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Core Research Program: Results from the First Wave of the Base Year Data Collection

GEAR UP COLLEGE AND CAREER READINESS
EVALUATION CONSORTIUM

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ACT[®]

The ACT logo consists of the letters 'ACT' in a bold, blue, sans-serif font. A red swoosh underline is positioned under the letter 'A'. A registered trademark symbol (®) is located to the upper right of the letter 'T'.A decorative graphic on the left side of the page, composed of concentric, overlapping circular patterns of fine lines in shades of green, yellow, and orange, resembling a stylized sunburst or a complex geometric design.

As part of its contribution to CCREC, ACT is leading the core research program, a longitudinal study of the effectiveness of fourteen GEAR UP state grants on the academic achievement, college going, and college retention of low-income and other at-risk students.

Introduction

Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) is a federal discretionary grant program intended to increase the number of low-income students who are prepared to enter and succeed in postsecondary education.¹ The program provides six- or seven-year grants to states and local partnerships to provide services at middle schools and high schools that educate primarily low-income students.² GEAR UP has three broad objectives:

- Increase academic performance and preparation for postsecondary education.
- Increase the rate of high school graduation and participation in postsecondary education.
- Increase educational expectations and student and family knowledge of postsecondary educational options, preparation, and financing.

Fourteen states that received GEAR UP grants in either the 2011 or 2012 award cycles have partnered with the National Council for Community and Education Partnerships (NCCEP) and ACT to form a research consortium known as the College and Career Readiness Evaluation Consortium (CCREC) that focuses on the effectiveness of their GEAR UP programs in meeting these three objectives.³ As part of its contribution to the consortium, ACT is leading two long-term research efforts on behalf of CCREC:⁴

1. The core research program is a longitudinal study of the effectiveness of GEAR UP state grants on the academic achievement, college going, and college retention of low-income and

other at-risk students who are eligible to receive grant-funded services. This research program will follow CCREC students and a matched comparison group of nonparticipants over time using assessment data from ACT Explore®, ACT Plan® or ACT Aspire®, and The ACT® and college enrollment data from the National Student Clearinghouse (NSC) to examine differences in the academic growth and educational outcomes of these two groups.

2. The supplemental research program, addressed in more detail in other reports prepared for CCREC, is a longitudinal study of the impact of good educational practices delivered through two commonly offered GEAR UP-funded services, tutoring and mentoring, on the academic achievement and noncognitive outcomes (e.g., academic self-confidence and commitment to school) of GEAR UP participants. Unlike the core research program, the supplemental research program is not intended to address the causal effect of GEAR UP. Instead, the supplemental research program intends to help consortium member states and other GEAR UP programs better understand the relationships between the structure and quality of services commonly offered by GEAR UP programs and the relationships among service structure and quality, academic achievement, and noncognitive outcomes.

This report focuses on the core research program, beginning with an overview of it. Next, we provide descriptive data and narrative discussions on student background characteristics, baseline academic achievement, educational plans,

and self-reported needs for the study and comparison samples. The report concludes by identifying the future direction of the CCREC core research and supplemental research programs.

Core Research Program

This is the general causal question of interest to the core research program: Are students who are eligible to receive services funded by GEAR UP state grants better off educationally than they would have been in absence of that funding? This broad question will be addressed by comparing the academic growth, college-going rates, and college retention rates between a treatment group of students who were eligible to receive GEAR UP-funded services in the fourteen CCREC member states and a matched comparison (“control”) group of students who did not receive GEAR UP-funded services.

Base Year Primary Research Questions

The research questions for the base year are *not* intended to address the causal effect of GEAR UP. Rather, they are asked for the purposes of establishing a baseline for estimating the effect of GEAR UP and informing the selection of a matched comparison group for GEAR UP participants. The five questions are:

1. Among eighth graders who took ACT Explore during the 2012–13 academic year, to what extent do CCREC students and non-CCREC students differ with regard to their background characteristics?
2. To what extent do CCREC students and non-CCREC students differ in their academic achievement levels in the areas of English, mathematics, reading, and science as measured by ACT Explore?
3. To what extent do CCREC students and non-CCREC students differ in being on track for

readiness, as measured by their attainment of ACT Explore Benchmarks in the areas of English, mathematics, reading, and science?

4. To what extent do CCREC students and non-CCREC students differ in their high school and post-high school plans (e.g., not planning to complete high school, career/technical school, community college, four-year university), as self-reported on ACT Explore?
5. To what extent do CCREC students and non-CCREC students differ with regard to their self-reported educational planning and academic skill needs?

Data Collection and Sample

Data Collection

ACT will collect all data supporting the core research program from one of four assessments (i.e., ACT Explore, ACT Plan/ACT Aspire, and The ACT) or from its partnership with NSC.⁵ Over the course of this longitudinal study, five separate data collections will occur. The first collection will take place in the base year in eighth grade (ACT Explore), and there will be four follow-up data collections: in tenth grade (ACT Plan or ACT Aspire), in eleventh and/or twelfth grade (The ACT), in the first year of college (NSC), and in the second year of college (NSC).⁶

Among the CCREC members states, nine were awarded grants in FY2011 and five were awarded grants in FY2012 (see appendix table A1). Due to these different funding years for member states, the core research program follows, longitudinally, two waves of students. This report presents findings on those students from the first data collection wave (i.e., 2012–13) of the base (eighth-grade) year.⁷

CCREC Study Sample

The sample for the core research program comprises those students in the fourteen CCREC member states who are eligible to receive GEAR UP services prior to taking ACT Explore in the eighth grade. Ten CCREC member states are administering either a cohort-only program model or a blend of cohort and priority student program models (see appendix table A1). Within these states, only the core research program follows those students initially assigned to GEAR UP under the cohort model. Four states are administering a priority-only program model, but assignment of students to GEAR UP services under these models varies across the states. Given the focus of the core research program on the academic growth, educational plans, and eventual college enrollment and retention of students assigned to receive GEAR UP services, priority students are incorporated into the longitudinal design by similarly following a “cohort” of priority students in these states who were assigned to receive GEAR UP services before taking ACT Explore in eighth grade. Although this approach excludes

a number of priority students from the study, the focus of the core research program is on understanding the benefits of GEAR UP on those students who were eligible to receive the services over the full course of the grant (grades 7–12).

The first data collection wave for the base year of the study took place during the administration of ACT Explore in the 2012–13 academic year. During that academic year, 13,659 eighth graders who were eligible to receive GEAR UP services across 156 schools in eight states took ACT Explore (see table 1). Roughly three out of four of these students were from Kentucky, Oklahoma, or Washington.

Comparison Groups

Non-CCREC GEAR UP Students

To identify nonconsortium students who were potentially receiving services funded by a GEAR UP grant, the consortium requested a data file from the US Department of Education that provided a list of schools receiving GEAR UP services as reported by GEAR UP state

Table 1. Number of CCREC Schools and Students Identified in ACT Explore Research Data File

State	Schools	Students	% of total students
Idaho	28	2,237	16.4
Kentucky	30	3,676	26.9
Minnesota	6	372	2.7
Montana	18	763	5.6
Oklahoma	24	2,989	21.9
Utah	6	114	0.8
Washington	30	3,191	23.4
Wisconsin	14	317	2.3
Total	156	13,659	100.0

and partnership grantees as part of their 2013 Annual Performance Report submission. After removing CCREC schools from this list, ACT matched the remaining schools against ACT Explore test records for the 2012–13 school year to identify non-CCREC GEAR UP students.

Non-GEAR UP Students

All ACT Explore-tested students not identified as being served by CCREC or Non-CCREC GEAR UP were considered Non-GEAR UP students for the purposes of this report. Non-GEAR UP students were subdivided into two groups by the share of students at the school who were eligible to receive a free or reduced-price lunch. In this report, students attending a non-GEAR UP school with a free and reduced-price lunch rate of 50% or higher are referred to as non-GEAR UP lower-income students. Students attending a non-GEAR UP school with a free and reduced-price lunch rate of less than 50% are referred to as non-GEAR UP higher-income students.

Distribution of Students across Groups

CCREC GEAR UP students ($N=13,659$) made up about 1% of all ACT Explore-tested students during the 2012–13 academic year (see table 2). Students receiving services through non-CCREC GEAR UP grants ($N=60,093$) comprised another 6% of all ACT Explore-tested students. Non-GEAR UP lower-income students ($N=464,724$) made up 46% of ACT Explore-tested students, whereas non-GEAR UP higher-income students ($N=469,103$) comprised 47% of all ACT Explore-tested students.

Base Year Findings

Background Characteristics

The ACT Explore data include information about students' demographic, socioeconomic, and educational backgrounds. This report section compares CCREC and non-CCREC students' background characteristics.

Gender

There were slightly more female (51%) than male (49%) CCREC students among those taking ACT Explore. Within the three comparison groups, however, there was a slightly greater share of students reporting their gender as male (51%) than as female (49%).

Race/Ethnicity

Compared to students served by other GEAR UP grants and non-GEAR UP lower-income students, a larger share of CCREC students reported they were American Indian, White, or two or more races; a smaller share were African American; and a similar or smaller share were Hispanic (see table 3). Compared to non-GEAR UP higher-income students, a larger share of CCREC students were American Indian, Hispanic, or of two or more races, and a smaller share were African American, Asian, or White. These differences in the racial/ethnic composition of CCREC GEAR UP students and students in the other comparison groups are driven to some extent by the different regions and states where the students reside (see table 4).

State of Residence

CCREC students from the 2012–13 ACT Explore administration year were located within eight of the fourteen member states. Non-CCREC GEAR UP students were also mostly concentrated within a few states. Roughly three out of ten Non-CCREC GEAR UP students were from Texas, with another four out of ten having resided in Michigan, Kentucky, Tennessee or Illinois (see table 4). Compared to GEAR UP students, non-GEAR UP students represented a larger number of states, and these students were more widely distributed across those states.

Parents' Education Level

A larger share of CCREC students than non-CCREC GEAR UP students had parents with some postsecondary training or education; the share of students whose parents had earned at least a bachelor's degree largely drives this difference (see figure 1). Similar shares of

Table 2. Number of States, Schools, and Students across Comparison Groups

	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
States	8	24	41	47
Schools	156	516	4,303	2,972
Students	13,659	60,093	464,724	469,103

Table 3. Percent of Students by Race/Ethnicity

Race/Ethnicity	GEAR UP		Non-GEAR UP	
	CCREC (N = 13,659)	Non-CCREC (N = 60,093)	Low income (N = 464,724)	High income (N = 469,103)
African American	6	21	23	8
American Indian	6	1	2	0.7
Asian	2	1	2	4
Hispanic	16	35	16	9
Pacific Islander	0.5	0.7	0.7	0.5
White	58	28	44	61
Two or more races	6	2	3	2
Prefer not/no response	6	12	9	15

Figure 1. Percent by Parents' Education Level

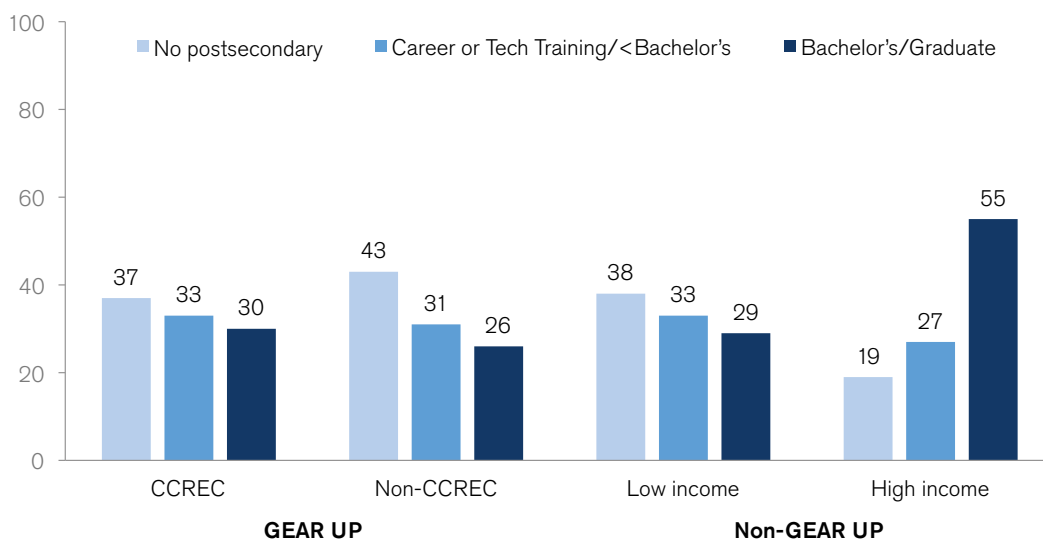


Table 4. Percent of Students by State of Residence

State	GEAR UP		Non-GEAR UP	
	CCREC (N = 13,659)	Non-CCREC (N = 60,093)	Low income (N = 464,724)	High income (N = 469,103)
Alabama			7.9	3.7
Alaska				0.1
Arizona			4.2	3.5
Arkansas		1.1	4.8	1.9
California		2.1	0.4	3.2
Colorado		1.8	1.0	2.2
Connecticut				0.0
Delaware			0.0	
Florida		0.1	0.4	0.1
Georgia			0.3	0.1
Hawaii		0.9	1.4	1.1
Idaho	16.4		0.1	0.5
Illinois		9.0	7.4	10.3
Indiana			0.9	0.8
Iowa			0.9	0.6
Kansas		1.3	1.0	0.7
Kentucky	26.9	11.6	4.8	3.7
Louisiana		3.5	7.0	2.4
Maine				0.1
Massachusetts				0.0
Michigan		13.0	7.1	11.8
Minnesota	2.7	1.0	1.0	7.4
Mississippi			0.4	0.1
Missouri			2.6	3.9
Montana	5.6			0.1
North Carolina		1.0	13.4	8.8
North Dakota			0.0	0.2
Nebraska			0.3	0.6
Nevada		0.2	0.1	0.1
New Jersey			0.6	0.3
New Mexico		0.6	0.1	
New York			0.0	0.3
Ohio			3.0	5.1
Oklahoma	21.9	4.7	4.8	2.3
Oregon			0.7	1.4
Pennsylvania		0.2	0.1	0.0
Rhode Island				0.0
South Carolina		5.9	4.7	3.7
South Dakota				0.0
Tennessee		10.3	7.8	5.3
Texas		28.3	6.2	5.6
Utah	0.8	2.0	1.2	1.5
Vermont		0.1		
Virginia			0.4	1.0
Washington	23.4	1.4	0.1	0.2
West Virginia		0.2	2.6	1.5
Wisconsin	2.3		0.7	3.7
Wyoming				0.1

non-GEAR UP lower-income students and CCREC students had parents with at least a bachelor's degree and parents with no postsecondary education or training. Unlike the other three student groups, roughly eight out of ten non-GEAR UP higher-income students had parents with some postsecondary education or training, and over half of these students had parents with at least a bachelor's degree.

Special Status Codes

Each ACT Explore answer folder includes a section for identifying the test records of students with particular characteristics for subgroup analysis. This section is completed by the test supervisor after students have finished testing and therefore indicates official school designations for the student as opposed to student self-reported information. Each special status code has its own response field, and supervisors are instructed to mark all fields that apply. Although a marked field indicates that the student has been assigned with that special status by the school, the absence of a mark in a field does not necessarily imply that the student

does not have that special status. Not all schools complete this section of the answer folder, so it is difficult to distinguish between the absence of a special status and school nonresponse.⁸ The comparative information provided in this section should therefore be interpreted with caution.

As seen in table 5, about one out of three CCREC students, non-CCREC GEAR UP students, and non-GEAR UP lower-income students were reported to receive free or reduced price lunch, compared to only 13% of non-GEAR UP higher-income students. Unlike students in the comparison groups, a far larger share of CCREC students were designated as receiving Title I math or reading services.

Academic Achievement

As previously mentioned, base year comparisons of academic achievement levels among CCREC, non-CCREC GEAR UP, and non-GEAR UP students are not intended to address the causal effect of GEAR UP. In this report they establish a baseline for estimating the effect of GEAR UP over time and inform the selection of a matched

Table 5. Percent of Students with School-Reported Special Status Codes

Status code	GEAR UP		Non-GEAR UP	
	CCREC (N = 13,659)	Non-CCREC (N = 60,093)	Low income (N = 464,724)	High income (N = 469,103)
Special Education	7	6	8	6
Limited English Proficiency	3	4	3	1
Free/Reduced Price Lunch	36	37	32	13
Title I Math	24	8	7	0.9
Title I Reading	24	8	7	1

Table 6. Adjusted Mean ACT Explore Scores

Subject test	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
English	13.7	13.0*	13.5*	15.5*
Mathematics	14.7	14.2*	14.7	16.4*
Reading	14.0	13.2*	13.8*	15.5*
Science	16.1	15.5*	15.9*	17.4*
Composite	14.7	14.1*	14.6*	16.3*

Note: Mean ACT Explore scores were adjusted by test date using OLS regression to account for academic growth over the span of the academic year.

* $p < 0.0001$ for adjusted mean difference between CCREC and non-CCREC students.

non-GEAR UP comparison group. This baseline will be used in subsequent data collection periods to estimate that causal effect.

Average ACT Explore Scores

The score scale for each ACT Explore subject test and the Composite ranges from 1 to 25. As seen in table 6, CCREC students had lower mean ACT Explore scores than non-GEAR UP higher income students. The mean differences in test scores between CCREC students and non-GEAR UP higher-income students were in the range of 1.4 to 1.8 points across the subject tests and Composite scores. Compared to non-CCREC GEAR UP students, CCREC students had higher scores, with the difference ranging from 0.5 to 0.8 points across subject tests and Composite scores. The test scores between CCREC students and non-GEAR UP lower-income students were the most comparable, although CCREC students had a 0.1- to 0.2-point advantage across all but the Mathematics Test score.

ACT Explore Readiness Benchmarks

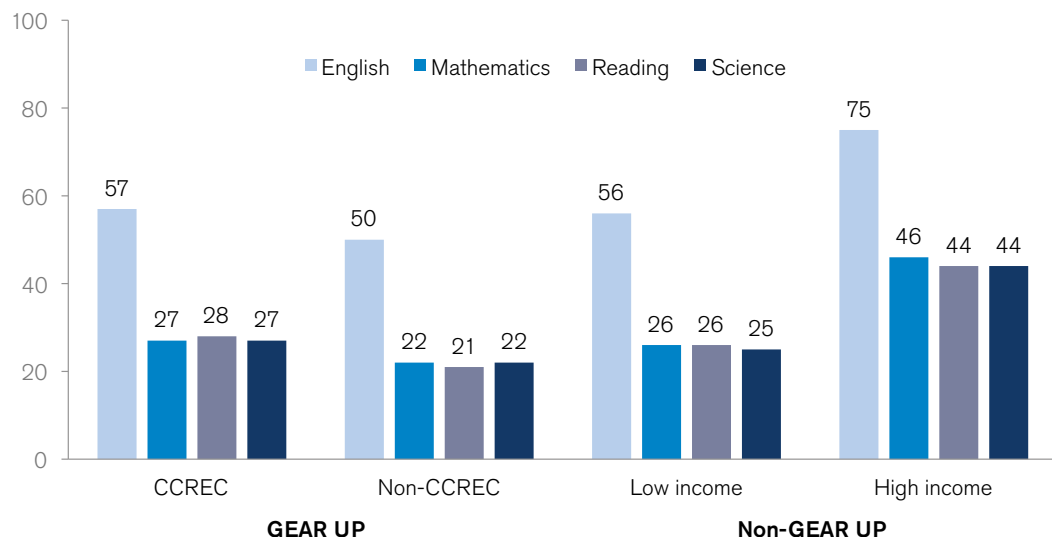
The College Readiness Benchmarks for ACT Explore were developed using large data sets

of students who had taken ACT Explore, ACT Plan, and The ACT. First, the probabilities at each ACT Explore and ACT Plan test score point associated with meeting the appropriate Benchmark for The ACT were estimated using logistic regression. Then, the ACT Explore scores in English, Mathematics, Reading, and Science that corresponded most closely to a 50% probability of success at meeting each of the four Benchmarks established for The ACT were selected. The Benchmarks for ACT Explore, as updated in 2013, are a score of 13 for English, 17 for Mathematics, 16 for Reading, and 18 for Science.

Similar shares of CCREC and non-GEAR UP lower-income students met or exceeded the ACT Explore Benchmarks (see figure 2). Compared to these two student groups, smaller percentages of non-CCREC GEAR UP students met or exceeded the ACT Explore Benchmarks. The non-GEAR UP higher-income group had the largest shares of students who met or exceeded the ACT Explore Benchmarks.

Over 60% of students attending CCREC, non-CCREC GEAR UP, or non-GEAR UP lower-income schools met one or fewer ACT

Figure 2. Percent Meeting or Exceeding ACT Explore Subject Area Benchmarks



Explore Benchmarks (see figure 3). Among students attending non-GEAR UP higher-income schools, only 41% of students met one or fewer ACT Explore Benchmarks. Between 19% and 26% of CCREC, non-CCREC GEAR UP, and non-GEAR UP lower-income students met or exceeded three or more ACT Explore Benchmarks, compared to 44% of non-GEAR UP higher-income students who did so.

Self-Reported Grades

Students may self-report their academic performance in each subject area over the previous and current academic year at the time that they take ACT Explore. Table 7 provides the percentage of students in CCREC and

each comparison group who self-reported earning mostly As or Bs in each of the core subject areas. As seen in the table, a slightly larger share of CCREC students than either non-CCREC GEAR UP students or non-GEAR UP lower-income students reported earning mostly As or Bs in each subject area. Compared to students in these three groups, a noticeably larger share of non-GEAR UP higher-income students reported earning mostly As or Bs in each subject area. Fifty percent or fewer GEAR UP students and non-GEAR UP lower-income students reported earning As or Bs in all four core subject areas, compared to three out of five non-GEAR UP higher-income students.

Figure 3. Percent Meeting or Exceeding Number of ACT Explore Benchmarks

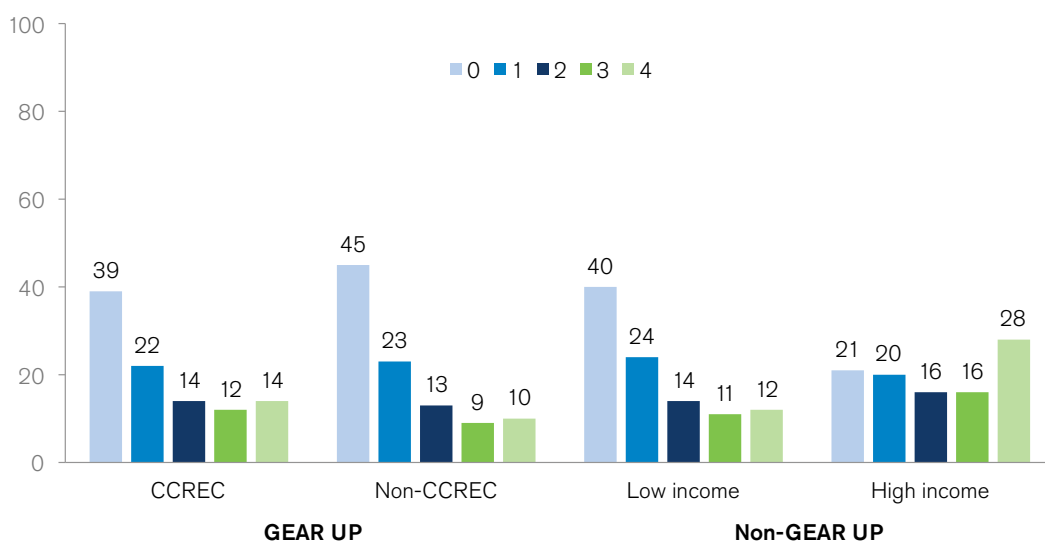


Table 7. Percent of Students Who Reported Earning As or Bs by Subject Area

Subject area	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
English	76	73	74	83
Mathematics	70	67	68	78
Social Studies	75	71	72	82
Natural Sciences	74	70	70	80
All Four	50	43	45	62

Figure 4. Percent Having Taken One or More Accelerated or Honors Courses

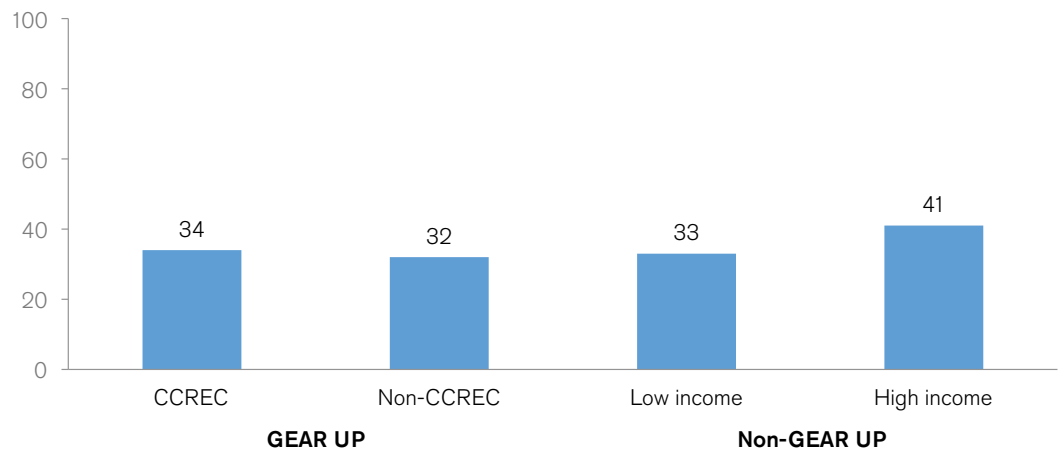
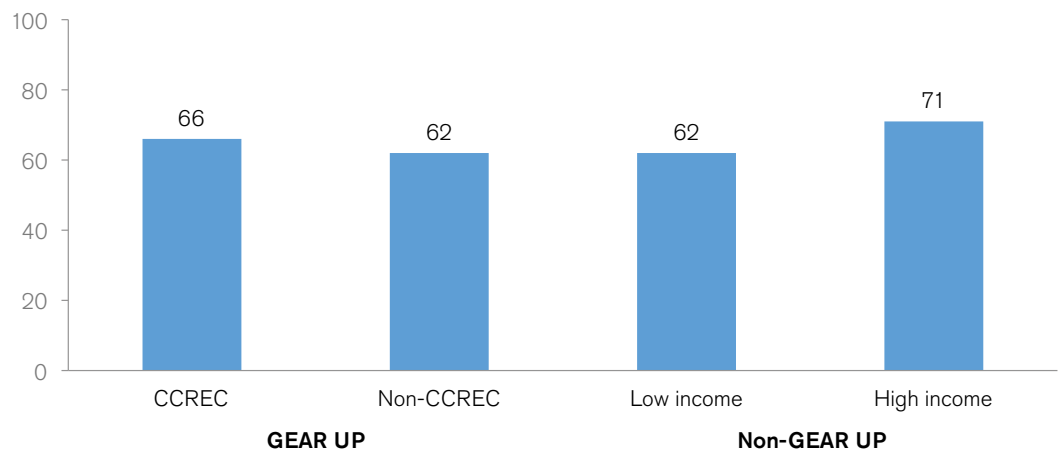


Figure 5. Percent Planning to Pursue a College Preparatory Curriculum in High School



Accelerated/Honors Course Taking

Students may indicate at the time they complete ACT Explore whether or not they have taken accelerated or honors courses. Roughly one out of three CCREC, non-CCREC GEAR UP, or non-GEAR UP lower-income students reported participating in one or more accelerated or honors courses compared to two out of five non-GEAR UP higher income students (see figure 4). This difference in the share of students who reported participating in accelerated or honors courses may be a reflection of differences among these groups regarding their prior or current academic achievement levels, as seen in other sections of this report. It may also reflect differences among these groups in the

accelerated or honors course offerings that are available within their schools.

Educational Plans

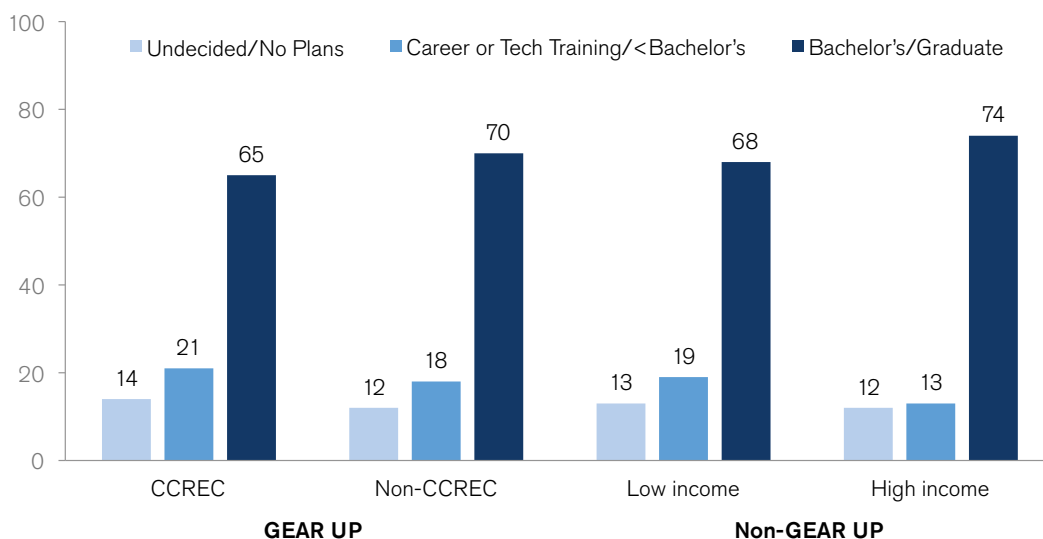
College-Preparatory Coursework

Two out of three ACT Explore-tested CCREC eighth graders indicated at the time they took the assessment that they planned to pursue a college-preparatory program of courses during high school (see figure 5). A slightly smaller percentage (62%) of non-CCREC GEAR UP students and non-GEAR UP lower-income students were planning to pursue such coursework. Seven out of ten non-GEAR UP higher-income students planned to pursue a college-preparatory curriculum.

Table 8. Percent of Students Planning to Take the ACT-Recommended Years of Coursework in Specific Subjects

Subject (Years)	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
English (4)	49	46	42	50
Mathematics (3+)	61	58	55	67
Social Studies (3+)	48	47	43	54
Natural Sciences (3+)	52	53	49	59
ACT-Recommended Core	33	33	30	38

Figure 6. Percent by Educational Plans After High School



ACT-Recommended Core Curriculum

The core curriculum ACT recommends consists of four years of English and three years each of mathematics, science, and social studies. The benefits to students of taking the right number of core preparatory courses in high school have been well documented by ACT research.

As compared to non-CCREC GEAR UP students and non-GEAR UP lower-income students, a greater percentage of CCREC students planned to take the ACT-recommended years of coursework in each of the core subject areas except Natural Sciences (see table 8). With the exception of the planned years of English coursework, a larger share of non-GEAR UP higher-income students than other students

were planning to take the recommended number of years of coursework. Only roughly one out of three CCREC eighth graders planned to complete the ACT-recommended core curriculum. This share is comparable to that of non-CCREC GEAR UP students and is slightly higher than that of non-GEAR UP lower-income students.

Post-High School Plans

At the time they took ACT Explore, roughly one out of eight students in all four comparison groups either had no education or other training planned for after high school or were undecided about their future educational plans (see figure 6). Among CCREC students, non-CCREC GEAR UP students, and non-GEAR UP lower-income students, more than three out of

five students planned to obtain a bachelor's or graduate degree, whereas about one out of five planned to obtain some education or training below the bachelor's degree. Compared to students in these three groups, about three out of four non-GEAR UP higher-income students planned to obtain a bachelor's or graduate degree, and one out of eight planned to obtain some education or training below the bachelor's degree.

Self-Reported Needs

ACT Explore includes a section where students can indicate areas where they feel they need additional help. Table 9 shows the percentage of students in each of the four groups that indicated that they needed assistance with various educational plans and academic skills. As seen in the table, students' self-reported needs do not vary to a great extent by student group despite there being evident differences in the academic achievement levels of students across these groups. Despite the student group and the specific need in question, the majority of students responding to the needs assessment felt that they did not need help. Taken together, these findings suggest that a number of students who are struggling academically do not feel they need assistance to improve upon their academic skills.

Discussion

ACT's longitudinal CCREC core research program will compare the academic growth, college-going rates, and college retention rates between a treatment group of students who were eligible to receive GEAR UP-funded services in the fourteen CCREC member states and a matched comparison ("control") group of students who did not receive GEAR UP-funded services. Through this nearly decade-long study, we seek to provide a reasonable response to the general causal question of interest to the core research program: Are students who are eligible to receive services funded by GEAR UP state grants better off educationally than they would have been in absence of that funding?

This report provides baseline information about the students eligible to receive GEAR UP services through eight of the fourteen CCREC state GEAR UP grants and about students in a number of key comparison groups. Base year comparisons of academic achievement levels among CCREC, non-CCREC GEAR UP, and non-GEAR UP students are not intended to address the causal effect of GEAR UP. Rather, they establish a baseline for estimating the effect of GEAR UP over time and inform the selection

Table 9. Percent of Students Indicating that They Need Assistance

Need	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
Exploring Options After High School	35	36	36	36
Improving Writing Skills	30	30	30	28
Improving Reading Speed or Comprehension	25	27	26	23
Improving Study Skills	33	34	37	38
Improving Mathematical Skills	37	39	38	32
Improving Computer Skills	18	18	18	18
Improving Public Speaking Skills	37	33	35	36

of a matched non-GEAR UP comparison group in order to allow us to estimate the causal effect in subsequent data collection periods.

Baseline information about eligible students from the remaining six CCREC state GEAR UP grants will be included in a similar report in 2015. Together, the reports will provide the baseline information necessary for performing a longitudinal study on the relationship between academic outcomes and GEAR UP programmatic eligibility.

Within this report, we explored a number of comparisons among CCREC and non-CCREC eighth graders who took ACT Explore during the 2012–13 academic year with regard to their background characteristics, academic achievement and being on track for college readiness, educational plans, and academic skill needs. A summary of the baseline observations follows.

Background Characteristics

Generally, the CCREC GEAR UP study sample was most like the non-GEAR UP low-income comparison group on most background characteristics measures. There were slightly larger shares of female (2 percentage points [ppts]), American Indian (4 ppts), White (14 ppts), or self-identified two or more race/ethnicity (3 ppts) CCREC students in the CCREC GEAR UP group than in the non-GEAR UP lower-income comparison group. Nearly identical shares of CCREC students' parents and non-GEAR UP low-income students' parents had similar levels of formal education.

The CCREC student group was the most racially/ethnically heterogeneous, though it was still majority White, while the non-GEAR UP high-income comparison group was the most racially/ethnically homogeneous. Most CCREC students were from Idaho, Kentucky, Oklahoma, and Washington, while students from the three comparison groups were substantially more geographically dispersed.

Academic Achievement and Being On Track for College Readiness

As with background characteristics, the ACT Explore scores of the CCREC GEAR UP study sample were most like the non-GEAR UP low-income comparison group. Similar shares of CCREC and non-GEAR UP lower-income students met or exceeded the ACT Explore Benchmarks. ACT Explore scores and Benchmark attainment rates were highest for the non-GEAR UP higher-income group, as were their levels of self-reported As and Bs and participation in accelerated/honors courses.

Educational Plans

The educational plans of CCREC eighth graders fell between those of the comparison groups. CCREC GEAR UP students were less likely than non-GEAR UP higher-income students to plan to pursue a college-preparatory program of courses during high school or to plan to take the ACT-recommended years of coursework in each of the core subject areas, but they were more likely than non-CCREC GEAR UP students and non-GEAR UP lower-income students to do so. Interestingly, the CCREC GEAR UP group was slightly less likely than were students in the comparison groups to have planned to obtain a bachelor's or graduate degree. A greater share of CCREC students were undecided or had no post-high school plans than did those from the comparison groups.

Academic Skill Needs

Students' self-reported needs did not vary to a great extent by student group despite there being differences in the academic achievement levels among these groups. The majority of students felt that they did not need help, regardless of group. These findings suggest that a number of students who are struggling academically do not feel that they need assistance to improve upon their academic skills.

In summary, the CCREC GEAR UP group was most like the non-GEAR UP low-income group in terms of background characteristics and measures of academic achievement and college readiness. Therefore, the non-GEAR UP lower-income group will be the comparison group used in subsequent ACT-authored CCREC reports for this study. CCREC GEAR UP students were slightly more likely to plan to take a college-preparatory program of courses or the ACT-recommended years of coursework in high school than the non-GEAR UP lower-income group, but they were less likely than the non-GEAR UP higher-income group to do the same. CCREC GEAR UP students were slightly less likely to plan to pursue a bachelor's or graduate degree and slightly more likely to have no post-high school plans than students in the comparison groups. Students in all groups indicated similar levels of academic and educational planning needs.

Future ACT Reports on CCREC Core and Supplemental Research Programs

This report on the first wave of base year data collection is the first ACT-authored report on the core research program for the College and Career Readiness Evaluation Consortium. Upcoming reports and briefs for the core research program include:

- First wave base year
 - ~ A summary report of the first wave base year data collection (this report)

- ~ Several one-page data briefs on the first wave base year data collection
- Second wave base year
 - ~ Second wave base year data collection report (much like this report)
 - ~ Summary of the second wave report
 - ~ Several one-page data briefs on the second wave base year data collection
- Combined waves base year
 - ~ A third base year data collection report that combines the base year data collection waves
 - ~ Summary of the combined waves report
 - ~ Several one-page data briefs on the base year data collection
- First follow-up year
 - ~ Follow-up report that will present findings on school intermediate outcomes
 - ~ Summary of the first follow-up report
 - ~ Several one-page data briefs on the first follow-up

Upcoming reports and briefs for the supplemental research program include:

- Base year data collection report
- Summary of the base year data collection report
- Several one-page data briefs on the base year data collection ■

Appendix

Table A1. CCREC Member States

State	FY funding	Model	Data collection wave	
			1	2
Arizona	2012	Cohort		✓
Idaho	2011	Cohort	✓	✓
Kentucky	2011	Cohort	✓	✓
Minnesota	2011	Hybrid	✓	✓
Montana	2011	Hybrid	✓	✓
Nevada	2012	Cohort		✓
New Mexico	2012	Priority		✓
North Carolina	2012	Hybrid		✓
Oklahoma	2011	Priority	✓	✓
Tennessee	2012	Hybrid		✓
Utah	2011	Priority	✓	✓
Washington	2011	Hybrid	✓	
Wisconsin	2011	Priority	✓	
Wyoming	2011	Priority	✓*	

* Although Wyoming received its grant during the 2011 award cycle, the state will not test students with ACT Explore until their ninth-grade year (i.e., 2013–14).

Table A2. Background Characteristics of CCREC and Comparison Groups

Characteristics	GEAR UP		Non-GEAR UP	
	CCREC	Non-CCREC	Low income	High income
<i>N</i> counts				
States	8	24	41	47
Schools	156	516	4,303	2,972
Students	13,659	60,093	464,724	469,103
Race/Ethnicity	(%)			
African American	6	21	23	8
American Indian	6	1	2	0.7
Asian	2	1	2	4
Hispanic	16	35	16	9
Pacific Islander	0.5	0.7	0.7	0.5
White	58	28	44	61
Two or more races	6	2	3	2
Prefer not/no response	6	12	9	15
Status Code	(%)			
Special Education	7	6	8	6
Limited English Proficiency	3	4	3	1
Free/Reduced Price Lunch	36	37	32	13
Title I Math	24	8	7	0.9
Title I Reading	24	8	7	1

Notes

- 1 “Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP),” US Department of Education, last modified September 29, 2014, <http://www2.ed.gov/programs/gearup/index.html>.
- 2 More information about GEAR UP can be found on the US Department of Education’s Frequently Asked Questions page on GEAR UP, <http://www2.ed.gov/programs/gearup/faq.html#question1>.
- 3 The fourteen states are Arizona, Idaho, Kentucky, Minnesota, Montana, Nevada, New Mexico, North Carolina, Oklahoma, Tennessee, Utah, Washington, Wisconsin, and Wyoming. More information about the College and Career Readiness Evaluation Consortium can be found at the website of the National Council for Community and Education Partnership, <http://www.edpartnerships.org/college-and-career-readiness-evaluation-consortium-ccrec>.
- 4 Ty Cruce, *ACT-CCREC Core Research Program: Study Questions and Design* (Iowa City, IA: ACT, 2015).
- 5 More information about the data collection instruments used for the core research program can be found in the technical manuals of each associated assessment: ACT, *ACT Explore Technical Manual* (Iowa City, IA: ACT, 2013), <http://www.act.org/explore/pdf/TechManual.pdf>; ACT, *ACT Plan Technical Manual* (Iowa City, IA: ACT, 2013), <http://www.act.org/plan/pdf/PlanTechnicalManual.pdf>; ACT, *The ACT Technical Manual* (Iowa City, IA: ACT, 2014), http://www.act.org/aap/pdf/ACT_Technical_Manual.pdf.
- 6 Although data collection for the ACT core research program ends after the second year of college, a separate consortium-led evaluation will follow students through college completion.
- 7 Although Wyoming received its grant during the 2011 award cycle, the state will not test students with ACT Explore until their ninth-grade year (i.e., 2013–14). Results from Wyoming will be presented with those of the states participating in the second wave of the data collection.
- 8 Thirty-nine percent of CCREC schools, 32% of non-CCREC GEAR UP schools, 32% of non-GEAR UP lower-income schools, and 41% of non-GEAR UP higher-income schools have no reported information in the special status code section of the ACT Explore answer folder.

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