

Executive Summary

Background

The *Higher Education Reconciliation Act of 2005* created two new grant programs for undergraduates: the Academic Competitiveness Grant (ACG) program and the National Science and Mathematics Access to Retain Talent (National SMART) Grant program. The ACG program is intended to encourage students to take challenging courses in high school and thus increase their likelihood of success in college. The National SMART Grant program is intended to encourage students to pursue college majors considered in high demand in the global economy (mathematics, science, engineering, technology, and languages deemed critical to the national interest).

To be eligible for an ACG or National SMART Grant, a student had to qualify for a Federal Pell Grant, enroll full-time in a degree program at a two- or four-year institution of higher education, and be a U.S. citizen. First-year students who met these conditions, graduated from high school after Jan. 1, 2006, and completed a rigorous high school program (as defined by the U.S. Department of Education) could receive an ACG up to \$750 (depending on their financial need). Second-year students could receive up to \$1,300 if they graduated from high school after Jan. 1, 2005, met all the other conditions for an ACG, and had a cumulative grade point average (GPA) of at least 3.0¹ at the end of their first year of college. National SMART Grants worth up to \$4,000 are available to third- and fourth-year students who are majoring in mathematics, science (physical, life, or computer), engineering, technology, or certain foreign languages considered critical to the national interest² and who maintain a cumulative GPA of at least 3.0.

With the passage of the *Ensuring Continued Access to Student Loans Act of 2008* (H.R. 5715), eligibility for the programs has been expanded. Specifically, part-time students and noncitizen permanent residents will be able to receive ACGs and National SMART Grants starting in Jan. 2009, and students in certificate programs lasting a year or more at a degree-granting institution will be able to receive ACGs. However, the *Higher Education Opportunity Act of 2008* (H.R. 4137), enacted in August 2008, delayed implementation of these changes and gave states increased control over defining rigorous secondary school programs of study. This report describes implementation and participation patterns under the original eligibility conditions.

¹ On a 4.0 scale or the numeric equivalent.

² Appendix A includes a complete list of eligible majors.

If the new grant programs are successful, more low-income students will complete rigorous high school programs, enroll in college full-time, and earn degrees, and more students will major in mathematics, science, engineering, technology, and critical languages. The U.S. Department of Education has encouraged states, school districts, and schools to take steps to promote rigorous course-taking and to establish efficient mechanisms for verifying students' eligibility for the grants.³ Congress provided \$790 million for ACGs and National SMART Grants for 2006–07 and \$4.5 billion over five years. The programs will end after the 2010–11 academic year unless reauthorized.

Approximately 300,000 ACGs and 60,000 National SMART Grants were awarded in the 2006–07 academic year, compared with the Department's initial estimates of 425,000 ACGs and 80,000 National SMART Grants.⁴ Whether the shortfall was due to an overestimate of the number of eligible students, difficulties associated with the rapid implementation of a complex program, or both is difficult to assess. The Department's goal is to double participation by 2010–11.

MPR Associates and JBL Associates are assisting the Department of Education in evaluating the ACG and National SMART Grant programs. Because the programs were announced in May 2006 and the first awards made for the 2006–07 academic year, it is too soon to answer the most important questions that the Department has posed for this multiyear study:

- Will the financial incentives provided by the ACG program induce more economically disadvantaged high school students to complete a rigorous high school program and enroll and succeed in postsecondary education?
- Will the availability of National SMART Grants motivate more students to major and receive degrees in mathematics, science, engineering, technology, and critical languages?

Students currently in their final years of high school simply may not have enough time left to take all the required courses, and students about to enter their third and fourth years of college may be well-established in other majors and not have the foundation needed to switch to one of the qualifying majors even if they wanted to. First-year activities therefore focused on the following:

- Identifying and describing implementation issues from the perspective of major stakeholders by conducting interviews, reviewing documents, and monitoring stakeholder Web sites.

³ Chapter 6 of this report contains the Department's specific recommendations.

⁴ *Federal Register* Vol. 71, No. 127, p. 37998.

- Comparing information on the state-specific rigorous high school programs approved by the secretary of education and on state high school graduation requirements.
- Examining 2006–07 participation in the programs overall, across states, by student characteristics, and (for National SMART Grants) by field of study using the COD-CPS Interface Grant Recipient File maintained by the Office of Federal Student Aid.
- Analyzing historical data to determine national trends in high school course-taking and to develop estimates of eligibility for ACGs and National SMART Grants. This baseline information—obtained from the National Assessment of Educational Progress (NAEP), Education Longitudinal Study of 2002 (ELS), Beginning Postsecondary Student Aid Studies (BPS), National Postsecondary Student Aid Studies (NPSAS), and the Integrated Postsecondary Education Data System (IPEDS)—will provide a benchmark against which to examine current and future participation in the ACG and National SMART Grant programs.
- Summarizing Department of Education and stakeholder recommendations for improving the programs.

This report summarizes the findings of these activities and presents recommendations developed by the Department of Education and stakeholders to increase participation. Updates to this report will be provided after years two and three, and a final report on outcomes and impact prepared after the fourth year of the programs (2009–10). The impact of the programs will be evaluated as data become available. Multivariate analyses will be employed to the extent feasible, focusing on longitudinal state data.

Summary of Major Findings

First-Year Implementation Concerns

- Although stakeholders applaud the intent of the programs, many were frustrated by the administrative burdens put on institutions and staff and the lack of awareness and confusion about the ACG and National SMART Grant programs. Some difficulties were eased during the first implementation year as the Department clarified language in the regulations, such as how to compute grade point averages (GPAs), how academic year is defined, and methods for establishing a student’s academic major. Nevertheless, some concerns remain, including the need to base ACG awards on students’ four-year high school transcripts (which colleges do not always have) and difficulties associated with verifying the completion of a rigorous high school program.

- Successful implementation of the programs (especially ensuring that students are well-informed) will require cooperation and coordination across high school and postsecondary education. High school counselors, college academic advisors, and financial aid administrators interviewed for this report all commented on the lack of awareness and the need for better coordination among these groups of professionals.

State Definitions of Rigorous High School Programs

- For the first year of the ACG program, the U.S. secretary of education approved as rigorous at least one advanced, honors, or other program in 40 states and approved more than one program in 22 states. The content of these programs varied widely. Some appeared to be more demanding than the Department of Education (ED) course-based curriculum, some appeared to be less demanding, and some were difficult to compare.

First-Year Participation

- First-year participation was lower than expected for both ACGs and National SMART Grants (about 300,000 ACGs and 60,000 National SMART Grants, compared with the 425,000 and 80,000 initially estimated). It is difficult to know whether this is due to inaccurate estimates of the number eligible, implementation issues, lack of knowledge about the programs, or all of the above.
- At four-year institutions, the percentage of first- and second-year Pell Grant recipients that received an ACG ranged from a high of 32 percent (for Massachusetts residents) to a low of 4 percent (for Alaska residents). At two-year institutions, the rate varied from 6 percent (for Oklahoma and Florida residents) to less than 1 percent in six states.
- About one-quarter of all first- and second-year Pell Grant recipients received an ACG at public and private nonprofit four-year institutions, but only 3 percent did so at public two-year institutions, at which students are more likely to enroll part-time and are less likely to be well-prepared academically.
- About three-quarters of ACG recipients were first-year students, suggesting that second-year students had difficulty meeting the 3.0 GPA requirement (the only difference in the requirements for first- and second-year awards).
- Five percent of Pell Grant recipients in both the third and fourth years received a National SMART Grant.
- Participation rates for the National SMART Grant program also varied (from 2 percent in the District of Columbia to 14 percent in Utah). There did not appear to be any systematic relationship between the National SMART Grant participation

rate at institutions in a state and the percentage of bachelor's degrees awarded in National SMART Grant-eligible fields in that state. In other words, a state's rate cannot be explained simply by the proportion of students majoring in eligible fields in that state.

- Although all recipients were from lower-income families, ACG recipients tended to come from families with higher incomes than those who received only Pell Grants. Students with Expected Family Contributions (EFCs) of 0 received 46 percent of all Pell Grant dollars awarded, but only 32 percent of ACG dollars. The family income of dependent students with National SMART Grants was also somewhat higher than that of those who received only Pell Grants.
- About half of all participating institutions awarded fewer than 50 ACG Grants, and about one-third awarded fewer than 10 National SMART Grants.
- Students with a major in the life sciences had the largest share of National SMART Grants (38 percent).

Historical Information: Trends in High School Course-taking

- States have been raising high school graduation standards and are continuing to do so, with numerous changes planned for the next few years. These efforts encourage more rigorous course-taking and may promote increased eligibility for ACGs regardless of any other initiatives, but they confound efforts to isolate the impact of the ACG program on course-taking.
- The percentage of high school graduates completing a rigorous high school program has increased over time. About half of all high school graduates now complete the ED course-based rigorous curriculum, but low-income students are less likely than others to do so. The same is true even when the comparison is limited to those who enroll in college full-time right after high school, although the gap is less pronounced for this group.

Historical Information: Estimates of Eligibility

- Based on analysis of historical data, 13 percent of first-time, first-year students would have been eligible for an ACG in 2003–04, which is almost double the percentage that would have been eligible in 1995–96 (7 percent) had the program existed in those years. In contrast, the percentage of undergraduates in the third year or above that would have been eligible for a National SMART Grant remained stable at 2 percent.
- The academic requirement for the ACG appears difficult to meet. Most undergraduates are U.S. citizens and most recent high school graduates enrolled full-time in college, but barely half of those meeting these eligibility criteria also

took the required courses. Taking science courses and a language other than English were the most difficult requirements to meet.

Historical Information: Trends in National SMART Grant-eligible Majors

- The proportion of all bachelor's degrees awarded in National SMART Grant-eligible fields has remained stable—about 15 percent since 1995–96.

Summary of Department of Education and Stakeholder Recommendations

- To increase the number of students qualified for grants, the Department has asked states to commit to doubling the number of grant recipients by 2010–11. To achieve this goal, the Department has urged high school and postsecondary stakeholders to know their states' approved rigorous curricula, advocate for initiatives to increase low-income students' access to rigorous course work and National SMART Grant-eligible majors, and support efforts to increase awareness of the grant programs.
- To improve the identification of students eligible for grants, the Department has suggested strategies such as developing a core high school curriculum for college admissions that meets ACG eligibility requirements; having states provide colleges with lists of students receiving recognition through programs that make them potentially eligible for an ACG; and having institutions review the transcripts of all Pell Grant recipients to ensure that eligible students are not overlooked.
- To reduce the administrative burden on high schools and postsecondary institutions, stakeholders offered recommendations similar to those of the Department but also called for additional assistance in devising and applying solutions. They recommend improved collaboration on marketing the ACG and National SMART Grant programs; training and workshops for financial aid administrators, college registrars, academic advisors, and high school guidance and college counselors; and better communication between high school and college counselors.