



**West Virginia Higher Education  
Policy Commission**

Dr. Brian Noland, Chancellor

# RESEARCH BRIEF

## **WEST VIRGINIA GEAR UP STUDENTS: Comparisons from the 2010 Senior High School Opinions Survey**

*This Higher Education Policy Commission (HEPC) Research Brief compares the educational experiences and college plans of West Virginia Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) students in the high school class of 2010 with students at comparable West Virginia high schools and all students statewide. This brief provides a snapshot of differences between GEAR UP students, similar non-GEAR UP students, and students statewide with respect to academic preparation, college aspirations, college influences, and college choice. GEAR UP is a federally funded, six-year grant program aimed at increasing college-going rates among students in ten high-need counties. GEAR UP provides academic preparation and college readiness services to approximately 5,500 students each year. The GEAR UP and GEAR UP comparison high schools are similar in school size, graduation rates, percentage of low-income students, proportion of minority students, and academic achievement scores.*

### **Key Findings**

- Overall, about 12 percent of survey respondents were enrolled at a GEAR UP high school at the time of the survey. Just over 17 percent of respondents were enrolled at comparable high schools.
- Students at GEAR UP schools reported lower levels of academic preparation than peers at comparable schools (as measured by math courses taken and ACT scores). A greater proportion of GEAR UP students reported plans to attend vocational, and community and technical colleges than peers at similar schools. Students at GEAR UP schools were more likely to report plans to obtain an academic degree; however, fewer GEAR UP students planned to attend college in general compared to their peers at similar schools and statewide.
- Teachers and guidance counselors appeared to play a more significant role in shaping the college aspirations of students at GEAR UP schools compared with students at similar non-GEAR UP schools. Parents and guardians were the single most important influence for all students.
- Generally, students at GEAR UP schools appear to be better informed about different options for financing college than their peers at comparable schools.
- Affordability was cited as the single most important factor affecting college choice for both groups of students; however, a lower proportion of students at GEAR UP schools reported affordability concerns, perhaps because they were better informed about ways of paying for college.

### **Overview**

In spring 2010, a sample of West Virginia's seniors was asked to respond to a series of questions about their high school experiences and their plans after graduation. The questions were intended to provide teachers, principals, counselors, faculty, administrators, and policy makers across the state with the most current snapshot of the students' perspectives, experiences, and plans as they transitioned to life beyond high school.

The sample was designed to be representative of the seniors enrolled in public high schools in 2010. In addition, because of considerable variation in the size of high schools, the sample was drawn to be representative across both small and large schools. A random sample of high schools was drawn from the 117 high schools across the state. In addition, all GEAR UP and GEAR UP comparison schools were purposefully sampled, resulting in a final sample of 61 schools. In

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total, students from 47 of the 61 (about 77%) high schools responded. Responses are representative of the 18,472 high school seniors enrolled in 2010. A detailed description of the survey and methods used for this report can be found in the methodological appendix.

### Academic Preparation

Students were asked a series of questions to get a sense of their academic preparation for college-level coursework. Students at GEAR UP schools were more likely than their peers at similar schools to report a higher GPA, but were less likely to have reported taking a 4-year college (professional) preparatory curriculum (See Table 1). However, students at GEAR UP schools were more likely to report having taken a community college (skilled) preparatory curriculum. Overall, a greater proportion of students at GEAR UP schools reported taking a high school curriculum that prepared them for postsecondary education compared to students at similar high schools (80% compared to 77%). GEAR UP high school students were less academically prepared than peers at similar schools as measured by self reported ACT scores and highest math level completed successfully. Overall, students at GEAR UP and comparable schools reported lower levels of academic preparation than their peers at all other schools statewide and reported lower levels of academic preparation than the statewide average.

**Table 1:** Academic Preparation

		GEAR UP School	GEAR UP Comparable School	All WV Schools Statewide
		Column %	Column %	Column %
Cumulative High School GPA	Not reported	17.8	22.4	20.7
	Less than 2.0	11.0	6.7	8.5
	2.0 to 2.99	18.3	19.5	16.7
	3.0 or Higher	52.9	51.4	54.1
High School Curriculum Path	Professional (prep 4 yr. college)	48.2	53.9	60.8
	Skilled (prep 2 yr. college)	32.6	23.7	21.2
	Entry (prep work-force)	10.6	4.9	7.4
	Unsure	8.6	17.5	10.5
ACT Scores	Not reported	52.5	43.5	46.4
	Bottom Quartile, <19	16.9	13.4	11.7
	Third Quartile, 19-21	12.3	15.8	13.8
	Second Quartile, 22-23	7.5	10.4	9.7
	Top Quartile, >=24	10.8	17.0	18.3
Highest Math Level Completed Successfully	Less than Algebra 1	0.5	0.7	1.1
	Algebra 1	3.0	1.8	2.0
	Geometry	17.2	9.2	8.9
	Algebra 2	31.2	36.7	36.0
	Trigonometry	24.0	18.6	24.4
	Pre-calculus	16.6	19.9	15.5
	Calculus or above	7.4	13.1	12.1

All differences statistically significant at the 95% level of confidence.

## College Aspirations

With regard to college aspirations, students at GEAR UP schools reported first considering college later than their peers at similar schools (See Table 2). A lower proportion of GEAR UP students reported that they had decided to attend college compared with peers at comparable schools. About 71 percent of GEAR UP school students had reported visiting a college campus in the past year compared with 74 percent of students at similar high schools. Students at GEAR UP schools had lower educational aspirations overall than their peers. About 84 percent of students at GEAR UP schools aspired to obtain a postsecondary credential compared to 91 percent of their peers at comparable high schools. However, less than 2 percent of GEAR UP students reported no plan to obtain an academic degree as compared to over 3 percent on average statewide. Overall, the statewide average and students at comparable schools were more likely to start thinking about college earlier, planned to attend college at higher rates, and had higher aspirations than their peers at GEAR UP schools. Nevertheless, a higher proportion of GEAR UP students reported planning to complete high school, aspired to obtain a vocational or undergraduate certificate, and aspired to obtain an Associate's degree than their peers at comparable schools and the statewide average.

**Table 2:** College Aspirations

		GEAR UP School Column %	GEAR UP Comparable School Column %	All WV Schools Statewide Column %
First considered attending college	Elementary school	32.6	42.0	42.1
	Middle school	20.3	21.8	23.0
	Freshman year of HS	8.9	12.5	9.1
	Sophomore year of HS	4.3	3.3	3.4
	Junior year of HS	10.4	6.4	6.1
	Senior year of HS	7.5	6.5	6.2
	Never considered going	15.9	7.4	10.0
I have decided to attend college	Yes	74.6	83.7	82.4
I have decided to attend college next fall	Yes	64.5	75.8	74.0
I have already applied to college	Yes	65.9	68.9	70.5
# of times visited college campus past 12 months	None	28.3	25.5	27.1
	Once	22.7	22.7	21.2
	Twice	23.6	22.7	21.0
	Three	12.0	12.5	13.5
	Four	5.4	5.6	5.9
	Five or more	8.1	11.0	11.4
Highest academic degree student hopes to obtain	No academic degree	1.9	2.7	3.1
	High School diploma/GED	14.2	5.4	9.3
	Vocational or undergraduate certificate	8.3	6.4	6.0
	Associate's Degree	15.5	12.6	10.2
	Bachelor's Degree	29.8	30.4	28.4
	Master's Degree	21.1	26.4	27.5
	Doctoral degree	9.3	16.2	15.5

All differences statistically significant at the 95% confidence level.

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**College Influences**

Students were asked a series of questions regarding what people influenced their college aspirations, what their sources of information about college were, and how informed they felt about certain financing options (see Table 3). These are all important factors that can influence whether or not a student decides to attend college.

Parents or guardians were cited most frequently as an important or very important influence on college aspirations. Parents and guardians were equally as important for GEAR UP school students and their peers at comparable schools. Overall, students at GEAR UP schools reported that school personnel (i.e., teachers and guidance counselors) had a greater influence on their decision about college than reported by students at comparable schools and by students statewide. This may demonstrate that GEAR UP helped to build a college-going culture at their schools. Institutional websites were cited most frequently across both groups as important or very important sources of information about college, although GEAR UP school students cited them more often. Both groups of students reported brochures, direct mail, E-mail, and college fairs as important or very important sources of information. More GEAR UP students reported all sources of information as important or very important in comparison to their peers at similar schools. This may indicate that GEAR UP students are better informed about colleges overall. The greatest difference between GEAR UP students and their peers with respect to sources of information was Television and CFWV.com.

Both groups of students reported feeling most informed about the PROMISE Scholarship as a source of college financing. Federal loans, Pell Grants, and the West Virginia Higher Education Grant Program (in that order) were the other financing options about which students felt most informed. Across all options, a higher proportion of GEAR UP school students reported feeling very or somewhat informed. This suggests that GEAR UP students may be better informed about how to finance college than peers at similar schools. Overall, GEAR UP students appeared to be better informed about financing options than students at all high schools statewide.

**Table 3:** College Influences

	GEAR UP School	GEAR UP Comparable School	All WV Schools Statewide
	Column %	Column %	Column %
<b>Influences on College Aspirations</b>			
Parent/Guardian*	83.6	83.9	81.9
Teacher	74.3	64.6	59.0
Friend	67.2	62.8	61.0
Guidance counselor	66.0	53.9	46.6
Grandparent*	60.1	60.7	55.9
Other family member*	55.1	55.4	49.5
Principal	50.1	42.0	32.6
Sibling*	46.3	44.7	42.5
College admissions counselor	45.0	40.7	36.6
Coach	36.4	32.0	29.2
Religious leader	34.2	31.6	27.0
Community outreach counselor*	23.5	22.2	16.0
<b>Sources of Information about College</b>			
College websites	75.1	72.8	72.7
Brochures	64.6	59.9	55.4
Direct mail	63.8	59.8	58.7

	GEAR UP School	GEAR UP Comparable School	All WV Schools Statewide
	Column %	Column %	Column %
<b>Sources of Information Cont.</b>			
E-mail	59.2	54.1	52.0
College fairs	58.4	53.9	47.2
College planning websites	54.1	46.1	42.6
Television	47.2	38.6	33.1
CFWV.com	44.2	35.8	29.6
Signs	43.4	36.5	31.0
Magazines	41.7	33.8	29.3
Newspapers	35.8	30.8	25.5
Radio	35.0	29.1	23.9
<b>Informed about Financing Options</b>			
PROMISE Scholarship	74.4	69.1	69.5
Federal Loans	68.9	58.7	57.6
Pell Grants	67.0	54.9	50.1
West Virginia Higher Education Grant Program	62.1	48.2	46.1
Work study	60.0	52.9	50.2
West Virginia Engineering, Science and Technology Scholarship	46.0	35.4	32.5
College Savings Plans (529 Plans)	43.6	37.2	33.8
Tax Credits (e.g., Hope, American Opportunity)	39.1	33.8	28.7
West Virginia Higher Education Adult Part-Time Student Grant	38.3	32.1	26.5
Underwood-Smith Teacher Scholarship	37.4	29.6	25.7

\* No statistical difference between GEAR UP and GEAR UP Comparable School.

## College Choice & Finance

Finally, students were asked a series of questions regarding how they planned to finance college and what factors influence their particular choice of institution if they did plan to go to college.

With respect to financing college, GEAR UP school students were as likely to report filling out a FAFSA (necessary for receiving all forms of state and federal aid) as their peers at comparable schools. However, on average, students statewide were more likely to report completing a FAFSA than both groups. No significant differences existed with respect to whether GEAR UP and comparable students planned to attend full or part time. Statewide, students were more likely to plan full-time attendance. Overall, GEAR UP school students were more likely to report that they intended to rely on state or federal sources of financial aid than personal savings or money from family. The greatest difference with respect to finance sources for GEAR UP school students and peers at comparable schools was using money from parents/relatives and state need-based aid. About 10 percent fewer GEAR UP students reported that they would rely on family to pay for college, whereas about five percent more said they would rely on state need-based aid compared to peers at similar schools. Affordability was the most cited factor affecting college choice, though it appeared to be less of a concern for GEAR UP school students than their peers at comparable schools.

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Besides affordability, academic offerings were cited most often by GEAR UP school students and students at comparable schools as a factor affecting college choice, although academic offerings were relatively less important to GEAR UP school students. The recommendations of a teacher or counselor played a more important role in college choice for GEAR UP school students than peers at comparable students. Interestingly, the size of the student body was also a more important factor affecting college choice for GEAR UP students, though it is unclear whether GEAR UP students preferred larger or smaller schools.

**Table 4:** College Choice & Finance

	GEAR UP School	GEAR UP Comparable School	All WV Schools Statewide
	Column %	Column %	Column %
<b>Submitted a FAFSA*</b>	76.7	75.4	80.0
<b>Plans to attend Full-time*</b>	82.9	81.4	88.3
<b>Plan to attend Part-time*</b>	17.1	18.6	11.7
<b>Sources of Financing College</b>			
Parents/relatives	66.4	75.6	76.0
Personal savings	52.1	56.1	60.5
Pell Grant	50.8	42.0	35.2
Scholarship from the college*	49.8	51.0	53.7
Federal loans*	45.3	43.3	44.1
Other loans*	45.0	44.0	41.3
State need-based aid	38.8	34.3	31.0
Work-study*	36.9	34.0	32.5
Scholarship from private source	34.3	30.7	30.1
PROMISE Scholarship	28.0	33.5	35.6
Military programs*	11.9	12.1	10.0
<b>Institution Type*</b>			
Missing or Did Not Reply	37.5	35.4	34.8
In-state, Baccalaureate-granting	35.6	37.8	41.8
In-state, Community & Technical College	18.3	14.9	8.6
Out-of-state	5.6	7.6	8.9
In-state, Independent	3.1	4.3	5.8
On-line	0.1	0.0	0.1
<b>Factors influencing college choice</b>			
Affordability	73.1	77.6	72.1
Academic Offerings	68.3	74.3	72.6
Scholarship Offer*	57.1	59.1	55.6
Academic Reputation of Institution*	56.2	58.1	58.2
Marketing Material from Institution*	56.1	58.0	55.4
Close to Home*	54.4	53.7	46.4
Part-time Employment Available at Institution*	52.3	52.1	48.0
Size of Student Body	50.6	47.7	46.1
Plan to Live and Work in Same State Post-Graduation*	49.7	50.3	40.1
Near Enough to Live at Home*	49.6	48.5	38.1
Easy to Gain Admission*	48.3	46.1	40.2
Attractive Social Life	48.1	52.5	51.1
Friends Attending Same Institution	47.0	44.7	39.1
PROMISE Scholarship Accepted at the Institution	45.9	49.4	44.2

	GEAR UP School	GEAR UP Comparable School	All WV Schools Statewide
	Column %	Column %	Column %
<b>Factors influencing choices Cont.</b>			
Parent Preferences	43.6	39.0	35.8
Honors Programs*	39.1	41.0	37.2
Attractive Athletics Program*	37.4	36.6	36.7
Institution Recommended by Teacher or Counselor	37.3	31.2	23.7
Attractive Religious Affiliation or Program	35.3	32.4	26.5
National Rankings*	29.4	28.2	26.5
Legacy	23.1	19.9	16.2

\* Not statistically significant at the 95% confidence level.

### Methodological Appendix

The target population for the survey was all West Virginia students who were high school seniors in spring 2010. Respondents were selected through a random, stratified sample. High schools were the primary sample unit, with the sampling frame constructed from a list of all high schools (n=117) maintained by the West Virginia Department of Education. High schools were stratified by the size of the senior class as well as the three U.S. Congressional districts in West Virginia in order to make the sample as representative as possible. High schools were assigned to Congressional districts based on the address of their main administrative office. To stratify by senior class size, each high school was assigned to a quartile. The lowest quartile had fewer than 86 students in the senior class, followed by 86 to 137, 138 to 197, and 197 or more. Data on senior class size were obtained from the U.S. Department of Education's Common Core of Data for 2009.

In addition, all West Virginia GEAR UP schools (n=18) as well as their comparison schools (n=18) were sampled. Seniors at GEAR UP schools were sampled after receiving GEAR UP services for one full school year. GEAR UP schools are those that participate in the GEAR UP program administered by the West Virginia Higher Education Policy Commission. Comparison schools for GEAR UP were selected prior to survey administration using Euclidean distance similarity measures. The percentage of tenth-grade students who achieved proficient levels in reading and math in 2008 WESTEST were used as matching factors (except Lincoln County High School, for which the 2009 data were used). Other key school level indicators (e.g., school size, graduation rates, percentage of low-income students, and proportion minority students) were also generally matched for each pair of schools.

Sampling was implemented via PROC SURVEYSELECT in SAS version 9.1. In total, 61 schools—including all GEAR UP and comparison schools were selected to receive the survey. The survey was administered via high school guidance counselors who were asked to distribute hard copies of the instrument during the homeroom period. To elicit a high response rate, three follow-up contacts were made with guidance counselors and principals. In total, 47 of the 61 (about 77%) high schools had respondents. Of the 36 GEAR UP and comparison schools sampled, 13 GEAR UP schools (about 72%) and 14 comparison schools (about 77%) participated in the survey. See Appendix A and Appendix B for a list of participating and non-participating schools. Overall, 4,592 students responded to the survey, representing about 25 percent of the target population (n=18,472) and 51 percent of the sample (n=9,071).

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**Appendix A: List of Participating High Schools**

GEAR UP Schools	GEAR UP Comparable Schools	All Other WV Schools
Burch High School	Chapmanville Regional High School	Bridgeport High School
Clay County High School	East Hardy High School	Buckhannon Upshur High School
Gilbert High School	Greenbrier East High School	Capital High School
Iaeger High School	Independence High School	Fayetteville High School
Lincoln County High School	John Marshall High School	Gilmer County High School
Matewan High School	Man Senior High School	Grafton High School
Mount View High School	Poca High School	Hundred High School
Scott High School	Richwood High School	Lewis County High School
Sherman High School	Riverside High School	Liberty High School
Westside High School	Saint Albans High School	Lincoln High School
Williamson High School	Sissonville High School	Magnolia High School
Wirt County High School	Tolsia High School	Martinsburg High School
Wyoming County East High School	Tyler Consolidated High School	Morgantown High School
	Valley High School	Musselman High School
		Nicholas County High School
		Oak Hill High School
		Parkersburg High School
		Preston High School
		Wayne High School
		Weir High School

**Appendix B: List of Non-Participating High Schools**

GEAR UP Schools	GEAR UP Comparable Schools	All Other WV Schools
Big Creek High School	Greenbrier West High School	Hannan High School
Roane County High School	Mount Hope High School	Herbert Hoover High School
Summers County High School	Midland Trail High School	Paw Paw High School
Tug Valley High School	Point Pleasant Junior/Senior	Van Junior/Senior High School
Webster County High School	High School	Woodrow Wilson High School

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