TO: Don Coers
FROM: Grady Price Blount
DATE: November 6, 2007

re: SAS Action Plan

Per your request, this document constitutes a retrospective performance report on and future action plan for the Special Academic Scholarships (SAS). The data and consensus on this report came from joint meeting between myself, George Shankle, and Paul Swets.

As you can see on the following pages, SAS recipients have been spectacularly successful with higher GPAs, higher retention rates, and higher graduation rates than both Carr recipients and the ASU student population as a whole. However, it is not demonstrable that our SAS dollars are effectively recruiting net new students into ASU.

Data from student surveys, conducted in the Fall 2007 term, imply that under the current implementation, SAS is mostly persuading students who have already decided to attend college and to do so at ASU. We therefore recommend that ASU continue to support the current SAS program with improvements listed below. We also recommend that ASU invest in a parallel program (also described below) to target students with high potential but who, for socioeconomic and demographic reasons, are not even considering attending college. This two-pronged approach, one branch focusing on college-ready students and producing immediate results with the other branch focusing on developing a long-term pool of applicants from underrepresented strata, should be ripe for generating extramural funding support.

Numerous national studies, most recently the Achievement Trap (Wyner et al., 2007), have illuminated the problem of high potential low achievers, particularly in rural settings. We have discussed and confirmed this situation locally with representatives from the San Angelo ISD and several rural outlying districts.

We propose channeling part of the SAS budget into an early intervention program identifying 6th through 9th grade students meeting the Achievement Trap criteria of low income, high achievement, and low potential for attending college. Ken Stewart and his colleagues in the Sociology department are currently seeking Community Development funding precisely for this early intervention identification process.

Once selected, these new SAS candidates would be provided with invitations to summer science/math camps, one-on-one mentoring, enrichment activities, and finally the college-readiness training specifically for eventual enrollment at ASU. We propose that these scholarships be encumbered 4 to 5 years in advance as we identify candidates in middle school or early high school (final awards being contingent upon satisfactory completion of their high school career and ACT/SAT scores).

When candidates reached high school junior/senior status they would be provided with dual enrollment classes here to demonstrate their ability to perform college-level work satisfactorily.

Startup costs for the summer programs could be partially derived from existing SAS funds. Final payouts, in the form of tuition, fees and books would not occur until several years after initiation. This concept is ripe for extramural funding support. Indeed, Kelly McCoy and Connie Russell have already submitted an NSF application (October 2007) to fund parts of the summer camp programs.

For the future, we propose to tighten the scope of the SAS program to focus strictly on math and science (STEM) students and concomitantly remove Modern Languages from the SAS pool (Dean Lambert concurs with this recommendation).

Recommendations:

SAS is an important retention tool, but in order for it to be a more effective recruitment tool, potential students should be made aware of it before they have finalized decisions about whether and where to attend college. Previous experience with potential SAS applicants indicates that they respond positively to personal contact from ASU faculty in the students' fields of interest. We recommend [1] Actively seeking SAS candidates, paying special attention to high school students at small schools in the regional service area of San Angelo (this approach could include adding a part-time recruiter for STEM fields); [2] Adding Computer Science as an SAS eligible major; [3] Removing French and German as SAS-eligible majors (Dean Lambert concurs with this recommendation); and, [4] If the proposed additional recruitment efforts are successful, increase ASU's $100,000 annual commitment for initial SAS awards. Coupled with current initiatives to initiate ASU/TTU dual degrees and 4+2 programs, this last option could prove particularly fruitful. In summary, our recommendations are:

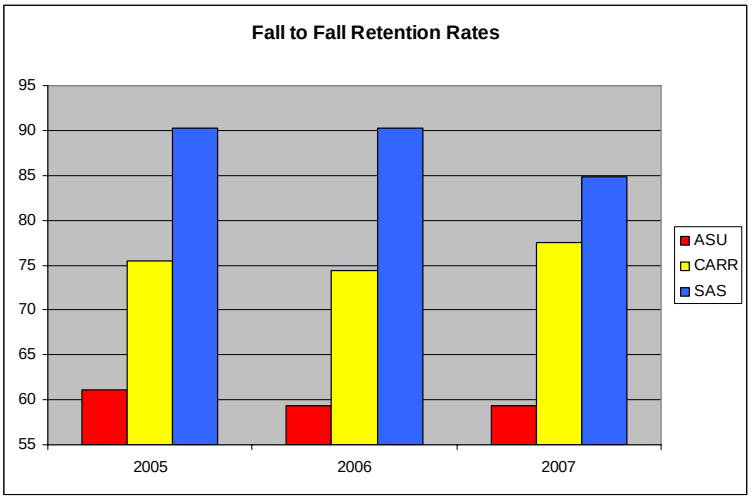
- Honor existing commitments, but increase direct recruitment efforts to focus on net new enrollments in STEM fields.
- Consider making SAS a standalone program in addition to its current role as a "Carr Supplement".
- Use SAS funds to "matching dollars" to leverage extramural funding for STEM field proposals.
- Add Computer Science.
- Delete Modern Languages.
- Plan now for increases in the SAS budget based on success in the above recommendations.

Special Academic Scholarships: Historical Performance

The success of the SAS program has been in the STEM programs of the College of Sciences: only 22 scholarships (<10% of the total) have been awarded to students outside the sciences. Many of the extant SAS students have come from local, often small, high schools. For example, 44% of the Fall 2006 SAS class came from towns within a 200 mile radius of San Angelo with a population of fewer than 5,000. This self-selected group has "appeared" on campus with little active or overt SAS recruitment.

SAS has functioned 100% as a "Carr Supplement". A total of 230 Special Academic Scholarships have been awarded through Fall 2007. The average annual award is $1954. The average GPA for awardees is 3.47. The fall to fall retention rates average nearly 90% (≈50% higher than ASU aggregate performance and ≈15% better than Carr Academic Scholarship awardees.

Fall to fall retention rates for first time, full time, degree seeking students



Awardee survey data highlights (n=57): SAS Awareness: Less than 1% of awardees had heard of the SAS prior to their senior year in high school. Nearly half reported that they first heard of the SAS in the summer immediately preceding their first enrollment at ASU. Almost 70% heard about SAS for the first time from ASU rather than a school counselor or someone at home. 70% said getting an SAS was *critical* or *important* in their enrolling at ASU. 60% said getting the SAS was *critical* or *important* in their remaining at ASU.

Conclusions SAS is an important retention tool, but it has been deployed exclusively for students already committed to ASU. It needs to be deployed more strategically as a recruitment tool; particularly before students have finalized decisions about college. The current Special Academic Scholarship program commitments should be honored, with additional attention and funding allocated to student recruitment. Most profoundly, existing SAS funds ARE NOT being used to leverage extramural funding. This can and should be remedied immediately.

Appendix A: Achievement Trap Executive Summary

Today in America, there are millions of students who are overcoming challenging socioeconomic circumstances to excel academically. They defy the stereotype that poverty precludes high academic performance and that lowerincome and low academic achievement are inextricably linked. They demonstrate that economically disadvantaged children can learn at the highest levels and provide hope to other lower-income students seeking to follow the same path.

Sadly, from the time they enter grade school through their postsecondary education, these students lose more educational ground and excel less frequently than their higher-income peers. Despite this tremendous loss in achievement, these remarkable young people are hidden from public view and absent from public policy debates. Instead of being recognized for their excellence and encouraged to strengthen their achievement, highachieving lower-income students enter what we call the "achievement trap" — educators, policymakers, and the public assume they can fend for themselves when the facts show otherwise.

Very little is known about high-achieving students from lower-income families — defined in this report as students who score in the top 25 percent on nationally normed standardized tests and whose family incomes (adjusted for family size) are below the national median. We set out to change that fact and to focus public attention on this extraordinary group of students who can help reset our sights from standards of proficiency to standards of excellence.

This report chronicles the experiences of highachieving lower-income students during elementary school, high school, college, and graduate school. In some respects, our findings are quite hopeful. There are millions of high-achieving lower-income students in urban, suburban, and rural communities all across America; they reflect the racial, ethnic, and gender composition of our nation's schools; they drop out of high school at remarkably low rates; and more than 90 percent of them enter college.

But there is also cause for alarm. There are far fewer lower-income students achieving at the highest levels than there should be, they disproportionately fall out of the high-achieving group during elementary and high school, they rarely rise into the ranks of high achievers during those periods, and, perhaps most disturbingly, far too few ever graduate from college or go on to graduate school. Unless something is done, many more of America's brightest lower-income students will meet this same educational fate, robbing them of opportunity and our nation of a valuable resource.

This report discusses new and original research on this extraordinary population of students. Our findings come from three federal databases that during the past 20 years have tracked students in elementary and high school, college, and graduate school. The following principal findings about high-achieving lower-income students are important for policymakers, educators, business leaders, the media, and civic leaders to understand and explore as schools, communities, states, and the nation consider ways to ensure that all children succeed:

Who They Are:

- *Overall, about 3.4 million K-12 children* residing in households with incomes below the national median rank in the top quartile academically. This population is larger than the individual populations of 21 states.
- *More than one million K-12 children* who qualify for free or reduced-price lunch rank in the top quartile academically.

- *When they enter elementary school, high-achieving, lower-income students mirror America both demographically and geographically.* They exist proportionately to the overall first grade population among males and females and within urban, suburban, and rural communities, and are similar to the first grade population in terms of race and ethnicity (African-American, Hispanic, white, and Asian).

An Unequa l Start:

- *Starting-line disparities hamstring educational mobility.* Among first-grade students performing in the top academic quartile, *only 28 percent are from lower-income families, while 72 percent are from higher-income families.*

Losing Ground during K-12:

- In elementary and high school, *lower-income students neither maintain their status as high achievers nor rise into the ranks of high achievers as frequently as higher-income students.*
  - Only *56 percent of lower-income students maintain their status as high achievers in reading by fifth grade,* versus 69 percent of higher-income students.
  - While *25 percent of high-achieving lower-income students fall out of the top academic quartile* in math in high school, only 16 percent of high-achieving upperincome students do so.
  - Among those not in the top academic quartile in first grade, *children from families in the upper* income half are more than twice as likely as those from lowerincome families to rise into the top academic quartile by fifth grade. The same is true between eighth and twelfth grades.
- High-achieving lower-income students drop out of high school or do not graduate on time at a rate twice that of their higher-income peers (8 percent vs. 4 percent) but still far below the national average (30 percent).

Unfulfilled Potential in College & Graduate School:

- Losses of high-achieving lower-income students and the disparities between them and their higher-income academic peers persist through the college years. While more than nine out of ten high-achieving high school students in both income halves attend college (98 percent of those in the top half and 93 percent of those in the bottom half), high-achieving lower-income students are:
  - Less likely to graduate from college than their higher-income peers (59 percent versus 77 percent);
  - Less likely to attend the most selective colleges (19 percent versus 29 percent);
  - More likely to attend the least selective colleges (21 percent versus 14 percent); and
  - Less likely to graduate when they attend the least selective colleges (56 percent versus 83 percent).
- High-achieving lower-income students are much less likely to receive a graduate degree than high-achieving students from the top income half. Specifically, among college graduates, 29 percent of high achievers from lowerincome families receive graduate degrees as compared to 47 percent of high achievers from higher-income families.

This pattern of declining educational attainment mirrors the experiences of underachieving students from lower-income families — they start grade school behind their peers, fall back during high school, and complete college and graduate school at lower rates than those from higher-income families. Our nation has understandably focused education policy on low-performing students from lower-income backgrounds. The laudable goals of improving basic skills and ensuring minimal proficiency in reading and math remain urgent, unmet, and deserving of unremitting focus. Indeed, our nation will not maintain its promise of equal opportunity at home or its economic position internationally unless we do a better job of educating students who currently fail to attain basic skills.

But this highly visible national struggle to reverse poor achievement among low-income students must be accompanied by a concerted effort to promote high achievement within the same population. The conclusion to be drawn from our research findings is not that high-achieving students from lower-income backgrounds are suffering more than other lower-income students, but that their talents are similarly under-nurtured. Even though lower-income students succeed at one grade level, we cannot assume that they are subsequently exempt from the struggles facing other lowerincome students or that we do not need to pay attention to their continued educational success. Holding on to those faulty assumptions will prevent us from reversing the trend made plain by our findings: we are failing these highachieving students throughout the educational process.

Next Steps The time is at hand for targeting public policies, private resources, and academic research to help these young strivers achieve excellence and rise as high educationally as their individual talents can take them. Toward that end, our nation can take important steps to begin to bring this valuable and vulnerable population of students out of the national shadows:

- Educators, researchers, and policymakers need to more fully understand why, upon entering grade school, comparatively few lower-income students achieve at high levels and what can be done in early childhood to close this achievement gap. >
- Federal, state, and local education officials should consider ways to broaden the current focus on proficiency standards to include policies and incentives that expand the number of lower-income students achieving at advanced levels.
- Educators must raise their expectations for lowerincome students and implement effective strategies for maintaining and increasing advanced learning within this population.
- Educators and policymakers must dramatically increase the number of high-achieving lower-income students who complete college and graduate degrees by expanding their access to funding, information, and entry into the full range of colleges and universities our nation has to offer, including the most selective schools.
- Local school districts, states, and the federal government need to collect much better data on their highperforming lower-income students and the programs that contribute to their success, and use this information to identify and replicate practices that sustain and improve high levels of performance.

Importantly, as each of these and related efforts unfold, we must consider how advancing policies and practices that assist high-achieving lower-income students can be used to help all students.

The picture painted by this report runs counter to the expectations we have of our educational institutions. As we strive to close the achievement gaps between racial and economic groups, we will not succeed if our highestperforming students from lower-income families continue to slip through the cracks. Our failure to help them fulfill their demonstrated potential has significant implications for the social mobility of America's lower-income families and the strength of our economy and society as a whole. The consequences are especially severe in a society in which the gap between rich and poor is growing and in an economy that increasingly rewards highly-skilled and highly-educated workers. By reversing the downward trajectory of their educational achievement, we will not only improve the lives of lower-income high-achievers, but also strengthen our nation by unleashing the potential of literally millions of young people who could be making great contributions to our communities and country.

-Joshua Wyner, John M. Bridgeland, John J. Diulio, Jr.