

Texas GEAR UP: Beyond Grad

Biennial Impact Report

Evaluation of Years 1 and 2

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Executive Summary

The Texas Education Agency’s (TEA) Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP): Beyond Grad grant program (referred to as “GEAR UP” in this report) serves approximately 10,000 students from six Texas independent school districts (ISDs), including 12 middle schools and high schools in rural communities in West Texas, Southeast Texas, and the Coastal Bend.¹

GEAR UP provides targeted services to a grade-specific **primary cohort** of students who were in Grade 7 during the 2018–19 school year and expected to graduate at the end of Grade 12 in the 2023–24 school year (i.e., the **class of 2024**) through their first year of postsecondary education. Services aimed at both the middle and high school level included targeted academic tutoring, teacher professional development to increase academic rigor, individualized college and career counseling, and workshops/events aimed at students and parents. Middle school students had access to a college and career exploration course and additional support for Algebra I completion in Grade 8.

GEAR UP also provides basic services to a **priority cohort** of students consisting of all other students in Grade 9–12 attending participating high schools in the grantee districts during each year of the seven-year grant (i.e., from school years 2018–19 to 2024–25).

Evaluating GEAR UP and Purpose of this Report

This report presents findings from the impact evaluation during the first two program years—school years 2018–19 (Year 1) and 2019–20 (Year 2) and focuses on the following evaluation questions:

- What outcomes are associated with participation in GEAR UP? How do these differ by district?
- How do trends in outcomes for the class of 2024 GEAR UP cohort students differ in comparison to the state average?
- How do trends in outcomes for the class of 2024 GEAR UP cohort students differ in comparison to the students in a matched comparison group created through propensity score matching (PSM)?
- How do trends in outcomes for the class of 2024 students differ from students who attended the same schools one year prior to program implementation (i.e., the class of 2023)?
- How do trajectories of outcomes differ based on the length of time students attended GEAR UP schools? For example, do students who participate in GEAR UP in all grades differ compared to students who enter GEAR UP schools at a later grade level?

¹ The school districts participating in TEA’s GEAR UP grant include Cleveland ISD, Culberson County-Allamore ISD, Education Service Center 19 with San Elizario ISD, Mathis ISD, Sheldon ISD, and Sinton ISD.

The external evaluation is a longitudinal design that spans seven years and follows a cohort model. There are five key cohort groups in the study:

- The **class of 2024 GEAR UP cohort** includes students at the six GEAR UP districts to whom services were provided.
- The **matched comparison cohort** consists of a statistically matched sample of students who are attending similar districts that did not participate in GEAR UP. These students are also from the class of 2024.
- The **retrospective cohort** includes students who attended GEAR UP districts one year prior to the start of the grant (i.e., the class of 2023).
- The two **follow-on cohorts** include students who attended the GEAR UP districts one and two years after implementation (although listed here for illustrative purposes, students in these follow-on cohorts are not included in the analyses in this report). These students are from the classes of 2025 and 2026.

This report focuses on Year 2, when the class of 2024 was in Grade 8. Findings regarding outcomes in the class of 2024 GEAR UP cohort are compared to those from the matched comparison and retrospective cohorts. The number of years in the class of 2024 GEAR UP cohort is also analyzed as a predictive factor for better outcomes.

The outcomes examined are limited to Algebra I completion by the end of Grade 8 and promotion from Grade 8 to Grade 9. It was intended that this evaluation would also examine results on the Grade 8 State of Texas Assessments of Academic Readiness (STAAR) assessment in mathematics, reading, and science. However, due to the Coronavirus Disease 2019 (COVID-19) pandemic, STAAR was not administered in the spring of 2020, limiting the scope of this report.

Summary of Findings

Algebra I Completion

A primary objective for GEAR UP in the middle school years was to increase Algebra I completion by the end of Grade 8. Project Objective 1.1 sets the target for Algebra I completion by the end of Grade 8 at 30%. GEAR UP districts made progress toward this goal, increasing the percentage of students completing Algebra I from 18% (class of 2023) to 22% (class of 2024). Statistical models indicated that students who participated in GEAR UP were almost twice as likely as students in the retrospective cohort to complete Algebra I, once covariates like district, prior achievement on STAAR, and student characteristics were included in the models. Additionally, students who participated in the program for two years completed Algebra I at twice the rate as students who participated only one year. However, when examining the results comparing a sample of the class of 2024 GEAR UP cohort students to a PSM-matched comparison sample, there were no differences between groups in the multilevel models.

On-Time Promotion

On-time promotion rates from Grade 8 to Grade 9 were almost 100% for the class of 2024 GEAR UP cohort, exceeding the state average of 99.5%. These rates were similar for students

in the matched comparison and retrospective cohorts. With rates near 100% for all groups, statistical analyses could not be conducted.

Limitations

There were several important limitations in the study.

- **Availability and reliability of outcome data were affected by the COVID-19 pandemic.** Because the COVID-19 pandemic forced districts to close for a time, and then resume services virtually, the annual STAAR assessments were cancelled for 2020. The STAAR assessment provides reliable statewide information on student academic achievement, and without it, the number of outcomes that could be explored was limited. Additionally, there may be missing data among the outcomes that were able to be collected. For example, one district in the class of 2024 GEAR UP cohort did not submit middle school course completion data in spring 2020, and thus Algebra I completion data were not available.
- **The quasi-experimental study design cannot prove causality.** That is, even when analyses are carefully controlled, it is not possible to state with certainty that participation in GEAR UP actually caused any observed differences between cohorts. That is, it can only be said that GEAR UP implementation was *associated* (or not) with differences in outcomes, and not that the program *caused* the changes.
- **Prior Algebra I completion in Grade 8 was not considered in the selection of districts for the matched comparison group.** The districts for the matched comparison cohort were carefully selected to be as similar as possible to the GEAR UP districts. However, they were not selected based on prior Algebra I completion levels for Grade 8 students. It is possible that the comparison districts had higher levels of Grade 8 Algebra I completion in the years prior to the analysis due to other districtwide programs, policies, and initiatives. A large level of variation by district for this outcome was observed.
- **Some of the observed differences in Algebra I completion may have been due to differences in course offerings and not differences in student interest and capacity to succeed in the course.** In the retrospective cohort, for example, several of the districts had near 0% completion of Algebra I in prior years, which may indicate that the course was not available for students to take.
- **The study may underestimate the magnitude of effects favoring the class of 2024 GEAR UP cohort.** For purposes of this study, students were considered to be a part of the class of 2024 GEAR UP cohort if they were enrolled in a GEAR UP district during fall snapshot in Grade 8. They were not required to have received services to be part of the cohort. Additionally, all students from the retrospective cohort who were retained in Grade 8 became part of the class of 2024 GEAR UP cohort. Therefore, this study may underestimate the magnitude of effects favoring the class of 2024 GEAR UP cohort.
- **Length of time in cohort as an indicator of program impact is complicated by additional factors.** Length of time in cohort was found to be significantly positively

related to Algebra I completion in Grade 8. However, students who participated only in Grade 8 may have differed from their counterparts in important ways. For example, students who moved between Grade 7 and Grade 8 may have had family members with job changes or other disruptions that may have affected their ability to succeed in school. In addition, enrolling in Algebra I often occurs at the end of Grade 7. If students were not in a GEAR UP campus in Grade 7, they may not have received encouragement to enroll in the course.

- **This report focuses on short-term outcomes that are very specific and measurable.** Predictors used in the analyses were also measurable (e.g., gender, economic status). Other variables that may also have an impact on outcomes may not be measurable, such as student motivation and family structure. Some of the GEAR UP activities that occurred in Grades 7 and 8 may not be associated with outcomes to date but may eventually be associated with the longer-term goals of the program including enrolling in and attending a postsecondary educational institution.

Recommendations

- **Ensure an adequate number of Grade 9 students are enrolled in Algebra I and provide academic supports as needed to meet the Grade 9 Algebra I completion goal.** Improving Algebra I completion is a goal for GEAR UP through Grade 9. Project Objective 1.1 sets a target of 85% Algebra I completion by the end of Grade 9. Because the majority of districts did not meet the Grade 8 target of 30%, many districts will have some extra catching up to do to meet the goal. Districts should consider ensuring that an adequate number of students are enrolled in the course and should consider providing academic supports, such as tutoring and offering extra resources, to ensure that, once enrolled, students successfully complete Algebra I by the end of Grade 9.
- **Sustain increases in Algebra I completion in Grade 8.** Despite missing the target of 30% Algebra I completion by the end of Grade 8, there was a significant increase in completion of Algebra I in GEAR UP districts once the program began. Sustaining the practices that caused the increase could lead to lasting improvements in Algebra I completion that can be observed in future reports by analyzing the results of the follow-on cohorts.
- **Consider Algebra I completion as a factor when selecting comparison districts in future studies.** There was a large amount of variation in Algebra I completion by district for students at both the GEAR UP campuses and in the matched comparison group. Some of these differences in Algebra I completion may have been due to differences in course offerings and not differences in student interest and capacity to succeed in the course. In future studies, consider choosing comparison districts that have similar levels of Algebra I completion to intervention districts in the year prior to intervention.