unlike a military boot camp, there is nothing personally punitive, interpersonally harsh, or rigidly hierarchical about the Academic Summer Institute. While the Academic Summer Institute is academically and socially intensive, pushes the students intellectually, and expects them to

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[34] Ibid.

[35] This approach stands in sharp contrast to ones that rely heavily on upper division students to provide much of the tutoring—a group that turns over year to year and that varies in academic content knowledge and the interpersonal skills needed to work closely with students.

[36] Layden, S. (undated). Written communication from Dr. Layden to Mehmet Dali Ozturk.

do well, the environment is always friendly and humane. During the academic year, the atmosphere in the HEOP/AOP office has a similar feel. It is the physical center of a welcoming community with a genuinely academic/intellectual center.

One of the most valuable features of the Opportunity Programs may be that they are racially/ethnically diverse. This provides participants with many opportunities to learn to work with students academically across racial/ethnic lines and to make friends across those lines as well. Because underrepresented minority students are a small percentage of the Skidmore student body, laying the groundwork for them to have access to students from other groups is essential. After all, in many courses they will take during their undergraduate years, they may be the only students from their group in the room. Thus, they need experience working productively with majority students. Similarly, majority students need experience working productively with them.

Available data show that participating students from all racial/ethnic groups do well in GPA terms relative to regularly admitted students from their respective groups. However, one very important negative finding is that there are substantial racial/ethnic differences in average GPAs among the participants. During one four-year period, the average GPAs for HEOP/AOP graduates were 3.42 for Asians, 3.26 for Whites, 3.03 for Hispanics, and 2.93 for Blacks.[37] Thus, while the underrepresented minority students in HEOP/AOP are clearly benefiting academically, Whites and especially Asians are benefiting more, at least as measured by GPA.

Four additional points need to be made about the Opportunity Programs. First, when asked to explain their overall success, a Skidmore professor deeply involved in HEOP/AOP said it was due to a "superb staff of extremely overqualified and underpaid long-standing employees" who "genuinely understand the academic material their students are expected to learn" and who also have the "interpersonal skills and awareness of minority students' concerns" that enable them to work effectively with the students on non-academic matters.[38]

These are astute observations. The four full-time professionals are clearly very able and dedicated. The fact that three of them have been together for about a decade suggests that their collective

[37] Unpublished data provided by Dr. Layden to Mehmet Dali Ozturk.
[38] Solomon, S. (undated). Written communication from Dr. Solomon to Mehmet Dali Ozturk.

expertise also may be important to the success of HEOP/AOP at Skidmore.

Second, not only are the characteristics and qualifications of the staff crucial to the success of the program, but it also has been extremely difficult to find people with the skills and sensibilities of those Dr. Layden has hired.[39] This suggests that, should several selective liberal arts colleges attempt to establish programs similar to HEOP/AOP in the near future, it would be difficult for them to recruit staffs that could quickly operate them at the high level of quality that is currently found at Skidmore. Another way of making this point is that, even if very able, committed people were recruited, most would still need extensive training to be fully effective, yet there are no training programs available for what is being done at Skidmore.

Third, the approach to recruiting students for the Opportunity Programs at Skidmore raises an important unknown: the size of the pool of disadvantaged underrepresented minority students who would do well in programs with the characteristics of HEOP/AOP. Most of the students admitted into HEOP/AOP at Skidmore have graduated in the top 10% or so in urban and rural high schools serving heavily disadvantaged populations. In fact, many of the students have been among the top 5 or 10 students in their high school classes; it has not been uncommon for students to have been the valedictorian or salutatorian in such high schools.[40] It is possible that the Opportunity Programs could be just about as effective with underrepresented minority students who graduated in the top 20%, not simply the top 10%, of many such high schools, but that is a question that can only be answered by testing HEOP/AOP with such students.

Fourth, the Opportunity Programs have another population available to target: regularly admitted Black and Hispanic students at Skidmore. Many of these students are not too much different in terms of academic preparation than the group that HEOP/AOP currently serves. (Their high school GPAs and SAT scores tend to be considerably lower than those of regularly admitted Whites and Asians.) Yet, whether these students would benefit academically, including in terms of earning meaningfully higher GPAs at Skidmore, is a question that remains to be answered empirically.

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[39] Layden, written communication from Dr. Layden to Mehmet Dali Ozturk.

[40] Conversation between Dr. Layden and L. Scott Miller at Skidmore College in July 2004.

This review of the Skidmore Opportunity Programs suggests it is sufficiently promising that much more extensive testing of its potential should be undertaken. This testing should include assessments at several selective private liberal arts colleges in order to determine how effective it is a number of campus environments and with a number of different professional staffs. It also should involve assessments with a wider range of underrepresented minority students in terms of academic preparation (i.e., with students who are somewhat less well prepared and with those who are somewhat better prepared). It should involve testing of the strategy in a manner that provides opportunities to learn if there is a set of valuable achievement benefits (including higher GPAs) associated with providing extensive academic support to participating students across all four undergraduate years, not just the first two. (Providing such support throughout the undergraduate years might help reduce the racial/ethnic GPA differences that currently exist among program participants.) Ideally, some of these tests would involve randomized trials; at a minimum, they should use quasi-scientific evaluations with participants compared to carefully matched groups of similar students.

Funding Tests and Evaluations of Promising Strategies

Extensive testing of the Opportunity Programs and modified versions of the Meyerhoff Scholars Program at a number of selective liberal arts colleges would be expensive. Thus, it is hard to imagine that extensive testing of those (or other) strategies could be undertaken without major financial commitments from one or more foundations with an interest in raising the achievement of underrepresented minority students.

This would necessarily require the cooperation of several selective private liberal arts colleges, which, in turn, would require the leaders to commit their institutions to full testing and evaluation of the strategy or strategies. Because foundation investment in rigorous strategy testing and evaluation is currently limited, one of the most important acts of cooperation among the leaders of a group of selective private liberal arts colleges may be to work together to seek large financial commitments from two or three foundations to test fully at least a few promising approaches.

The need to assess multiple strategies reflects not only the possibility that any single promising approach may prove to be of

marginal value when subjected to widespread testing, but also the reality that no single strategy is likely to address the needs of the full range of underrepresented minority students at selective private liberal arts colleges. For instance, the Opportunity Programs are designed to serve academically underprepared students from economically disadvantaged backgrounds, and yet, in addition to these individuals, many selective private liberal arts colleges currently enroll a number of underrepresented minority students from middle and professional class families. The strategy testing and evaluation process should take the needs of these students into account, as well, especially since many of them seem to be vulnerable to the overprediction phenomenon.

The Operating Cost and Staff Development Challenges

In addition to the need for foundation funding of extensive strategy design, testing, and evaluation work, it also undoubtedly will be necessary for the participating selective liberal arts colleges to make a commitment to pay for much of the ongoing operating costs of effective programs that emerge from these strategy development and assessment efforts. This may be a greater challenge than persuading some foundations to make large, long-term grants to support the strategy testing agenda. In the review of existing programs that my colleagues and I have conducted, we found that many, if not most, relied to a considerable extent on external funding for their operation. Importantly, this is true for the Opportunity Programs at Skidmore. The State of New York provides a substantial amount of financial support each year for Skidmore's HEOP, which makes it possible to have the four-person professional staff.

One plausible approach to generating a stable stream of money to pay for program operating costs at selective liberal arts colleges with strong fundraising capacities would be for their presidents and boards to raise multimillion dollar endowments earmarked for this purpose. Of course, this would mean making fundraising for this purpose a relatively high priority for a period of years. Unfortunately, for many selective liberal arts colleges that have relatively limited fundraising abilities, an endowment approach may not be feasible. Thus, for them, in the absence of stable long-term funding from government or foundations, mounting high quality programs seems likely to be problematic, even if several proven strategies become available.

Beyond the fundraising challenge is the problem of developing and maintaining staffs with the expertise to operate proven strategies with fidelity. As noted earlier, because program staffs tend to be small and there is little documentation of how strategies work in practice, turnover can lead to unintended changes in what is being done. Nonetheless, if strong evidence of effectiveness were developed for a few strategies over the next decade and several private liberal arts colleges made a commitment to use them, it might become somewhat easier to maintain knowledgeable staffs for them. For instance, mechanisms could be developed for program directors to share information on how they operate their programs and (possibly) on their results with students. In addition, a large enough supply of people qualified to become directors might emerge from these staffs to handle turnover among the directors. Internship programs also might be developed to help train junior staff members. Of course, these things would require adequate funding, something that is already a potentially serious problem for many institutions.

At the very least, leaders of selective private liberal arts colleges should ensure that they have a rich stream of information about the academic performance of the students at their institutions that is broken down by race/ethnicity and linked to measures of academic preparation, economic factors, program participation, and the like. Measures of academic performance would, at a minimum, include retention rates, graduation rates, and GPA distributions. This would ensure that leaders have a reasonably good picture of how things are going academically for their underrepresented minority students and whether there is a need to improve the efforts that their institutions are making in response to those students' needs.

Some Final Observations

The above discussion suggests that it is far from clear that it will be possible to raise the academic achievement of underrepresented minority students substantially at a large number of selective private liberal arts colleges over the next 10 to 20 years. The financial obstacles, alone, to the development of proven strategies and to implementing them widely with fidelity make this a daunting area in which to work.

Probably the best hope for progress would be for a sizable foundation to make a major, long-term commitment to underwriting strategy development, testing, evaluation and implementation efforts in this area. Such a commitment might alleviate the financial obstacles to effective work and, in the

process, make it possible for several leaders of selective private liberal arts colleges to establish this issue as an ongoing priority on their campuses. But it seems unlikely that the heads of any existing foundations will, on their own, decide to make this a long-term program priority in the near future. This suggests that a group of presidents of selective private liberal arts colleges should consider joining together to make the case to some foundation heads for staking out a leadership position in this area. Better still, it might be more productive for them to encourage some wealthy individuals to establish a new foundation chartered exclusively to work in this area.