



A R I Z O N A   S T A T E   U N I V E R S I T Y

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# **Arizona's Best and Brightest: What Happens After High School?**

**A Report for the Helios Education Foundation**

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**Contents**

Key Findings ..... 2

Introduction ..... 2

    Arizona ACT District Choice State Testing (DCST) Program ..... 2

    Schools and Districts in the DCST Program ..... 3

Limitations to Analysis ..... 3

    Non-random Sampling of Students ..... 3

    Non-response to Key Questions..... 3

Targeting the Study..... 3

    Highly Achieving Target Group ..... 3

    Expanded Target Group..... 6

Profile of the Dataset..... 6

    Demographics ..... 6

    Income and Ethnicity ..... 7

    Academic Aspirations and Expectations ..... 8

        Educational Attainment ..... 8

        Live with Family or Away from Home ..... 10

        Full- or Part-time College ..... 10

        ACT Scores Sent to In-state or Out-of-state Colleges..... 11

College Outcomes ..... 11

    College Attendance ..... 12

    Full-time Enrollment..... 12

    In-state and Out-of-state Enrollments ..... 12

    4 year and 2 year College Enrollment ..... 13

    In State Preferences ..... 13

    Enrollment in Competitive Colleges..... 14

    College Graduation Rates..... 14

Results by District ..... 14

Conclusions ..... 17

Appendix A – Tables with Counts and Statistical Tests..... 18

Appendix B – Schools and Districts in the DCST Program ..... 22

End Notes ..... 24

## Key Findings

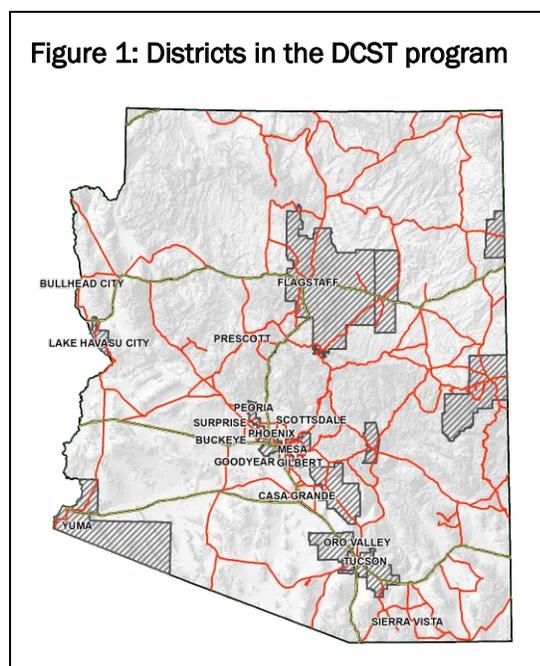
Low-income, highly achieving high school students in Arizona are statistically indistinguishable in terms of their academic aspirations and expectations and their college outcomes from their higher-income, highly achieving peers.<sup>1</sup> These students have college aspirations that match those in the higher-income categories, they attend college at the same rate, and they attend out-of-state schools at the same rate. Highly achieving students from 2008-2010 cohorts in both income groups also have graduation rates that are not statistically different from each other.

However, differences appear when the analysis is expanded to also include students with grade point averages of 2.5 and above. Low-income students in this group are statistically less likely to send their ACT scores to out-of-state colleges and less likely to enroll in college and, when they do enroll, they are more likely to go to a two-year school such as a community college or trade school rather than a four-year university and are less likely to earn a bachelor's degree than higher-income peers.

## Introduction

Between 2008 and 2012, 82 high schools across the state were provided funding from Helios Education Foundation to administer the ACT test to all of their students, with varying levels of student participation by district. Morrison Institute for Public Policy was asked to identify highly achieving low-income students from this group. Highly achieving students were defined as those with an ACT Composite score at or above the 90<sup>th</sup> percentile nationally and a high school grade point average (GPA) of 3.5 or greater. Low-income students were identified as those with self-reported family incomes of less than \$36,000 annually. A second analysis was also conducted including those students who potentially qualify for admission to one of Arizona's three public four-year universities. This analysis included students with a high school GPA of 2.5 or greater.

## Arizona ACT District Choice State Testing (DCST) Program



Helios Education Foundation has sponsored administration of the ACT test to all high school juniors in selected Arizona school districts since 2009 through the District Choice State Testing (DCST) program. In Arizona, the ACT is usually taken only by juniors seriously considering college enrollment. By providing the test to a wider selection of students it was hoped college matriculation rates among Arizona high school graduates might increase. Additionally, the post-high school outcomes of the DCST students could provide insight into how the college aspirations of students match up to the reality of matriculation and eventual graduation.

## Schools and Districts in the Dataset

The final dataset submitted to Morrison Institute includes data from both DCST schools and those outside of the program. ACT test results for 82,203 students over five years from 2008 through 2012 were included. Test scores were from 82 high schools in 19 districts statewide, with 14 of these districts participating in DCST for some or all of the five year period. Less than 2 percent of the participants were from charter schools, with the rest from traditional district schools. These schools covered urban, rural and tribal areas of the state (Figure 1). For a complete list of schools and districts that participated in the program, along with the number of students tested each year, refer to Appendix C.

## Limitations to Analysis

### Non-random Sampling of Students

The students represented in the DCST data are neither a comprehensive census nor a random sample of students enrolled in the participating districts during the study period. Comparing the number of test-takers in the DCST data to the number of 11<sup>th</sup> graders reported by the National Center for Education Statistics shows that 77% of the students in participating districts took the ACT. While this is a significant percentage, it does not represent a statistically valid sample of the population. This lack of statistical reliability limits the degree to which we can generalize the findings of the study to a wider population.

### Non-response to Key Questions

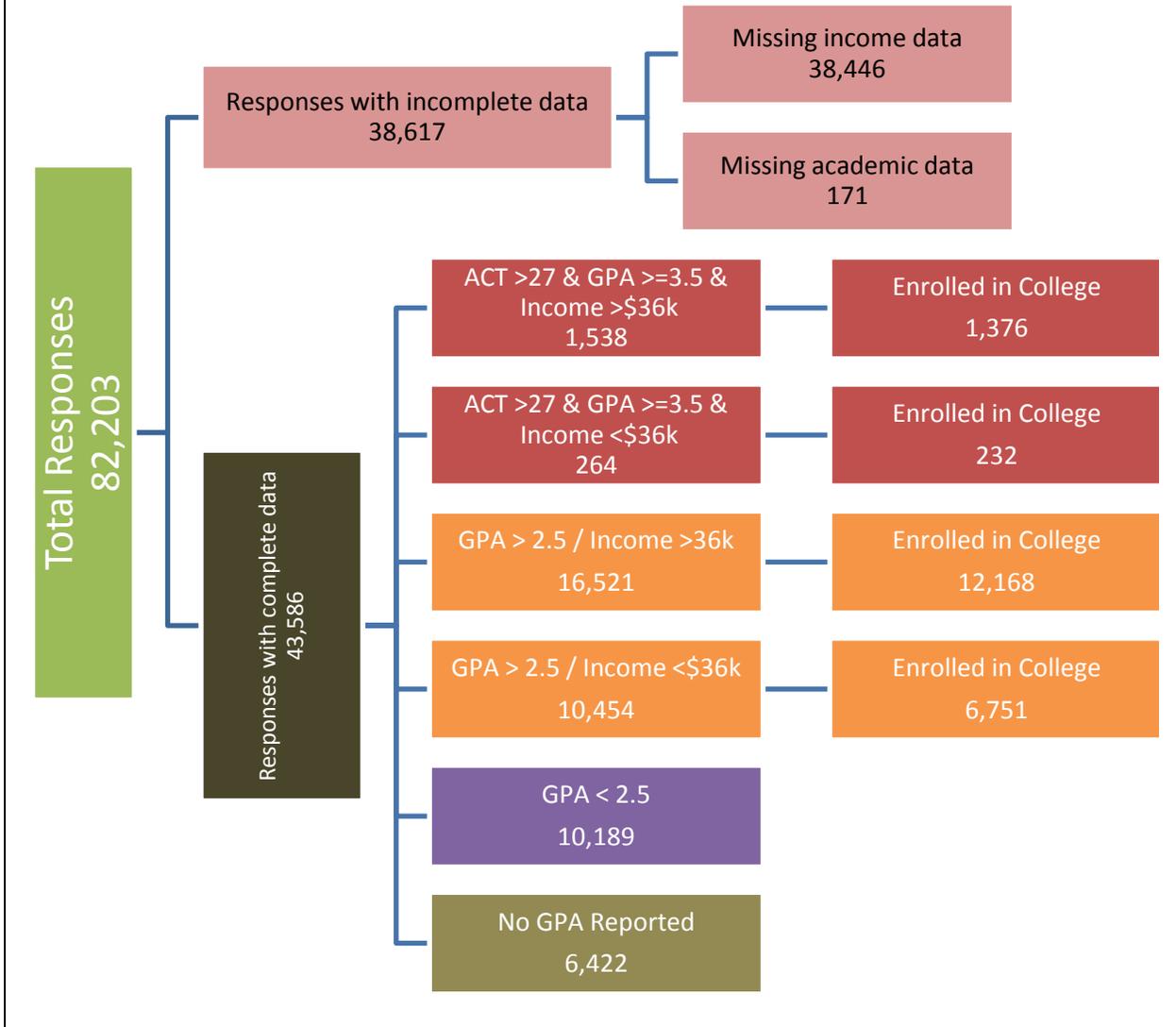
Identification of the target population of highly achieving low-income students was done through analysis of the survey that students completed as part of the ACT test. A large number of students (38,446) did not respond to the question “Please estimate the approximate total combined income of your parents before taxes last year.” Additionally, 171 records were missing one or both of the academic variables in a way that excluded them from the final dataset. As shown (Figure 2), the exclusion of these records reduced the number of valid responses to 43,586, or 53% of the total. This incomplete data further limits the ability to generalize from the DCST dataset to Arizona’s high school population as a whole. Unless otherwise noted, tables and figures in this report were drawn from the 43,586 valid responses.

## Targeting the Study

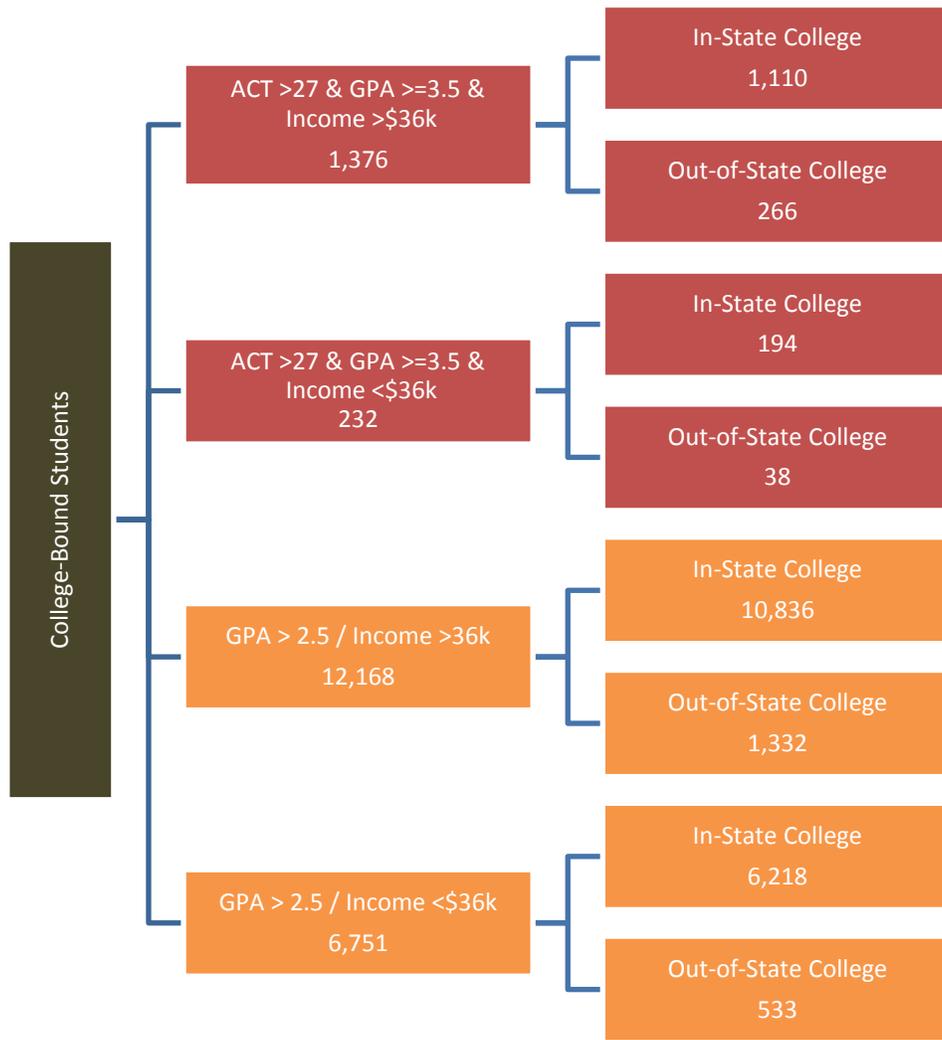
### Highly Achieving Target Group

The original group targeted for analysis in this study consists of highly achieving low-income students. Highly achieving students were defined as those scoring at or above the 90<sup>th</sup> percentile on the ACT and having a grade point average of at least 3.5. An ACT composite score of greater than 27 signifies performance at the 90<sup>th</sup> percentile nationally.

Figure 2: Breakdown of DCST data



**Figure 3: College outcomes in DCST data**



Note that just 5.4% of the DCST students had ACT scores at or above the 90<sup>th</sup> percentile of ACT scores nationwide. This discrepancy is probably largely due to the expansion of the DCST population to include large numbers of non-college bound students. Nationally, the test is usually administered to students who are applying for post-secondary education. These students presumably perform better on the ACT than their classmates who are not considering college. A total of 1,802 students were categorized as highly achieving. Low-income students were those that indicated their family income was less than \$36,000 annually. Of the highly achieving students, 264 were in the low-income category, and 1,538 indicated their family’s income was over \$36,000.

Throughout this report, the term ‘highly achieving’ will be used to refer to the DCST students who ranked at the 90<sup>th</sup> percentile or higher on the ACT Composite score and also had a GPA of 3.5 or higher. Students with self-reported family incomes of \$36,000 or less will be identified as “low-income,” while students who reported incomes in excess of \$36,000 will be identified as “high income.” The Federal Poverty Level (FPL) for a family of four in Arizona is \$23,850, with \$36,000 just slightly above the 150% FPL level of \$35,775. Many

students in the high-income category would still be considered economically disadvantaged by many standards. Most of the students in the upper-income category come from families that are not upper or even middle income. They might better be classified as “not extremely poor.”

### **Expanded Target Group**

Due to the small number of students in the original target group (264), it was decided to expand the study to include all students who might be eligible to attend one of the state’s three public universities. The state has a long tradition of liberal admission for Arizona residents to these universities and, despite recent tuition increases, a bachelor’s degree from one of the state’s three universities remains attractive and attainable to low-income and minority students. Entrance requirements vary among the three universities and applicants are accepted based upon a number of factors. There is no minimum ACT score for admission, but a GPA of at least 2.5 is required. Students with a GPA of at least 2.5 were deemed to have a reasonable chance for admission to a state university. Within the 43,586 valid records in the DCST dataset, there are a total of 26,975 records for students showing a GPA of 2.5 or greater. Of the remaining records, 10,189 showed a GPA of less than 2.5 and 6,422 had no GPA information available. Of the students with a GPA of at least 2.5, 10,454 reported family income of less than \$36,000 annually, and 16,521 were in the higher income category.

Throughout this report, the term “university eligible” will be used to refer to the DCST students who had a GPA of 2.5 or higher.

## **Profile of the Dataset**

### **Demographics**

The demographic makeup of the DCST students is shown in Table 1 along with data on Arizona’s 16- and 17-year-olds from the American Community Survey from the U.S. Census Bureau. This table demonstrates that the DCST students differ in many ways from those from the state as a whole. Students in the DCST program are more likely to be Latino and less likely to be in the top family-income brackets.

**Table 1: Demographics of DCST students**

	Statewide 16-17 year olds*	Valid Response	Highly Achieving	University Eligible	GPA <2.5
<b>Total</b>		<b>43,586</b>	<b>1,802</b>	<b>26,975</b>	<b>10,189</b>
<b>Gender</b>					
Male	51%	48%	45%	45%	56%
Female	49%	50%	54%	54%	42%
No Response / Missing	0%	2%	1%	2%	2%
<b>Race / Ethnicity</b>					
White	45%	34%	63%	41%	24%
Hispanic/Latino	40%	45%	12%	38%	55%
Black/African American	5%	5%	1%	4%	5%
American Indian/Alaskan Native	6%	3%	0%	2%	4%
Asian	2%	3%	13%	4%	1%
Native Hawaiian/Other Pacific Islander	0%	0%	0%	0%	0%
Two or more races	3%	4%	5%	5%	4%
Prefer not to respond	0%	6%	5%	5%	7%
<b>Income</b>					
<\$24k	20%	21%	5%	16%	28%
\$24k-\$36k	13%	24%	10%	22%	29%
\$36k-\$50k	13%	17%	17%	18%	16%
\$50k-\$60k	8%	13%	19%	14%	11%
\$60k-\$80k	14%	9%	13%	10%	7%
\$80k-\$100k	10%	6%	10%	7%	4%
>\$100k	22%	10%	27%	12%	6%
* From 2008-2012 American Community Survey, U.S. Census Bureau					

### Income and Ethnicity

Income is highly correlated with race and ethnicity in this data, as it is in the state as a whole. As shown in Table 2, Latino, African-American, and American Indian students in the DCST program are weighted heavily towards the lower-income brackets, while the vast majority of the students reporting top incomes for their families were white. Income and ethnicity are so highly correlated that in many respects they may be considered interchangeable and their effects so tightly intertwined that it is difficult to separate the effects of race and ethnicity from the effects of poverty.

Throughout this report, the statistical associations, or absence of associations, that are reported between lower and higher income students also apply to Latino and non-Latino students. Outcomes in Table 3 through Table 13 are shown as percentages of low and high income students, and similar percentages will apply to Latino and non-Latino students.

Tables with students counts and statistical significances for income categories and Latino status are included in Appendix A – Tables with Counts and Statistical Tests.

**Table 2: Income and Ethnicity – DCST Valid Responses**

	White	Hispanic / Latino	Black / African American	American Indian / Alaskan Native	Asian	Native Hawaiian / Other Pacific Islander	Two or more races	Prefer not to respond	Total
<\$24k	8%	31%	24%	26%	21%	13%	10%	26%	21%
\$24k-\$36k	19%	28%	26%	28%	20%	22%	26%	24%	24%
\$36k-\$50k	19%	15%	17%	20%	16%	14%	22%	17%	17%
\$50k-60k	17%	9%	12%	10%	12%	14%	17%	11%	13%
\$60k-80k	12%	7%	8%	7%	10%	11%	9%	8%	9%
\$80k-\$100k	10%	4%	6%	4%	6%	11%	7%	6%	6%
>100k	16%	5%	8%	4%	14%	14%	9%	9%	10%
<b>Total</b>	100%	100%	100%	100%	100%	100%	100%	100%	100%

### Academic Aspirations and Expectations

Prior to taking the academic portion of the test, students are asked to complete the ACT Student Profile Section, which asks a wide variety of questions about their background, including high school activities and aspirations for the future. Students are asked “What is the highest level of education you expect to complete?,” and given the following choices for answers:

- Business/technical or certificate program
- Associate’s degree (2 years)
- Bachelor’s degree (4 years)
- One or 2 years of graduate study (MA, MBA, etc.)
- Doctorate or professional degree (PhD, MD, JD, etc.)
- Other

Note that there is no option of selecting ‘No further education’ in the list, and the student is forced to make a choice for completion of some sort of post-secondary education. This is not surprising, since the ACT is generally administered to students who are planning to go to college after high school. However, the structure of this question causes difficulties when it is posed to a general population since many, if not most, of the DCST students do not intend to attend college. The lack of an option to not pursue a degree likely leads to an artificially high number of students reporting that they intend to pursue higher education. With the large stipulation that the question as presented in the ACT is not structured to provide an accurate assessment of true educational aspirations and intent, it still is clear that the DCST students see a college degree as a valuable and desirable achievement.

### Educational Attainment

An overwhelming majority (86%) of the DCST respondents said they expect to complete a bachelor’s degree or better (Table 3). Even the students with poor academic records showed

a strong preference for higher education. Of the students with a GPA less than 2.5, or a C+ average, 72% marked that they expect to get at least a bachelor’s degree and 17% selected “Doctorate or professional degree.” By comparison, the current Census figures for Arizona show a bachelor’s-or-better rate of 26.9% for the population age 25 and older, with less than 10% holding a graduate degree. The extent to which these exceptionally high numbers are due to an inadequately structured question is unknown, but the results may indicate that even these students who are unlikely to proceed to university recognize the value and importance of higher education.

There was no statistically significant difference between the highly achieving high-income and low-income students in terms of their expectation to earn at least a bachelor’s degree.<sup>2</sup> In fact, 99% of the highly achieving students in both income categories believed they would earn at least a bachelor’s degree, and 51% of each group expected to earn a doctorate or professional degree such as law or medicine. However, the lower-income students were statistically more likely to mark a bachelor’s degree as their highest educational expectation (23%) than their higher income peers (17%). This pattern of highly achieving, low- and high-income students having statistically identical outcomes, while the lower-achieving but still university-eligible students showing significant differences, will persist for many other comparisons in this report. For example, the higher-income students were more likely to envision a one- or two-year graduate degree (31%) than their low-income peers (25%).

**Table 3: Educational Aspirations**

	Highly Achieving		University Eligible		GPA <2.5		Valid Response
	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	
Business/ Technical or certificate program	0%	0%	3%	1%	7%	6%	4%
Associates degree	1%	0%	7%	4%	18%	13%	9%
Total Sub-Baccalaureate	1%	0%	10%	5%	25%	19%	12%
Bachelor’s degree	23%	17%	42%	40%	44%	47%	42%
1 or 2 years of graduate study (MA, MBA, etc.)	25%	31%	15%	20%	9%	12%	15%
Doctorate of professional degree	51%	51%	31%	33%	16%	17%	27%
Total Bachelor’s or Better	99%	99%	87%	93%	70%	76%	84%
Other	0%	1%	3%	2%	6%	5%	3%
Total	100%	100%	100%	100%	100%	100%	100%

Although the high- and low-income highly achieving students showed very similar educational aspirations, the university-eligible group displayed many statistically significant differences between high- and low-income groups. This is a pattern that will hold true for many of the analyses in this report: High- and low-income highly achieving students look very much the same, but differences between the income categories emerge when looking at the university-eligible group.

### Live with Family or Away from Home

A large majority of students (75%) anticipated living away from home when they go to college, with the percentage increasing as students increased in academic performance (Table 4). Across all three academic categories, students from higher-income families were statistically more likely to envision themselves living away from family. However, highly achieving Latino students were just as likely to say they would be living away from home as non-Latino high achievers.

As with all other data taken from the ACT Student Profile, these figures should be interpreted cautiously because the questions assume that all respondents will continue onto college when that is not the reality. However, the assumption of continuing onto a college education is probably much more valid in the highly achieving group given their demonstrated academic success.

	Highly Achieving		University Eligible		GPA <2.5		Valid Response
	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	
Away from home	85%	90%	73%	80%	72%	76%	75%
Parents or Relatives	14%	8%	25%	18%	25%	22%	22%
Missing	1%	1%	2%	2%	3%	3%	2%

### Full- or Part-time College

Students are also asked whether they expect to attend college on a full- or part-time basis. Most reported a desire for full-time enrollment. Students in the highly achieving and university eligible categories were more likely to plan for full-time enrollment, including nearly all of the highly achieving students (Table 5). Those from higher-income families were statistically more likely to see themselves as full-time students after high school. Highly achieving Latino students were just as likely to see themselves as future full-time college students as their non-Latino peers. Although a large majority (81%) of university eligible Latino students selected the full time student option on this question, the percentage is significantly lower than the 87% selected by the non-Latino university eligible students.

	Highly Achieving		University Eligible		GPA <2.5		Valid Response
	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	
Full-time student	97%	99%	79%	88%	57%	63%	76%
Part-time student	3%	1%	20%	12%	42%	35%	23%
Missing	0%	0%	1%	1%	2%	1%	1%

### ACT Scores Sent to In-state or Out-of-state Colleges

Students taking the ACT may opt to send their scores to as many as four colleges at no charge. This gives an indication of the ambition of students to attend in-state or out-of-state schools. Nearly two-thirds of the students opted to not send their scores to any school (Table 6). As noted, many students in the DCST program probably have no intention of immediately proceeding onto college, which would explain much of the non-response to this item. However, even among the highly achieving students, nearly 62% failed to select at least one college to receive their ACT scores. As seen in the next section, 89% of the highly achieving students actually enrolled in college. There are several possible explanations for this. For instance, students taking the test as high school juniors may have not thought about college enough to select schools in which they might be interested.

Of those who did elect to send their ACT scores to colleges, highly achieving students in high- and low-income families were equally likely to send their scores to in-state schools, out-of-state schools, or a mixture of both. However, in the university-eligible cohort, those in the higher-income bracket were statistically more likely to choose to send their scores either to only out-of state schools, or a mix of in and out-of-state schools. Latino students in both the highly achieving and university eligible categories were more likely to fail to choose a school to have their scores sent to than non-Latino students.

**Table 6: ACT Scores sent to In-State and Out-of-State School**

	Highly Achieving		University Eligible		GPA < 2.5		Valid Response
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k	
In-State Only	9%	8%	18%	14%	20%	18%	16%
In + Out State	26%	25%	19%	21%	13%	17%	18%
Out-of-State Only	6%	5%	2%	3%	2%	2%	2%
No Choice	59%	62%	60%	62%	66%	63%	64%

### College Outcomes

The National Student Clearinghouse receives matriculation and graduation data from over 3,500 post-secondary educational institutions representing over 98% of students in public and private colleges. This service provides the data needed to track the DCST students after they leave high school. Once the results from the ACT were analyzed and sorted by academic achievement, 26,958 names and birthdates of students with grade point averages of 2.5 or greater were submitted to the Clearinghouse. Information was tallied regarding which schools the students had matriculated to, along with other information about their enrollment status and eventual graduation. This data was linked to the existing ACT data to track the post-high school progress of the DCST students.

## College Attendance

**Table 7: Responses from National Student Clearinghouse**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
<b>Matriculated</b>	88%	89%	65%	74%
<b>Not matriculated</b>	12%	11%	35%	26%

Students for which the Clearinghouse has data can be definitively stated as having enrolled in college. There may also be a small number of students who have attended colleges that do not report to the Clearinghouse.<sup>3</sup>

Nearly 90% of the highly achieving students in both income categories appear to have enrolled in some form of higher education. There is no

statistically significant difference in the enrollment rates of highly achieving low-income and higher-income students. There is a significant difference in the enrollment rates of low-income and higher-income university-eligible students, with 74% of the higher-income students attending college of some sort and 65% of the low-income students attending (Table 7).

## Full-time Enrollment

**Table 8: First-semester college enrollment full or part-time status**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
<b>Full Time</b>	63%	62%	50%	51%
<b>Part Time</b>	35%	37%	47%	47%
<b>Other</b>	2%	1%	3%	2%

About half of the university-eligible students who enrolled in college were listed as full-time students, while their highly achieving peers enrolled full-time over 60% of the time. Low-income highly achieving students were statistically as likely to enroll as full-time students as those from higher-income families (Table 8). The low-income university-eligible students were also just as likely to enroll full-time as those from higher-income families.

## In-state and Out-of-state Enrollments

**Table 9: In- and out-of-state matriculations**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
<b>Arizona</b>	84%	81%	92%	89%
<b>Out of State</b>	16%	19%	8%	11%

Across all categories, only a small minority of the students (11%) that continued onto higher education enrolled in out-of-state schools (Table 9). As would be expected, the highly achieving students attended out-of-state schools at a rate nearly double that of the university-eligible students. Once again, the highly achieving students from higher- and

lower-income families were statistically the same when it came to their out-of-state enrollment rates, but the higher-income university-eligible students were more likely to attend an out-of-state school than their low-income peers. Note that although there is the same 3 percentage point difference in high- versus low-income out-of-state enrollment for both the highly achieving and university-eligible groups, the university-eligible difference is significant, while the same 3 point difference is not significant for the highly achieving group.

This is because the university-eligible group is much larger at 18,919 students, where a 3 point difference emerges as statistically significant. This is not a significant difference in the much smaller group of 1,608 highly achieving students.

#### 4 year and 2 year College Enrollment

**Table 10: 4- and 2-year school matriculations**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
<b>Not 4-year School</b>	29%	31%	64%	56%
<b>4 year school</b>	71%	69%	36%	44%

The highly achieving students were much more likely to enroll in a four-year college or university as opposed to a community college or trade school than the university-eligible students (Table 10). Enrollment in four-year colleges was not significantly higher for higher-income students than for lower-income

students, with about 70% of the students from each income category that continued their education enrolling in a four-year institution. Among the university-eligible students, those from higher-income families were more likely to go to a four-year school and less likely to opt for a less than four-year institution.

#### In State Preferences

**Table 11: In-State Preferences**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
ASU	18.9%	18.4%	6.9%	8.9%
UA	21.2%	21.3%	7.2%	10.6%
NAU	6.8%	4.5%	2.7%	4.3%
<b>Subtotal State Universities</b>	<b>47.0%</b>	<b>44.1%</b>	<b>16.8%</b>	<b>23.7%</b>
In-State Private Post-Secondary	1.1%	.7%	3.5%	2.2%
In-State Community College	25.4%	27.4%	39.5%	39.9%
<b>Sub Total In-State</b>	<b>73.5%</b>	<b>72.2%</b>	<b>59.8%</b>	<b>65.7%</b>
Out-of State	14.4%	17.3%	4.8%	7.9%
No College	12.1%	10.5%	35.4%	26.3%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Highly achieving students, from high and low income families, and those of Latino and non-Latino heritage all attended one of Arizona's three state run universities in large numbers (Table 11). Over 40% of highly achieving students in each of the four sub-groups (high income, low income, Latino and non-Latino), enrolled in either Arizona State University, the University of Arizona, or Northern

Arizona University. There was no statistical difference in enrollment patterns across these groups.

The university eligible students also had significant enrollments in the state universities, but the largest post-high school destination for this group was in-state community colleges. University eligible low income and Latino students attended the state's universities at significantly lower rates than their high income and non-Latino peers. Interestingly, although the community college rate of high and low income university eligible students is nearly identical, university eligible Latinos attend community college at a significantly higher rate (41.8%) than their non-Latino peers (38.4%).

## Enrollment in Competitive Colleges

**Table 12: Competitive College Enrollments**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
<b>In-State</b>	73.5%	72.2%	59.8%	65.7%
Competitive Out-of-State Schools	9.5%	9.0%	.8%	1.6%
Other Out-of-State Schools	4.9%	8.3%	4.0%	6.3%
<b>Sub Total Out-of State</b>	<b>14.4%</b>	<b>17.3%</b>	<b>4.8%</b>	<b>7.9%</b>
No College	12.1%	10.5%	35.4%	26.3%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

The highly achieving students in the DCST have ACT scores and grade point averages that place them in contention for acceptance into the most selective colleges.<sup>4</sup> In the highly achieving group, low income, high income, Latino, and non-Latino students enrolled in these schools at statistically similar rates

of around 9%(Table 12).

As would be expected, students in the lower performing university eligible group entered competitive schools at a much lower rate. Still some of these students were accepted to selective schools and, as with many other outcomes, the higher income and non-Latino students fared better than their low income and Latino counterparts.

## College Graduation Rates

**Table 13: Graduation Rates**

	Highly Achieving		University Eligible	
	Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k
Bachelor's Degree	52%	51%	16%	21%
Non-Baccalaureate Degree	5%	3%	8%	7%
Attended College, No Degree	31%	37%	49%	51%
<b>Sub Total Attended College</b>	<b>88%</b>	<b>92%</b>	<b>74%</b>	<b>79%</b>
No College	12%	8%	26%	21%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Students who took the test as juniors in 2008, 2009, or 2010 have been out of high school long enough to have earned a bachelor's degree. The Clearinghouse data indicates which of these students have received post-secondary degrees including technical certifications, associate's degrees, and bachelor's

degrees. Over half of the highly achieving students in this group have earned a bachelor's degree (Table 13). Once again, there is no difference in the bachelor's rate between students from low- and higher-income families. Low-income highly achieving students were also just as likely to earn non-baccalaureate degrees as higher-income students.

In the university-eligible group, students from higher-income families were statistically more likely to earn a bachelor's degree, but the percentages earning non-baccalaureate degrees were not statistically significant.

## Results by District

Results by districts are summarized in Table 14, showing the number of students tested by the DCST program, the number of valid responses received, and numbers on the highly

achieving and university-eligible students by high- and low-income categories. The table also includes an estimate of the total number of 11<sup>th</sup> grade students in each district for the years that the district participated in the program.

Overall participation in the DCST program is around 77%, with considerable variation among the districts. The state's largest school district, Mesa Unified had 57% of its 11<sup>th</sup> graders tested, while neighboring Chandler Unified tested 94% of its 11<sup>th</sup> graders. Driven largely by non-response to the question about family income, the number of valid responses that were used for analysis was considerably lower than the total test-takers. The valid responses in this dataset represent about 41% of the total number of 11<sup>th</sup> graders estimated in the districts by the National Center for Education Statistics. Marana Unified, a district just north of Tucson, administered the ACT test to 72% of its 11<sup>th</sup> graders, but these scores were removed from the analysis because none of the students provided an answer to the question about income.

**Table 14: Results by District**

District	Total Est. 11th Graders*	Total Tested	Valid Responses	Highly Achieving				University Eligible			
				High Income		Low Income		High Income		Low Income	
				n	Pct.	n	Pct.	n	Pct.	n	Pct.
Summit Public Charter High School	664	52	27	-	0%	-	0%	1	4%	5	19%
Arizona Agribusiness & Equine Center Inc	185	233	165	3	2%	1	1%	80	48%	54	33%
Chandler Unified District†	8,216	7,689	5,792	457	8%	53	1%	3,272	56%	765	13%
Flagstaff Unified District†	4,218	3,327	2,271	127	6%	16	1%	1,093	48%	454	20%
Florence Unified School District†	1,359	1,435	1,210	19	2%	5	0%	461	38%	291	24%
Globe Unified District†	580	473	251	2	1%	1	0%	112	45%	66	26%
Higley Unified School District†	1,303	1,920	852	52	6%	5	1%	511	60%	111	13%
Lake Havasu Unified District†	522	371	151	2	1%	4	3%	59	39%	49	32%
Marana Unified District*	1,921	1,375	-	-	-	-	-				
Mesa Unified District‡	9,917	5,611	1,732	138	8%	33	2%	822	47%	492	28%
Peoria Unified School District	15,243	13,036	7,451	227	3%	43	1%	3,519	47%	1,419	19%
Phoenix Union High School District†	29,473	22,037	9,637	60	1%	27	0%	1,431	15%	3,158	33%
Round Valley Unified District†	487	409	253	7	3%	1	0%	108	43%	64	25%
Sunnyside Unified District†	2,945	1,925	860	1	0%	2	0%	164	19%	341	40%
Tucson Unified District†	15,354	10,265	5,507	257	5%	50	1%	2,160	39%	1,457	26%
Vail Unified District†	2,903	2,569	1,992	117	6%	9	0%	1,144	57%	263	13%
Window Rock Unified District	397	280	132	-	0%	-	0%	28	21%	27	20%
Winslow Unified District†	178	145	102	3	3%	-	0%	31	30%	30	29%
Yuma Union High School District†	10,617	9,008	5,190	66	1%	14	0%	1,525	29%	1,406	27%
Other / Not Identified		43	11	-	0%	-	0%	-	0%	2	18%
<b>Total</b>	<b>106,482</b>	<b>82,203</b>	<b>43,586</b>	<b>1,538</b>	<b>4%</b>	<b>264</b>	<b>1%</b>	<b>16,521</b>	<b>38%</b>	<b>10,454</b>	<b>24%</b>

\* Number of 11th graders for the years each district, as estimated by the National Center for Education Statistics.

\*\* None of the Marana Unified District students responded to the question about family income.

† DCST participant district 2008-2012

‡ DCST participant district 2008-2009

## Conclusions

The highly achieving low-income students in the DCST data are in most ways statistically indistinguishable from their higher-income peers. These students with very high performance in high school, at least 90<sup>th</sup> percentile on the ACT and a 3.5 GPA, were nearly identical in both expectations for their post-high school academic lives and in their actual outcomes in college, regardless of their family income. Statistically significant differences between the two income groups were seen among the highly achieving students in regards to some areas of their expectations for the future, with low-income students being slightly more likely to anticipate living at home and attending college part time. Although data is not available on the post-high school living arrangements of these students, we can say that by the time they got to college, the low-income high achievers were just as likely to be enrolled full-time as their peers from higher-income families.

The low-income highly achieving students were just as likely to attend college as the higher-income students and were also just as likely to attend an out-of-state school and a four-year institution. There was also no statistically significant difference in the college graduation rates between these two groups.

Differing expectations and outcomes by income level become apparent when the analysis is expanded to include students all with a GPA of 2.5 or higher. Low-income students in this group are statistically less likely to send their ACT scores to out-of-state colleges, less likely to enroll in college, and when they do enroll they are more likely to go to a two-year school such as a community college or trade school rather than a four-year university. Additionally, they are more likely to attend an in-state school and less likely to earn a bachelor's degree than higher income peers.

In summary, highly achieving low-income students from the DCST program have educational outcomes that are identical to their higher-income peers, perhaps because of their own ambitions and intelligence, enhanced by existing support systems. The same cannot be said of the lower-achieving but still university-eligible students. These low-income students, who might be characterized as “bright-but-not-brilliant,” are not making the leap to higher education that could advance them up the economic ladder and out of poverty at the same rate as their higher-income peers. The reasons for this disparity, and their potential remedies, are ripe for further investigation.

## Appendix A – Tables with Counts and Statistical Tests

The following tables correspond to the tables in the body of the report and include the counts used to calculate percentages and flags for statistical significance in the two-sided test of equality for column proportions, as calculated by SPSS version 21.

Proportions in sub-table (e.g. “University Eligible”) rows are statistically different when they display differing subscripts. For example, Table 1-A shows a statistically significant difference in the proportion of students who identify as “Hispanic / Latino” between the “Highly Achieving” and “Not Highly Achieving” categories in the “High Achievement” sub-table, since the count of Highly Achieving Hispanic / Latinos is shown as 225<sub>a</sub>, while Not Highly Achieving Hispanic Latinos is 19,212<sub>b</sub>.

Similarly, rows with the same subscripts show no statistically significant difference, as seen in Native Hawaiian / Other Pacific Islanders with 3<sub>a</sub> listed as “Highly Achieving” and 149<sub>a</sub> as “Not Highly Achieving”

Tests are adjusted for all pairwise comparisons within a row of each sub-table using the Bonferroni correction.

Data marked with a <sup>1</sup> superscript are not suitable for comparison with this test.

Table 1-A: Demographics of DCST Students						
		Total Valid Responses	High Achievement		University Eligibility	
			Highly Achieving	Not Highly Achieving	Univ. Eligible	GPA < 2.5
Gender	<b>Total</b>	<b>43,586</b>	<b>1,802</b>	<b>41,784</b>	<b>26,975</b>	<b>10,189</b>
	Male	21,045 <sup>1</sup>	815 <sub>a</sub>	20,230 <sub>b</sub>	12,047 <sub>a</sub>	5,739 <sub>b</sub>
	Female	21,722 <sup>1</sup>	970 <sub>a</sub>	20,752 <sub>b</sub>	14,523 <sub>a</sub>	4,244 <sub>b</sub>
	No Response / Missing	819 <sup>1</sup>	17 <sub>a</sub>	802 <sub>b</sub>	405 <sub>a</sub>	206 <sub>b</sub>
Race/Ethnicity	White	14,964 <sup>1</sup>	1,132 <sub>a</sub>	13,832 <sub>b</sub>	11,180 <sub>a</sub>	2,424 <sub>b</sub>
	Hispanic/Latino	19,437 <sup>1</sup>	225 <sub>a</sub>	19,212 <sub>b</sub>	10,265 <sub>a</sub>	5,564 <sub>b</sub>
	Black/African American	1,999 <sup>1</sup>	21 <sub>a</sub>	1,978 <sub>b</sub>	1,084 <sub>a</sub>	548 <sub>b</sub>
	American Indian/Alaskan Native	1,121 <sup>1</sup>	4 <sub>a</sub>	1,117 <sub>b</sub>	568 <sub>a</sub>	420 <sub>b</sub>
	Asian	1,411 <sup>1</sup>	232 <sub>a</sub>	1,179 <sub>b</sub>	1,142 <sub>a</sub>	109 <sub>b</sub>
	Native Hawaiian/Other Pacific Islander	152 <sup>1</sup>	3 <sub>a</sub>	149 <sub>a</sub>	92 <sub>a</sub>	38 <sub>a</sub>
	Two or more races	1,945 <sup>1</sup>	98 <sub>a</sub>	1,847 <sub>b</sub>	1,320 <sub>a</sub>	416 <sub>b</sub>
	Prefer not to respond	2,557 <sup>1</sup>	87 <sub>a</sub>	2,470 <sub>a</sub>	1,324 <sub>a</sub>	670 <sub>b</sub>
Please estimate the approximate total combined income of your parents before taxes this year.	<\$24k	9,249 <sup>1</sup>	82 <sub>a</sub>	9,167 <sub>b</sub>	4,430 <sub>a</sub>	2,829 <sub>b</sub>
	\$24k-\$36k	10,631 <sup>1</sup>	182 <sub>a</sub>	10,449 <sub>b</sub>	6,024 <sub>a</sub>	2,942 <sub>b</sub>
	\$36k-\$50k	7,499 <sup>1</sup>	298 <sub>a</sub>	7,201 <sub>a</sub>	4,891 <sub>a</sub>	1,654 <sub>b</sub>
	\$50k-\$60k	5,459 <sup>1</sup>	340 <sub>a</sub>	5,119 <sub>b</sub>	3,751 <sub>a</sub>	1,071 <sub>b</sub>
	\$60k-\$80k	3,8030 <sup>1</sup>	232 <sub>a</sub>	3,598 <sub>b</sub>	2,686 <sub>a</sub>	680 <sub>b</sub>
	\$80k-\$100k	2,747 <sup>1</sup>	186 <sub>a</sub>	2,561 <sub>b</sub>	2,017 <sub>a</sub>	443 <sub>b</sub>
	>\$100k	4,171 <sup>1</sup>	482 <sub>a</sub>	3,689 <sub>b</sub>	3,176 <sub>a</sub>	570 <sub>b</sub>

Table 2-A: Income and Ethnicity – DCST Valid Responses										
		Race / Ethnicity (Recode)								
		White	Hispanic / Latino	Black / African American	American Indian / Alaskan Native	Asian	Native Hawaiian / Other Pacific Islander	Two or more races	Prefer not to respond	Total
Please estimate the approximate total combined income of your parents before taxes this year. (Recode)	<\$24k	1,185 <sub>a</sub>	6,121 <sub>b</sub>	472 <sub>c,d,f</sub>	291 <sub>c,f</sub>	293 <sub>c,d</sub>	20 <sub>a,d,e</sub>	201 <sub>e</sub>	666 <sub>f</sub>	9,249
	\$24k-\$36k	2,807 <sub>a</sub>	5,528 <sub>b</sub>	527 <sub>b,c</sub>	315 <sub>b,c</sub>	288 <sub>a,d</sub>	33 <sub>a,b,d</sub>	513 <sub>b,e</sub>	620 <sub>c,d,e</sub>	10,631
	\$36k-\$50k	2,822 <sub>a</sub>	3,001 <sub>b</sub>	343 <sub>a,b</sub>	228 <sub>a,c</sub>	225 <sub>a,b</sub>	22 <sub>a,b,c</sub>	435 <sub>c</sub>	423 <sub>a,b</sub>	7,499
	\$50k-\$60k	2,533 <sub>a</sub>	1,787 <sub>b</sub>	230 <sub>c</sub>	111 <sub>b,c</sub>	174 <sub>c</sub>	22 <sub>a,b,c</sub>	324 <sub>a</sub>	278 <sub>b,c</sub>	5,459
	\$60k-\$80k	1,764 <sub>a</sub>	1,306 <sub>b</sub>	157 <sub>b,c,d</sub>	84 <sub>b,c,d</sub>	140 <sub>a,c,d</sub>	17 <sub>a,b,d</sub>	169 <sub>d</sub>	193 <sub>b,d,e</sub>	3,830
	\$80k-\$100k	1,431 <sub>a</sub>	771 <sub>b</sub>	110 <sub>c,d</sub>	49 <sub>b,c</sub>	90 <sub>c,d</sub>	16 <sub>a,d,e,f</sub>	135 <sub>c,e</sub>	145 <sub>c,f</sub>	2,747
	>\$100k	2,422 <sub>a</sub>	923 <sub>b</sub>	160 <sub>c</sub>	43 <sub>b</sub>	201 <sub>a</sub>	22 <sub>a,c</sub>	168 <sub>c</sub>	232 <sub>c</sub>	4,171
	<b>Total</b>	<b>14,964</b>	<b>19,437</b>	<b>1,999</b>	<b>1,121</b>	<b>1,411</b>	<b>152</b>	<b>1,945</b>	<b>2,557</b>	<b>43,586</b>

Tables 3-A : Academic Aspirations														
		Highly Achieving		University Eligible		GPA <2.5		Highly Achieving		University Eligible		GPA <2.5		Total Valid Responses
		Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	LaOti no	Not Latino	Latino	Not Latino	Latino	Not Latino	
		What is the highest level of education you expect to complete?	Business/Technical or certificate program	0	2	278	231	403	254	2	0	227	282	
Associates degree	2		2	740	648	995	568	1	3	638	750	904	659	3,711
Total Sub-Baccalaureate	2 <sub>a</sub>		4 <sub>a</sub>	1,018 <sub>a</sub>	879 <sub>b</sub>	1,398 <sub>a</sub>	822 <sub>b</sub>	3 <sub>a</sub>	3 <sub>b</sub>	865 <sub>a</sub>	1,032 <sub>b</sub>	1,269 <sub>a</sub>	951 <sub>b</sub>	5,227 <sup>2</sup>
Bachelor's degree	59		263	4,299	6,502	2,473	2,016	37	285	4,170	6,631	2,421	2,068	18,027
1 or 2 years of graduate study (MA, MBA, etc.)	65		478	1,543	3,313	512	513	60	483	1,620	3,236	552	473	6,625
Doctorate of professional degree	133		782	3,156	5,336	914	750	124	791	3,260	5,232	919	745	11,481
Total Bachelor's or Better	257 <sub>a</sub>		1,523 <sub>a</sub>	8,998 <sub>a</sub>	15,151 <sub>b</sub>	3,899 <sub>a</sub>	3,279 <sub>b</sub>	221 <sub>a</sub>	1,559 <sub>a</sub>	9,050 <sub>a</sub>	15,099 <sub>b</sub>	3,892 <sub>a</sub>	3,286 <sub>a</sub>	36,133 <sup>2</sup>
Other	1 <sub>a</sub>		8 <sub>a</sub>	287 <sub>a</sub>	328 <sub>b</sub>	313 <sub>a</sub>	226 <sub>a</sub>	0 <sup>1</sup>	9 <sub>a</sub>	221 <sub>a</sub>	394 <sub>a</sub>	253 <sub>a</sub>	286 <sub>b</sub>	1,479 <sup>2</sup>
<b>Total</b>	<b>260</b>	<b>1,535</b>	<b>10,303</b>	<b>16,358</b>	<b>5,610</b>	<b>4,327</b>	<b>224</b>	<b>1,571</b>	<b>10,136</b>	<b>16,525</b>	<b>5,414</b>	<b>4,523</b>	<b>42,839</b>	

Tables 4-A through 6-A: Academic Aspirations

		Highly Achieving		University Eligible		GPA <2.5		Highly Achieving		University Eligible		GPA <2.5		Total Valid Responses
		Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Latino	Not Latino	Latino	Not Latino	Latino	Not Latino	
Where planning to live in college	Away from home	224 <sub>a</sub>	1,387 <sub>b</sub>	7,646 <sub>a</sub>	13,187 <sub>b</sub>	4,134 <sub>a</sub>	3,356 <sub>b</sub>	208 <sub>a</sub>	1,403 <sub>a</sub>	7,573 <sub>a</sub>	13,260 <sub>b</sub>	3,895 <sub>a</sub>	3,595 <sub>b</sub>	32,832 <sup>c</sup>
	Parents or Relatives	37 <sub>a</sub>	129 <sub>b</sub>	2,585 <sub>a</sub>	3,002 <sub>b</sub>	1,468 <sub>a</sub>	950 <sub>b</sub>	15 <sub>a</sub>	151 <sub>a</sub>	2,482 <sub>a</sub>	3,105 <sub>b</sub>	1,527 <sub>a</sub>	891 <sub>b</sub>	9,734 <sup>d</sup>
	Missing	3 <sub>a</sub>	22 <sub>a</sub>	223 <sub>a</sub>	332 <sub>a</sub>	169 <sub>a</sub>	112 <sub>a</sub>	2 <sub>a</sub>	23 <sub>a</sub>	210 <sub>a</sub>	345 <sub>a</sub>	142 <sub>a</sub>	139 <sub>a</sub>	1,020 <sup>e</sup>
	Total	264	1,538	10,454	16,521	5,771	4,418	225	1,577	10,265	16,710	5,564	4,625	43,586
Part or Full-time enrollment plan	Full-time student	256 <sub>a</sub>	1,522 <sub>b</sub>	8,228 <sub>a</sub>	14,523 <sub>b</sub>	3,271 <sub>a</sub>	2,802 <sub>b</sub>	220 <sub>a</sub>	1,558 <sub>a</sub>	8,273 <sub>a</sub>	14,478 <sub>b</sub>	3,228 <sub>a</sub>	2,845 <sub>b</sub>	33,081 <sup>f</sup>
	Part-time student	7 <sub>a</sub>	15 <sub>b</sub>	2,141 <sub>a</sub>	1,905 <sub>b</sub>	2,400 <sub>a</sub>	1,565 <sub>b</sub>	5 <sub>a</sub>	17 <sub>a</sub>	1,923 <sub>a</sub>	2,123 <sub>b</sub>	2,270 <sub>a</sub>	1,695 <sub>b</sub>	10,074 <sup>d</sup>
	Missing	1 <sub>a</sub>	1 <sub>a</sub>	85 <sub>a</sub>	93 <sub>b</sub>	100 <sub>a</sub>	51 <sub>b</sub>	0 <sup>g</sup>	2 <sub>a</sub>	69 <sub>a</sub>	109 <sub>a</sub>	66 <sub>a</sub>	85 <sub>b</sub>	431 <sup>h</sup>
	Total	264	1,538	10,454	16,521	5,771	4,418	225	1,577	10,265	16,710	5,564	4,625	43,586
Coding of College Choices	In-State	25 <sub>a</sub>	121 <sub>a</sub>	1,917 <sub>a</sub>	2,286 <sub>b</sub>	1,160 <sub>a</sub>	800 <sub>b</sub>	9 <sub>a</sub>	137 <sub>b</sub>	1,690 <sub>a</sub>	2,513 <sub>b</sub>	1,078 <sub>a</sub>	882 <sub>a</sub>	7,141 <sup>i</sup>
	In + Out State	68 <sub>a</sub>	381 <sub>a</sub>	1,998 <sub>a</sub>	3,492 <sub>b</sub>	741 <sub>a</sub>	733 <sub>b</sub>	46 <sub>a</sub>	403 <sub>a</sub>	1,761 <sub>a</sub>	3,729 <sub>b</sub>	692 <sub>a</sub>	782 <sub>b</sub>	7,641 <sup>j</sup>
	Out-of-State	15 <sub>a</sub>	79 <sub>a</sub>	255 <sub>a</sub>	487 <sub>b</sub>	88 <sub>a</sub>	92 <sub>b</sub>	9 <sub>a</sub>	85 <sub>a</sub>	188 <sub>a</sub>	554 <sub>b</sub>	59 <sub>a</sub>	121 <sub>b</sub>	1,012 <sup>k</sup>
	No Choice	156 <sub>a</sub>	957 <sub>a</sub>	6,284 <sub>a</sub>	10,256 <sub>b</sub>	3,782 <sub>a</sub>	2,793 <sub>b</sub>	161 <sub>a</sub>	952 <sub>b</sub>	6,626 <sub>a</sub>	9,914 <sub>b</sub>	3,735 <sub>a</sub>	2,840 <sub>b</sub>	27,792 <sup>l</sup>
Total	264	1,538	10,454	16,521	5,771	4,418	225	1,577	10,265	16,710	5,564	4,625	43,586	

Tables 7-A through 10-A: College Outcomes

		Highly Achieving		University Eligible		Highly Achieving		University Eligible	
		Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Latino	Not Latino	Latino	Not Latino
Clearinghouse Has Data	Yes	232 <sub>a</sub>	1,376 <sub>a</sub>	6,751 <sub>a</sub>	12,168 <sub>b</sub>	206 <sub>a</sub>	1,402 <sub>a</sub>	6,869 <sub>a</sub>	12,050 <sub>b</sub>
	No	32 <sub>a</sub>	162 <sub>a</sub>	3,696 <sub>a</sub>	4,343 <sub>b</sub>	19 <sub>a</sub>	175 <sub>a</sub>	3,390 <sub>a</sub>	4,649 <sub>b</sub>
	Total	264	1,538	10,447	16,511	225	1,577	10,259	16,699
1st Semester Enrollment Status	Other	5 <sub>a</sub>	17 <sub>a</sub>	186 <sub>a</sub>	246 <sub>b</sub>	1 <sub>a</sub>	21 <sub>a</sub>	159 <sub>a</sub>	273 <sub>a</sub>
	Part Time	74 <sub>a</sub>	473 <sub>a</sub>	2,993 <sub>a</sub>	5,318 <sub>a</sub>	75 <sub>a</sub>	472 <sub>a</sub>	3,075 <sub>a</sub>	5,236 <sub>a</sub>
	Full time	133 <sub>a</sub>	783 <sub>a</sub>	3,163 <sub>a</sub>	5,678 <sub>a</sub>	119 <sub>a</sub>	797 <sub>a</sub>	3,273 <sub>a</sub>	5,568 <sub>a</sub>
	Total	212	1,273	6,342	11,242	195	1,290	6,507	11,077
1st College In/Out State	Arizona	194 <sub>a</sub>	1,110 <sub>a</sub>	6,218 <sub>a</sub>	10,836 <sub>b</sub>	175 <sub>a</sub>	1,129 <sub>a</sub>	6,433 <sub>a</sub>	10,621 <sub>b</sub>
	Out of State	38 <sub>a</sub>	266 <sub>a</sub>	533 <sub>a</sub>	1,332 <sub>b</sub>	31 <sub>a</sub>	273 <sub>a</sub>	436 <sub>a</sub>	1,429 <sub>b</sub>
	Total	232	1,376	6,751	12,168	206	1,402	6,869	12,050
1st College 2/4 Year	Not-4 Year School	67 <sub>a</sub>	425 <sub>a</sub>	4,304 <sub>a</sub>	6,798 <sub>b</sub>	65 <sub>a</sub>	427 <sub>a</sub>	4,434 <sub>a</sub>	6,668 <sub>b</sub>
	4 year school	165 <sub>a</sub>	951 <sub>a</sub>	2,447 <sub>a</sub>	5,370 <sub>b</sub>	141 <sub>a</sub>	975 <sub>a</sub>	2,435 <sub>a</sub>	5,382 <sub>b</sub>
	Total	232	1,376	6,751	12,168	206	1,402	6,869	12,050

Table 11-A and 12-A: College of First Attendance

		Highly Achieving		University Eligible		Highly Achieving		University Eligible	
		Income <\$36k	Income >\$36k	Income <\$36k	Income >\$36k	Latino	Not Latino	Latino	Not Latino
Post-Secondary School Type	ASU	50 <sub>a</sub>	283 <sub>a</sub>	725 <sub>a</sub>	1,463 <sub>b</sub>	43 <sub>a</sub>	290 <sub>a</sub>	707 <sub>a</sub>	1,481 <sub>b</sub>
	UA	56 <sub>a</sub>	327 <sub>a</sub>	749 <sub>a</sub>	1,749 <sub>b</sub>	57 <sub>a</sub>	326 <sub>a</sub>	888 <sub>a</sub>	1,610 <sub>b</sub>
	NAU	18 <sub>a</sub>	69 <sub>a</sub>	279 <sub>a</sub>	706 <sub>b</sub>	6 <sub>a</sub>	81 <sub>a</sub>	235 <sub>a</sub>	750 <sub>b</sub>
	Subtotal State Universities	124 <sub>a</sub>	679 <sub>a</sub>	1,753 <sub>a</sub>	3,918 <sub>b</sub>	106 <sub>a</sub>	697 <sub>a</sub>	1,830 <sub>a</sub>	3,841 <sub>b</sub>
	In-State Private Post-Secondary	3 <sub>a</sub>	10 <sub>a</sub>	366 <sub>a</sub>	357 <sub>b</sub>	4 <sub>a</sub>	9 <sub>b</sub>	337 <sub>a</sub>	386 <sub>b</sub>
	In-State Community College	67 <sub>a</sub>	421 <sub>a</sub>	4,129 <sub>a</sub>	6,586 <sub>a</sub>	65 <sub>a</sub>	423 <sub>a</sub>	4,293 <sub>a</sub>	6,422 <sub>b</sub>
	Competitive Out-of-State Schools	25 <sub>a</sub>	139 <sub>a</sub>	81 <sub>a</sub>	267 <sub>b</sub>	23 <sub>a</sub>	141 <sub>a</sub>	82 <sub>a</sub>	266 <sub>b</sub>
	Other Out-of-State Schools	13 <sub>a</sub>	127 <sub>a</sub>	422 <sub>a</sub>	1,040 <sub>b</sub>	8 <sub>a</sub>	132 <sub>b</sub>	327 <sub>a</sub>	1,135 <sub>b</sub>
	No College	32 <sub>a</sub>	162 <sub>a</sub>	3,703 <sub>a</sub>	4,353 <sub>b</sub>	19 <sub>a</sub>	175 <sub>a</sub>	3,396 <sub>a</sub>	4,660 <sub>b</sub>
Total	264	1,538	10,454	16,521	225	1,577	10,265	16,710	

Table 13-A: College Graduation Classes of 2008-2010

		Highly Achieving		University Eligible		Highly Achieving		University Eligible	
		Income < \$36k	Income > \$36k	Income < \$36k	Income > \$36k	Latino	Not Latino	Latino	Not Latino
GradStatus	Bachelor's Degree	22 <sub>a</sub>	75 <sub>a</sub>	163 <sub>a</sub>	320 <sub>b</sub>	6 <sub>a</sub>	91 <sub>a</sub>	63 <sub>a</sub>	420 <sub>b</sub>
	Non-Baccalaureate Degree	2 <sub>a</sub>	5 <sub>a</sub>	78 <sub>a</sub>	112 <sub>a</sub>	0 <sup>1</sup>	7 <sub>a</sub>	29 <sub>a</sub>	161 <sub>a</sub>
	Attended College, No Degree	13 <sub>a</sub>	55 <sub>a</sub>	487 <sub>a</sub>	778 <sub>a</sub>	5 <sub>a</sub>	63 <sub>a</sub>	220 <sub>a</sub>	1,045 <sub>a</sub>
	Sub Total Attended College	37	135	728	1,210	11	161	312	1,626
	No College	5 <sub>a</sub>	12 <sub>a</sub>	262 <sub>a</sub>	323 <sub>b</sub>	0 <sup>1</sup>	17 <sub>a</sub>	135 <sub>a</sub>	450 <sub>b</sub>
	<b>Total</b>	<b>42</b>	<b>147</b>	<b>990</b>	<b>1,533</b>	<b>11</b>	<b>178</b>	<b>447</b>	<b>2,076</b>

## Appendix B – Schools and Districts in the DCST Program

Students tested in each year of the program, with totals.

School	District	2008	2009	2010	2011	2012	Total
Aaec-South Mountain Campus	Az Agribusiness & Equine Center	-	71	62	-	-	133
Aaec-Paradise Valley Campus	Az Agribusiness & Equine Center	-	-	63	-	-	63
Aaec-Red Mountain Campus	Az Agribusiness & Equine Center	-	-	37	-	-	37
<b>Arizona Agribusiness &amp; Equine Center Inc Total</b>		-	<b>71</b>	<b>162</b>	-	-	<b>233</b>
Basha High School	Chandler Unified District	-	-	457	567	568	1,592
Chandler High School	Chandler Unified District	-	-	687	695	735	2,117
Hamilton High School	Chandler Unified District	-	-	778	830	864	2,472
Perry High School	Chandler Unified District	-	-	457	498	553	1,508
<b>CHANDLER UNIFIED DISTRICT TOTAL†</b>		-	-	<b>2,379</b>	<b>2,590</b>	<b>2,720</b>	<b>7,689</b>
Coconino High School	Flagstaff Unified District	259	239	282	295	272	1,347
Flagstaff High School	Flagstaff Unified District	312	300	310	339	335	1,596
Sinagua High School	Flagstaff Unified District	210	174	-	-	-	384
<b>FLAGSTAFF UNIFIED DISTRICT TOTAL†</b>		<b>781</b>	<b>713</b>	<b>592</b>	<b>634</b>	<b>607</b>	<b>3,327</b>
Florence High School	Florence Unified School District	-	-	129	140	145	414
Poston Butte High School	Florence Unified School District	-	-	313	337	364	1,014
Summit School	Florence Unified School District	-	-	-	3	4	7
<b>Florence Unified School District Total†</b>		-	-	<b>442</b>	<b>480</b>	<b>513</b>	<b>1,435</b>
<b>Globe High School</b>	<b>Globe Unified District†</b>	<b>140</b>	<b>147</b>	<b>97</b>	<b>89</b>	-	<b>473</b>
<b>Higley High School</b>	<b>Higley Unified School District†</b>	-	-	<b>308</b>	<b>307</b>	<b>380</b>	<b>995</b>
Williams Field High School	Higley Unified School District	-	-	257	323	345	925
<b>Higley Unified School District Total†</b>		-	-	<b>565</b>	<b>630</b>	<b>725</b>	<b>1,920</b>
<b>Lake Havasu High School</b>	<b>Lake Havasu Unified District†</b>	<b>371</b>	-	-	-	-	<b>371</b>
<b>Mountain View High School</b>	<b>Marana Unified District</b>	<b>684</b>	<b>691</b>	-	-	-	<b>1,375</b>
Dobson High School	Mesa Unified District	558	554	-	-	-	1,112
Mesa High School	Mesa Unified District	722	652	-	-	-	1,374
Red Mountain High School	Mesa Unified District	674	686	-	-	-	1,360
Westwood High School	Mesa Unified District	466	432	-	-	-	898
East Valley Academy	Mesa Unified District	41	63	-	-	-	104
Skyline High School	Mesa Unified District	389	374	-	-	-	763
<b>MESA UNIFIED DISTRICT TOTAL†</b>		<b>2,850</b>	<b>2,761</b>	-	-	-	<b>5,611</b>
Raymond S Kellis High School	Peoria Unified School District	350	353	408	371	397	1,879
Liberty High School	Peoria Unified School District	259	281	296	420	416	1,672
Sunrise Mountain High School	Peoria Unified School District	382	345	358	369	403	1,857
Centennial High School	Peoria Unified School District	454	457	490	456	466	2,323
Cactus High School	Peoria Unified School District	331	277	262	319	280	1,469
Ironwood High School	Peoria Unified School District	443	395	362	423	440	2,063
Peoria High School	Peoria Unified School District	320	324	313	329	375	1,661
Top High School	Peoria Unified School District	24	28	24	21	15	112
<b>Peoria Unified School District Total</b>		<b>2,563</b>	<b>2,460</b>	<b>2,513</b>	<b>2,708</b>	<b>2,792</b>	<b>13,036</b>
Betty H Fairfax High School	Phoenix Union High School District	-	360	334	343	367	1,404
Cesar Chavez High School	Phoenix Union High School District	533	357	398	413	426	2,127
Alhambra High School	Phoenix Union High School District	484	425	406	413	516	2,244
Bostrom Alternative High Sch	Phoenix Union High School District	78	101	91	86	64	420
Camelback High School	Phoenix Union High School District	284	248	271	296	334	1,433
Carl Hayden High School	Phoenix Union High School District	350	375	377	407	345	1,854
Central High School	Phoenix Union High School District	363	364	395	407	418	1,947
Maryvale High School	Phoenix Union High School District	427	451	455	475	528	2,336
North High School	Phoenix Union High School District	441	373	372	447	445	2,078
Metro Tech High School	Phoenix Union High School District	271	275	267	286	318	1,417
South Mountain High School	Phoenix Union High School District	344	317	327	318	328	1,634
Trevor G Browne High School	Phoenix Union High School District	483	484	453	482	588	2,490
Cyber High School	Phoenix Union High School District	15	13	-	-	-	28
Suns-Diamond Backs Educ Acad	Phoenix Union High School District	-	30	26	72	45	173

School	District	2008	2009	2010	2011	2012	Total
Franklin Police And Fire Hs	Phoenix Union High School District	-	25	47	66	66	204
Bioscience High School	Phoenix Union High School District	41	32	52	63	60	248
Phoenix Union High School District Total†		<b>4,114</b>	<b>4,230</b>	<b>4,271</b>	<b>4,574</b>	<b>4,848</b>	<b>22,037</b>
<b>Round Valley High School</b>	Round Valley Unified District‡	<b>120</b>	<b>106</b>	<b>89</b>	<b>94</b>	-	<b>409</b>
<b>Summit High School</b>	<b>Summit Charter High School</b>	<b>14</b>	<b>10</b>	-	<b>4</b>	<b>24</b>	<b>52</b>
Desert View High School	Sunnyside Unified District	-	-	261	248	287	796
Sunnyside High School	Sunnyside Unified District	-	-	352	375	328	1,055
Star Academic Academy	Sunnyside Unified District	-	-	15	33	26	74
SUNNYSIDE UNIFIED DISTRICT TOTAL†		-	-	<b>628</b>	<b>656</b>	<b>641</b>	<b>1,925</b>
Catalina High School	Tucson Unified District	-	206	161	219	132	718
Cholla High Magnet School	Tucson Unified District	-	268	323	229	241	1,061
University Hs-Tucson	Tucson Unified District	-	157	181	199	224	761
Project More High School	Tucson Unified District	-	-	12	-	-	12
Palo Verde High Magnet School	Tucson Unified District	-	234	192	177	178	781
Pueblo High School	Tucson Unified District	-	295	278	250	198	1,021
Rincon High School	Tucson Unified District	-	173	213	197	225	808
Sabino High School	Tucson Unified District	-	259	289	261	252	1,061
Sahuaro High School	Tucson Unified District	-	326	315	330	388	1,359
Howenstine High School	Tucson Unified District	-	30	13	26	23	92
Santa Rita High School	Tucson Unified District	-	194	208	180	173	755
Tucson Magnet High School	Tucson Unified District	-	364	409	508	488	1,769
Teenage Parent High School	Tucson Unified District	-	-	10	-	9	19
Agave Distance Learning Prog	Tucson Unified District	-	1	-	-	7	8
Direct Link Ii	Tucson Unified District	-	-	-	2	-	2
Unknown Tucson School	Tucson Unified District	-	-	-	12	26	38
TUCSON UNIFIED DISTRICT TOTAL†		-	<b>2,507</b>	<b>2,604</b>	<b>2,590</b>	<b>2,564</b>	<b>10,265</b>
Vail Academy And High School	Vail Unified District	-	41	52	37	33	163
Cienega High School	Vail Unified District	-	358	419	403	376	1,556
Empire High School	Vail Unified District	-	142	183	184	187	696
Andrada Polytechnic High Schl	Vail Unified District	-	-	-	-	154	154
VAIL UNIFIED DISTRICT TOTAL†		-	<b>541</b>	<b>654</b>	<b>624</b>	<b>750</b>	<b>2,569</b>
<b>Window Rock High School</b>	<b>Window Rock Unified District</b>	<b>141</b>	-	-	<b>139</b>	-	<b>280</b>
<b>Winslow High School</b>	Winslow Unified District‡	-	-	-	<b>145</b>	-	<b>145</b>
San Luis High School	Yuma Union High School District	-	540	508	511	564	2,123
Kofa High School	Yuma Union High School District	-	457	480	453	453	1,843
Cibola High School	Yuma Union High School District	-	513	524	561	518	2,116
Yuma High School	Yuma Union High School District	-	314	310	295	269	1,188
Vista Alternative High School	Yuma Union High School District	-	73	48	38	36	195
Gila Ridge High School	Yuma Union High School District	-	365	392	395	391	1,543
Yuma Union High School District Total†		-	<b>2,262</b>	<b>2,262</b>	<b>2,253</b>	<b>2,231</b>	<b>9,008</b>
Unknown	Other	43	-	-	-	-	43
<b>Grand Total</b>		<b>11,821</b>	<b>16,499</b>	<b>17,258</b>	<b>18,210</b>	<b>18,415</b>	<b>82,203</b>
† DCST Participant District 2008-2012							
‡ DCST Participant District 2008-2009							

## End Notes

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<sup>1</sup> Note that 'higher income' in this case refers to students with self-reported family income greater than \$36,000 annually.

<sup>2</sup> Throughout this report, statistically significant indicates significantly different at  $p < 0.05$  in the two-sided test of equality for column proportions. SPSS outputs showing statistical significance are shown in Appendix A.

<sup>3</sup> In Arizona, there are seven schools with enrollments of more than 1,000 students that do not report to the National Student Clearinghouse: Art Institute of Phoenix, Pima Medical Institute, Universal Technical Institute of Arizona Inc., The Bryman School, Brookline College, Southwest Institute of Healing Arts, and National Paralegal College.

<sup>4</sup> For the purposes of this report, 'selective college' and 'competitive' college refers to any college that is listed as Most Competitive, Highly Competitive +, Highly Competitive, or Very Competitive + by Barron's Profiles of American Colleges (2009). This list can be found online at:  
[http://www.nytimes.com/interactive/2013/04/04/business/economy/economix-selectivity-table.html?\\_r=2&](http://www.nytimes.com/interactive/2013/04/04/business/economy/economix-selectivity-table.html?_r=2&).

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