MINNESOTA OFFICE OF HIGHER EDUCATION

GET READY/GEAR UP: LONGITUDINAL REPORT

Prepared for:

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BACKGROUND

The Minnesota Office of Higher Education (OHE) implemented Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) in 10 direct service schools throughout Minnesota during the 2011-2012 school year, serving approximately 6000 students in grades 4-12. The OHE GEAR UP program is known as Get Ready/GEAR UP. The objective of Get Ready/GEAR UP is to prepare students from low-income families and those from groups traditionally underrepresented in college for matriculation into postsecondary education through college planning, academic tutoring, and information on career and postsecondary options. To report on this objective, OHE contracted with an external evaluation firm to examine the relationship between program participation, student attitudes/perceptions, and academic outcomes.

Two cohorts of Get Ready/GEAR UP students were included in the 2011 study: 12th grade students and 8th grade students. These students were tracked on five key variables:

1. Demographic information (gender, ethnicity, special education status, Limited English Proficiency Status)¹;

2. Participation in GEAR UP activities;

- 3. End-of-year survey responses in 5 content areas (self-efficacy to get into college, doing well in school, goal setting, knowledge of high school coursework, peer support for postsecondary goals, and expectations or aspirations for postsecondary goals);
- 4. Reading and mathematics achievement on the Minnesota Comprehensive Assessment Series-II/III test (MCA-II/III; Grade 8 only);

5. High school graduation (Grade 12 only); and

6. Matriculation into college in the fall 2011 term (Grade 12 only).

¹ Free and Reduced Lunch status was unavailable for most students and was therefore not used in any analysis.

12TH GRADERS IN 2011

Student Demographics

Of 12th grade students served by Get Ready/GEAR UP, a total of 713 completed the Get Ready/GEAR UP survey and had at least one outcome data point: graduation and Postsecondary enrollment (PSE). Key demographic data of the sample of 713 students with survey and outcome data is shown in Table 1 below. As can be seen in the table, Get Ready/GEAR UP served slightly more females (53.0%) than males (47.0%). Most students were students of color (87.1%) mostly comprised of Asian American (45.3%) and African American (28.6%) students. One-tenth of the students received special education services (11.2%) and one-third of the students were described as being Limited English Proficient (32.5%). Most 12th grade students reported they participated in Get Ready/GEAR UP for four years (68.0%) however participation varied from one (5.4%) to six (6.8%) years.

Table 1: Student Demographics

Table 1. Student Demographics		
Demographics	Number (Percent)	
Female	378 (53.0%)	
Male	335 (47.0%)	
Ethnicity		
African American	203 (28.6%)	
Asian American	322 (45.3%)	
Caucasian	90 (12.7)	
Hispanic American	88 (12.4%)	
Native American	7 (1.0%)	
Native Hawaiian/Pacific	1 (0.1%)	
Islander		
Special Education	71 (11.2%)	
Limited English Proficiency	205 (32.5%)	
Years in GEAR UP		
Six	48 (6.8%)	
Five	7 (1.0%)	
Four	483 (68.0%)	
Three	0 (0.0%)	
Two	134 (18.9%)	
One	38 (5.4%)	

High School Graduation

High School Graduation Across Student Groups. High school graduation rates² were high among Get Ready/GEAR UP students with a large proportion of all 12th grade students (643 students, or 90.2%) graduating from high school. Graduation rates were similar for female (90.5%) and male (88.7%) students. And graduation rates among students of varied ethnic groups were similar, however Asian American students had the highest graduation rate (93.8%) and African Americans had the lowest (86.7%). Rates of graduation were also high among special education students (87.3%) and Limited English Proficient students (87.8%). Students with different lengths of time in Get Ready/GEAR UP had very similar graduation rates, although students with three (100%) or four (90.9%) years of experience had the highest graduation rates and students with one (84.2%) and two (81.4%) of experience had the lowest.

Table 2: High School Graduation Rates

Table 2: High School Graduation Rates		
Graduated from High School	Number (Percent)	
Gender		
Females	346 (90.5%)	
Males	297 (88.7%)	
Ethnicity		
African American	176 (86.7%)	
Asian American	302 (93.8%)	
Caucasian	81 (90.0%)	
Hispanic American	77 (87.5%)	
Native American	NR*	
Native Hawaiian/Pacific	NR*	
Islander		
Special Education	62 (87.3%)	
Limited English Proficiency	180 (87.8%)	
Years in GEAR UP		
Six	42 (87.5%)	
Five	NR*	
Four	439 (90.9%)	
Three	64 (100%)	
Two	57 (81.4%)	
One	32 (84.2%)	

^{*} Not Reported: The number of students is too small to report.

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² Graduation rate was defined as students who graduated high school within 4 years.

High School Graduation and Survey Results. Responses to the Get Ready/GEAR UP student survey were analyzed to identify factors or groups of related items. The analysis combined some of the Get Ready/GEAR UP survey items into factors: satisfaction with Get Ready/GEAR UP, attitudes about PSE, and attitudes about high school. Item Response Theory (IRT) analysis was used to combine those items within each factor into a single score³; those scores were then used in more advanced statistical procedures. Specifically, a *t*-test was used to test for statistically significant differences in scale scores for those students who did graduate from high school and those students who did not. Means for each group for the three scales is shown in Table 3 below. As can be seen in the table, compared to students who did not graduate from high school, those who graduated had more satisfaction with GEAR UP, had more positive attitudes about PSE, and had more positive attitudes about high school. Furthermore, the observed differences between students who did and did not graduate were statistically significant.

Table 3: Mean IRT Scores

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Survey Scale	Graduated Mean	Did Not Graduate Mean	Difference
Satisfaction with GEAR UP*	4.36	3.26	1.10
Attitudes about PSE*	2.33	1.55	0.78
Attitudes about High School*	1.59	0.91	0.67

^{*}Scores are statistically significantly different, p < 0.05.

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³ The Satisfaction with GEAR UP scale ranged from +8 to -8, the Attitudes about PSE ranged from +6 to -6, and the Attitudes about High School ranged from +6 to -6.

Immediate Postsecondary Enrollment

Immediate Postsecondary Enrollment Across Student Groups. A total of 643 Get Ready/GEAR UP students graduated from high school were eligible to enroll in a postsecondary institution and more than half of the students (382, or 59.4%) achieved PSE. Key characteristics of students who achieved PSE are summarized in Table 4 below. As can be seen in the table, female students had slightly higher rates of PSE (65.0%) than did male students (51.9%). PSE rates among students of different ethnic groups varied: while more than two-thirds of Caucasian students (71.6%) and more than half of the African American students (63.6%) and Asian American (56.6%) students enrolled in a postsecondary institution, less than half of the Hispanic American students (44.2%) did. In addition, less than one-third of students qualifying for special education services achieved PSE (29.0%) while the majority of Limited English Proficiency students did achieve PSE (53.9%). Among students of different lengths of time in Get Ready/GEAR UP, PSE rates showed some variation: More than three-quarters of students with two years of experience in Get Ready/GEAR UP achieved PSE (75.4%) and more than half of the students with three (50.0%), four (60.8%), and six (52.4%) years of experience with Get Ready/GEAR UP achieved PSE, only one-third of students with one year of experience (37.5%) achieved PSE.

Table 4: Postsecondary Enrollment Rates

Table 4: Postsecondary Enrollment Rates		
Enrolled in Postsecondary	Number (Percent)	
Gender		
Females	225 (65.0%)	
Males	154 (51.9%)	
Ethnicity		
African American	112 (63.6%)	
Asian American	171 (56.6%)	
Caucasian	58 (71.6%)	
Hispanic American	34 (44.2%)	
Native American	NR*	
Native Hawaiian/Pacific Islander	NR*	
Special Education	18 (29.0%)	
Limited English Proficiency	97 (53.9%)	
Years in GEAR UP		
Six	22 (52.4%)	
Five*	NR*	
Four	267 (60.8%)	
Three	32 (50.0%)	
Two	43 (75.4%)	
One	12 (37.5%)	

^{*} Not Reported: The number of students is too small to report.

Immediate Postsecondary Enrollment and Survey Results. Scores from the three survey scales were compared for those students who achieved PSE and those who were eligible for PSE and did not enroll and the results are shown in Table 5 below. A *t*-test was conducted to determine if the mean scores of students who graduated and enrolled in a PSE were different from those students who graduated but did not enroll. As can be seen in the table, students who enrolled in a PSE had more positive attitudes about PSE and more positive attitudes about high school than their peers who did not enroll in a PSE, and those differences are statistically significant. In addition, both groups of students had positive attitudes about Get Ready/GEAR UP and did not differ significantly from one another.

Table 5: Mean IRT Scores

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Survey Scale	PSE Enrolled Mean	No PSE Enrollment Mean	Difference
Satisfaction with GEAR UP	4.44	4.25	0.19
Attitudes about PSE*	2.52	2.05	0.47
Attitudes about High School*	1.74	1.37	0.37

^{*}Scores are statistically significantly different, p < 0.05.

Get Ready/GEAR UP Student Activities

In addition to the Get Ready/GEAR UP curriculum students received in class, students had the opportunity to participate in a number of optional Get Ready/GEAR UP activities throughout the school year. Activities varied across Get Ready/GEAR UP sites and included: advising, Get Ready/GEAR UP curriculum, tutoring (in classroom or after school), visits to postsecondary institutions, educational workshops, and various student support services. As seen in Table 6 below, more than half of the students (52.5%) participated in one activity during the year with another one-quarter of the students (26.6%) participating in two activities. Less than one-tenth of the students (8.8%) participated in three (7.0%), four (1.7%), or five (0.1%) activities and more than one-tenth of the students (12.1%) did not participate in any of the optional activities. On average, students participated in 1.3 activities during the school year. In addition, the two most frequently utilized activities were Advising (80.9%) and Curriculum (32.7%).

Table 6: Participation in Get Ready/GEAR UP Activities

	Number (Percent)
Number of Get Ready/GEAR UP Activities	
Five	1 (0.1%)
Four	12 (1.7%)
Three	50 (7.0%)
Two	190 (26.6%)
One	374 (52.5%)
None	86 (12.1%)
Most Common Activities	
Advising	577 (80.9%)
Curriculum	233 (32.7%)

8TH GRADE STUDENTS

Student Demographics⁴

A total of 625 8th grade students participated in Get Ready/GEAR UP in 2010-2011 and nearly equal proportions of 8th grade female (48.3%) and male (51.7%) students participated in the program. Most of the participants were students of color (92.5%) including large groups of Asian American (38.6%), African American (26.4%), and Hispanic American (24.7%) students with smaller groups of Native American (1.9%) and other students of color (Native Hawaiian/Pacific Islander=0.2% and Biracial=0.8%). Less than one-tenth of the students were Caucasian (7.4%). One-tenth of the students received special education services (10.2%) and over half were classified as Limited English Proficient (51.9%). More than half of the students (56.2%) had been involved with Get Ready/GEAR UP for two years, nearly two-tenths of the students (19.5%) had been involved for three years, about one-tenth of the students (14.7%) had participated for one year, and less than one-tenth of the students (9.6%) had participated in Get Ready/GEAR UP for four (5.8%) or five (3.8%) years.

Table 7: Student Demographics

Table 7: Student Demographics		
Demographics	Number (Percent)	
Female	302 (48.3%)	
Male	323 (51.7%)	
Ethnicity		
African American	165 (26.4%)	
Asian American	241 (38.6%)	
Caucasian	46 (7.4%)	
Hispanic American	154 (24.7%)	
Native American	12 (1.9%)	
Native Hawaiian/Pacific Islander	1 (0.2%)	
Bi-racial	5 (o.8%)	
Special Education	53 (10.2%)	
Limited English Proficiency	282 (51.9%)	
Years in GEAR UP		
Five	24 (3.8%)	
Four	36 (5.8%)	
Three	122 (19.5%)	
Two	351 (56.2%)	
One	92 (14.7%)	

⁴ Free and Reduced Lunch status was unavailable for most students and was therefore not used in any analysis.

MCA-II/III Proficiency

MCA-II/III Proficiency Among Student Groups. Students in 8th grade are required by the Minnesota Department of Education to be assessed on the Minnesota Comprehensive Assessment Series II/III (MCA-II/III). The test is used as a measure of student proficiency in reading and mathematics and to gauge Minnesota's progress towards goals outlined in No Child Left Behind. Of the 8th grade Get Ready/GEAR UP students who completed the MCA-II/III⁵, less than half (44.4%) were proficient in reading and only one-third of the students (37.4%) were proficient in mathematics.

Table 8 below shows the MCA-II proficiency rates for reading among Get Ready/GEAR UP students. As shown in the table, proficiency in reading was similar for female (47.1%) and male (41.6%) students. In addition, while more than half of the Caucasian students (63.9%) were proficient in reading, less than half of the African American (47.7%), Hispanic American (40.9%), and Asian American (40.5%) students scored proficient. Few Special Education students (12.5%) scored proficient in reading and one-quarter of Limited English Proficiency students (28.7%) scored proficient. Last, among students with varied years experience with Get Ready/GEAR UP proficiency in reading was similar: More than half of the students who participated for three (54.4%) or four (57.6%) years scored proficient in reading and nearly half of the students who participated for two (42.2%) and five (44.4%) years also scored proficient. However, less than one-third of the students who participated in Get Ready/GEAR UP for only one year (30.2%) scored proficient in reading.

Table 8: MCA-II Reading Proficiency Rates

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Enrolled in Post-Secondary	Number (Percent)
Gender	
Females	122 (47.1%)
Males	107 (41.6%)
Students of Color	
African American	61 (47.7%)
Asian American	83 (40.5%)
Caucasian	23 (63.9%)
Hispanic American	54 (40.9%)
Native American	NR*
Native Hawaiian/Pacific Islander	NR*
Bi-racial	NR*
Special Education	4 (12.5%)
Limited English Proficiency	72 (28.7%)
Years in GEAR UP	
Five	8 (44.4%)
Four	19 (57.6%)
Three	54 (54.5%)
Two	132 (42.2%)
One	16 (30.2%)

^{*} Not Reported: The number of students is too small to report.

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⁵ A total of 516 students had MCA-II/III reading scores and 535 had mathematics scores.

Table 9 below shows proficiency rates on the mathematics portion of the MCA-III by student groups. As can be seen in the table, proficiency rates in mathematics were similar between female (35.1%) and male students (39.7%). More Caucasian students scored proficient in mathematics than did students of color: While more than half of the Caucasian students (59.5%) scored proficient in MCA-III mathematics, less than half of the Asian American students (44.9%), less than one-third of the Hispanic American students (31.4%), and one-quarter of the African American students (25.6%) scored proficient. Students receiving Special Education services showed lower proficiency rates: less than one-tenth of those students (3.6%) scored proficient in mathematics. And over one-third of the students with Limited English Proficiency (41.6%) scored proficient in MCA-III mathematics. Mathematics proficiency rates were similar among students with different lengths of experience in Get Ready/GEAR UP: Less than half of the students with two (40.6%), three (41.0%), or four (45.5%) years experience and one-third of the students (35.5%) with five years experience scored proficient in MCA-III mathematics. However, one-tenth of the students (13.4%) with only one year's experience with Get Ready/GEAR UP scored proficient in mathematics.

Table 9: MCA-III Mathematics Proficiency Rates

1 able 9: MCA-III Mathematics Proficiency Rates		
Enrolled in Post-Secondary	Number (Percent)	
Gender		
Females	94 (35.1%)	
Males	106 (39.7%)	
Students of Color		
African American	34 (25.6%)	
Asian American	96 (44.9%)	
Caucasian	22 (59.5%)	
Hispanic American	43 (31.4%)	
Native American	NR*	
Native Hawaiian/Pacific Islander	NR*	
Bi-racial	NR*	
Special Education	7 (3.6%)	
Limited English Proficiency	82 (41.6%)	
Years in GEAR UP		
Five	7 (35.0%)	
Four	15 (45.5%)	
Three	43 (41.0%)	
Two	126 (40.6%)	
One	9 (13.4%)	

* Not-Reported: The number of students is too small to report.

MCA-II/III Performance and Survey Results

As was done with responses of 12th grade students, the responses of 8th grade students to the Get Ready/GEAR UP student survey were analyzed using IRT to combine student responses into a single score for each of the three scales: satisfaction with GEAR UP, attitudes about PSE, and attitudes about high school. Survey scale scores were then correlated with MCA-II/III reading and mathematics scores and the results are shown in Table 10 below. As shown in the table, satisfaction with GEAR UP has a weak correlation with both reading (.19) and mathematics (.14) and, although the correlations are weak, they are statistically significant. Neither reading or mathematics scores on the MCA-II/III were correlated with either attitudes about PSE (-.03, reading; -.03, mathematics) or attitudes about high school (.00, reading; .02, mathematics).

Table 10: Relationship between MCA-III Scores and Survey Scale Scores

Survey Scale	MCA-III Reading	MCA-III Mathematics
Satisfaction with GEAR UP	.19*	.14*
Attitudes about PSE	03	03
Attitudes about High School	.00	.02

^{*}Statistically significant at p < .05.

Get Ready/GEAR UP Student Activities

Students had the opportunity to participate in a number of optional Get Ready/GEAR UP activities throughout their 8th grade school year. Activities include advising (individual or group), Get Ready/GEAR UP curriculum, enrichment activities, tutoring (in classroom or after school), visits to postsecondary institutions, career exploration activities, educational workshops, service learning, and various summer programs. As seen in Table 11 below, the majority of students (75.5%) participated in three to six activities with less than one-fifth of the students (15.2%) participating in seven or more activities and less than one-tenth of the students (9.3%) participating in fewer than three activities. On average students participated in 4.4 activities each. The most commonly attended activities were curriculum (95.5%)-with nearly all students participating-college visits (90.9%), and advising (45.1%).

Table 11: Participation in Get Ready/GEAR UP Activities

Get Ready/GEAR UP Activities	Number (Percent)
Number of Activities	
Nine or Ten	8 (1.3%)
Seven or Eight	87 (13.9%)
Five or Six	168 (26.9%)
Three or Four	304 (48.6%)
One or Two	52 (8.3%)
None	6 (1.0%)
Most Common Activities	
Curriculum	597 (95.5%)
College Visits	568 (90.9%)
Advising	282 (45.1%)