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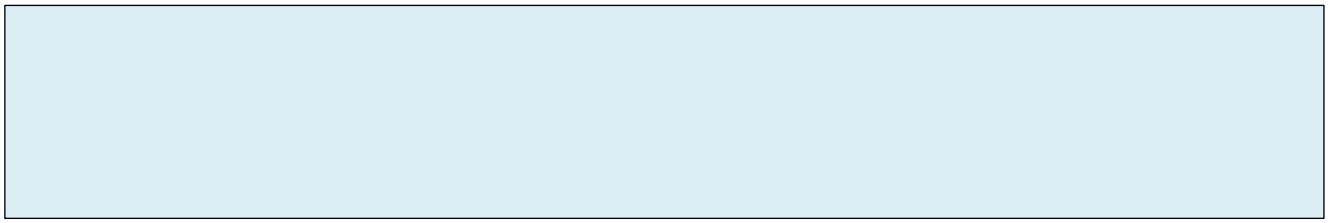
On-Time Promotion / Graduation

- Students in the cohort were less likely to be promoted on-time from Grade 9 to 10 than students in the retrospective cohort.
- Students in Texas GEAR UP SG schools had slightly higher graduation rates compared to all students at the state level, but there were no differences for graduation between the cohort groups or for length of time in cohort.



LONG TERM EFFECTS

Key Takeaway:

There were sustained increases in Grades 8 and 9 Algebra I completion for schools that implemented Texas GEAR UP SG for up to two years after program completion.

Completion rates for Algebra I increased for students in the primary cohort as compared to students in the retrospective cohort in both Grades 8 and 9, and the two follow-on cohorts had similarly high levels of Algebra I completion.

COHORT COMPARISONS

Key Takeaway:

Primary cohort students were less likely to meet five of the ten EOC standards examined than students in the retrospective cohort, and more likely to meet one of the ten standards in covariate MLM models, indicating a possible cost to the emphasis on advanced course taking. However, there were no differences between the primary and comparison cohort students in the models.

Table ES.4. STAAR EOC Performance Differences by Cohort Group

Outcome	Primary Cohort vs. Comparison		Primary Cohort vs. Retrospective	
	Group Level	Covariate Model	Group Level	Covariate Model
Algebra I Approaches Grade Level	-	-	-	Higher
Algebra I Meets Grade Level	-	-	Higher	-
English I Approaches Grade Level	-	-	Lower	Lower
English I Meets Grade Level	-	-	Lower	Lower
English II Approaches Grade Level	Higher	-	-	-

COHORT COMPARISONS

Key Takeaway:

Participation in Texas GEAR UP SG did not provide an advantage for students in terms of on-time promotion, graduation, or graduation under the Foundation High School Program with an endorsement or at the distinguished level of achievement.

Only 80% of primary cohort students were promoted from Grade 9 to Grade 10 on-time, which was substantially lower than the state average of 91%. A higher percentage of students in the primary cohort were promoted on-time from Grade 9 to Grade 10 than students in the retrospective cohort, but in the covariate MLM, once prior STAAR performance and other student characteristics were accounted for, retrospective cohort students were more likely to be promoted than primary cohort students. On the other hand, a slightly higher percentage of comparison cohort students were promoted from Grade 9 to 10 on time than students in the primary cohort, but there were no differences in the covariate MLM.

About 92% of Texas GEAR UP SG primary cohort students graduated early or on-time. This was slightly higher than the state of Texas (90%) for the class of 2018, but lower than the retrospective cohort (95%). However, there were no differences between cohorts in the MLM models for on-time graduation. A slightly lower percentage of primary cohort students (83%) graduated under the Foundation High School Program plus endorsement or at the distinguished level of achievement compared to the state (85%). However, there were no differences between the primary and comparison cohort for this outcome. Retrospective cohort students had the option to but were not required to graduate under the Foundation High School Program plus endorsement or at the distinguished level of achievement, so differences between cohorts were not assessed for this outcome. See Table ES.5.

Table ES.5. On-time Promotion/Graduation Differences by Cohort Group

Outcome	Primary Cohort vs. Comparison		Primary Cohort vs. Retrospective	
	Group Level	Covariate Model	Group Level	Covariate Model
On-time Promotion Grade 9 to 10	Lower	-	Higher	Lower
On-time Graduation	-	-	Lower	-
Graduation under the Foundation High School Program plus endorsement or at the distinguished level of achievement	-	-	n/a	n/a

Notes. Color indicates the direction of effect (blue = primary higher; orange = primary lower) and confidence in the observed results (darker shaded items, from the MLMs, indicate more reliability. "n/a" indicates that the area was not assessed, and "-" indicates no significant differences between cohort groups.

LONG-TERM EFFECTS

Differences between the primary cohort and the two follow-on cohorts for promotion from Grade 9 to Grade 10 were able to be examined for this outcome (graduation data were not available at the time of analysis)

LENGTH OF TIME IN COHORT

Students who were in the cohort for a longer period of time were more likely to have been promoted from Grade 9 to Grade 10 on time. However, there were no differences in the covariate MLMs for on time graduation or graduation under the Foundation High School Program plus endorsement or at the distinguished level of achievement.

Recommendations

- Algebra I completion was much higher for the primary cohort than the retrospective cohort, and the change was sustained for at least two subsequent years. However, there were no differences between cohort groups for Algebra II completion. If a goal of future programs is to increase advanced mathematics course taking through the end of high school, efforts should start early (as in the Texas G (n)11hf149.2 (bet6 0(n)R(gebr)- Uon.)]Plcww

Student Outcome Overview

This chapter's focus is on two categories of academic outcomes: college readiness and on-time promotion/graduation. A list of the outcomes, and how they are measured, follows. Each outcome also includes the requirements to be included in the analytic sample. Because student data is often incomplete for students who move in and out of schools, students must have been enrolled at a school and have attended enough days to be considered part of a cohort (either primary, comparison, retrospective or follow-on) to be included. See Appendix B, section B.6.5 for all cohort processing rules.

College Readiness: Advanced Course Completion

- Algebra I completion (by Grade 8) . Project Objective 1.1 states that by the end of the second year of the grant, 30% of cohort students will have completed Algebra I. Hutson et al. (2018) found Texas GEAR UP primary cohort students met this goal and were more likely than students in the comparison or retrospective cohort to have students complete Algebra I by Grade 8.[14] Because it has been measured before, this outcome will only be examined for the follow-on cohorts in this report. To be included in the analytic sample, students must have been in their cohort in Grade 8.
- Algebra I completion (by Grade 9). Project Objective 1.1 also states that by the end of the third year of the grant, 85% of primary cohort students will have completed Algebra I. Students must have been a part of their cohort in both Grade 8 and 9 to be included in the sample.
- Algebra II completion (by Grade 12). Project Goal 1 is to improve instruction and expand academic opportunities in mathematics and science, and Project Goal 4 is to provide a network of strong student support services to promote on-time promotion and academic preparation for college. One measure of progress toward this goal is the percentage of students who completed Algebra II by the end of Grade 12. Students were required to be in the GEAR UP cohort in Grades 9, 10, 11 and 12 to be part of these analyses.
- AP course completion. Project Objective 2.2 states that by the end of the project's fifth year (i.e., Grade 11) 60% of the cohort, EL students will have completed a pre-

College Readiness: STAAR End-of-Course (EOC) Achievement.

Project Objective 4.4 states that, by the end of the project's fifth year (i.e., Grade 11 for the primary cohort), 70% of students will demonstrate necessary academic preparation for college, and Project Objective 5.3 states that the percentage of students who graduate postsecondary ready in mathematics and English will meet or exceed the state average.

STAAR EOC outcomes were categorized by two achievement standards. The first standard was Approaches Grade Level standard. Students who are classified as meeting this standard passed the assessment. Passing standards changed over the course of the grant. Students taking STAAR assessments from 2012 to 2015 were held to the Level II Phase-in 1 standard. In 2015-16, a standard progression approach was applied to the performance standards to allow for annual, consistent, incremental improvements, which required 25 to 50 more scale score points to meet the passing standard (depending on the assessment).[15] Then in 2017, the standard stayed the same but was renamed Approaches Grade Level performance standard. For consisfFo0 Tw (-)Tj -0.002 T4 417.8443 558.6 Tm (The)Tj -0.013 Tc 0.013 Tw (n)Tj -0.he.9 (t (a -0.01

On-time Promotion and Graduation

- On-time promotion from Grade 9 to Grade 10. Project Objective 4.3 states that by the end of the project's third year (i.e., between Grade 9 and Grade 10), the on-time promotion rate of cohort students will exceed the state average. This outcome is based on enrollment in Grade 9 the prior year (e.g., 2014–15) and in Grade 10 the subsequent year (e.g., 2015–16). Students were required to be a part of their cohort in Grade 9 to be included in these analyses.
- On-time graduation. Project Objective 5.4 says that by the end of the project's sixth year (i.e., Grade 12), Texas GEAR UP SG cohort completion will meet or exceed the state average. This outcome is measured by examining graduation data from PEIMS. Students were required to be a part of their cohort in Grade 12 or to have graduated in a prior year to be included in these analyses.
- Graduation with the Foundation High School Program plus endorsement or the distinguished level of achievement. Project Objective 1.2 states that the percentage of students graduating on the Foundation High School Program or at the distinguished level of achievement will meet or exceed the state average. Students were required to be a part of their cohort in Grade 12 or to have graduated in a prior year to be included in these analyses.

Student Outcomes by Student Characteristics

Students within each school were grouped on the following student characteristics:[17]

- Gender
- Race/Ethnicity[18] (African American, Hispanic, White)[19]
- Economically Disadvantaged
- At-Risk at the Beginning of Year in Grade 9
- EL[20]

Each of the 18 student outcomes described in Section 2.2 is examined in the student

Females were more likely than males to complete advanced courses. They completed Algebra I by Grade 9 (74% versus 65%) and Algebra II by Grade 12 (86% versus 77%) at higher rates than males. More than half of females completed at least one AP course by Grade 12, completing 1.8 courses, on average. Only 40% of males completed at least one AP course, on average completing 1.3 courses. Double the percentage of females (4%) earned college credit through dual credit enrollment than males (2%).

A larger proportion of females achieved both the Approaches Grade Level and Meets Grade Level standards for the English I and English II EOCs. More females reached the Approaches Grade Level standard than males on Biology (85% versus 79%), and Algebra I (72% versus 64%). More males reached the Meets Grade Level standard on U.S. History than females, however (53% versus 4fTJ -0.009 I

Table 2.2. Outcomes by St... haracteristics: Gender (Female/...e)

		Percentage or ...		...ents ...alysis		Statistical Test Results	
				...ale	Male	t or F	sig
Advanced Course Completion	...Grade 9	74%	65%	2339	2400	46.24	***
	Algebra II by Grade 12	86%	77%	1727	1796	42.62	***

Section Summary

In this section, all of the academic outcomes for students were examined by student characteristic. There were several characteristics that had particularly strong differences. First, students who were classified as at-risk at the beginning of Grade 9 were much less likely to take advanced courses, meet both of the standards on STAAR EOC, and be promoted or graduate on time than students who were not at-risk. Differences between at-risk and not at-risk students were of the largest magnitude and statistical test results were the strongest (with all tests having p-values of <.001).

Two other areas that were strong predictors of underachievement were economic disadvantage (students classified as economically disadvantaged had poorer outcomes than non-disadvantaged students in all areas but on-time graduation and promotion) and EL status (students identified as EL had poorer outcomes than non-EL students in all areas but the percentage receiving dual credit and graduating under the Foundation high school program plus endorsement or at a distinguished level of achievement).

Gender and race/ethnicity were related to some outcomes, although the relationship was weaker than the first two areas. In terms of gender, females had better outcomes than males on 14 of 18 areas and poorer outcomehaTD [1.3 (unde.9 Ge3 <TD[1.07 c0.5 A(1.81 446.5 (Tc[(a] 0.81 (

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data set indicated the correlation between Grade 8 STAAR Reading and Grade 8 STAAR Mathematics was 0.57, which indicates a medium level of correspondence between the two.

As a reminder, because of student characteristic differences between the cohorts discussed in Section 1.3, the covariate MLM model should carry the most weight when interpreting findings, as it is the only model that controls for school, prior academic performance, and student characteristics. Tables for outcomes in which the cohort variable in the covariate MLM was significant are presented in the text. If the cohort variable was not significant, the relevant table is located in Appendix C. For more information on the analyses used in this report, see Appendix B.

Advanced Course Completion

The first set of outcomes explored were related to completing advanced courses. Student completion of Algebra I by Grade 9 and Algebra II by Grade 12 are first explored, followed by completion of AP courses and college credit earned via dual credit enrollment.

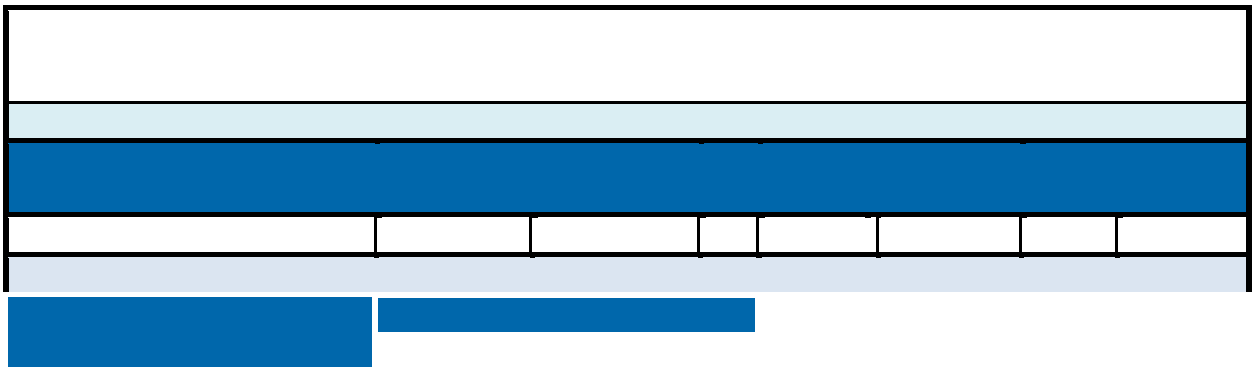
Algebra I Completion by Grade 9

Project Objective 1.1 states that, by Grade 9, at least 85% of cohort students will have completed Algebra I. Algebra I completers were defined as students who received credit for

was analyzed for this outcome. To be included in the analyses, students had to have been a part of their cohort in Grades 9, 10, 11 and 12.[24]

Comparison Cohort. There were no significant differences between the percentages of students who earned course credit at the group level. On average, 4% of students earned college credit through dual credit coursework. There was a very large difference between campuses, revealing limited offerings overall for dual credit courses.

Only one campus in the comparison cohort, School Q, had dual credit earners (approximately 17% of students at this campus). Only two campuses in the primary cohort had any dual credit completion – Schools J (14%) and L (34%). Cohort group was not a significant predictor in the MLM models (see Table C.7, Appendix C). Prior score was the only predictor of dual credit completion: students with higher Grade 8 STAAR Reading scores were more likely to earn dual credit than their students with lower Grade 8 STAAR Reading scoresTheual theic3-2 (a)1e lik0.duale(eTw 5.(2



On-Time Grade-Level Promotion and Graduation

One of the major objectives for the Texas GEAR UP SG is to increase on-time promotion (Project Goal 4) and to promote high school completion (Project Goal 5). The three outcomes in this section measure progr.6 k6e[(t)-.6 (t)-6.7 (c)-2 (o)10.6(t)-. c 0 Tw (-)Tj -0402 Tw -40.855 -1.157 Td (.2 (e

Table 2.18. On-time Promotion from Grade 9 to Grade 10: Texas GEAR UP Primary Cohort versus Retrospective Cohort

Initial Group Differences in Students' On-time Promotion from Grade 9 to Grade 10

Cohort Percentages			Number in Cohort		Test Results	
Primary	Retrospective		Primary	Retrospective	χ^2	sig
80%	77%		2233	2161	9.17	**

MLM Regression Models

	Main Model				Covariate Model			
Variable	B	SE	sig	OR	B	SE	sig	OR [a]
Intercept	1.54	0.32	***	NA	3.55	0.42	***	NA
Group (Primary cohort versus retrospective cohort)	0.20	0.07	**	1.22	-0.83	0.15	***	0.44 (2.3)
Grade 8 STAAR Reading Scale Score (z-score)					0.76	0.09	***	2.14
Female					0.35	0.14	*	1.42
Hispanic (versus White/Other)					0.12	0.36	ns	NA
African American (versus White/Other)					-0.29	0.38	ns	NA
English Learner					0.33	0.24	ns	NA
Economically Disadvantaged					0.01	0.23	ns	NA
At-Risk					-0.79	0.22	***	0.45 (2.2)
Number of students/schools				4394 / 6		2806 / 6		
School level variance	Intercept only		Main model		Covariate model			
	0.58		0.58		0.08			

Sources. Texas Education Agency, Texas GEAR UP SG Integrated Data Entry System (GUIDES) data through March 31, 2018; Texas Education Agency, Public Education Information Management System (PEIMS), 2014–2018; Texas Education Agency, State of Texas Assessments of Academic Readiness (STAAR), 2014–2018.

Notes. The reference categories in the model are: retrospective cohort, male, White/Other, not Economically Disadvantaged, non-EL, not at-risk. Asterisks indicate the level of statistical significance ("sig"): * < 5%, ** < 1%, *** < 0.1%; ns indicates non-significant finding. NA indicates not applicable. Students must have been enrolled in a Texas GEAR UP SG school in Grade 9 to be included in these analyses.

[a] For ease of interpretation, odds ratios of less than one have been transformed to reflect the odds of the non-reference group,

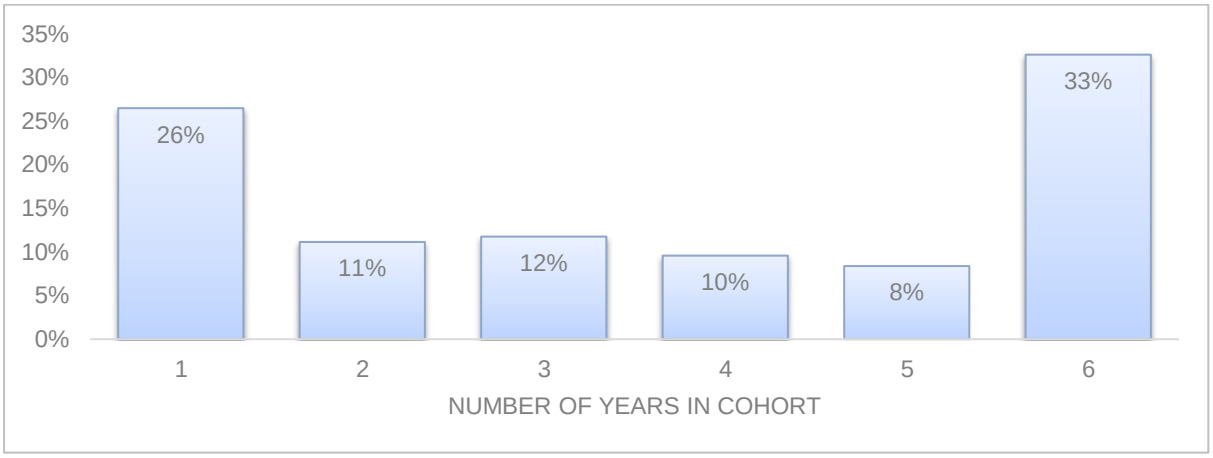
Grade 8 STAAR Reading score was a significant positive predictor of graduation in the MLM students with higher scores were more likely than students with lower Grade 8 STAAR Reading scores to graduate on time

retrospective cohort on one measure: they were more likely to achieve Approaches Grade Level standard on the Algebra I EOC.

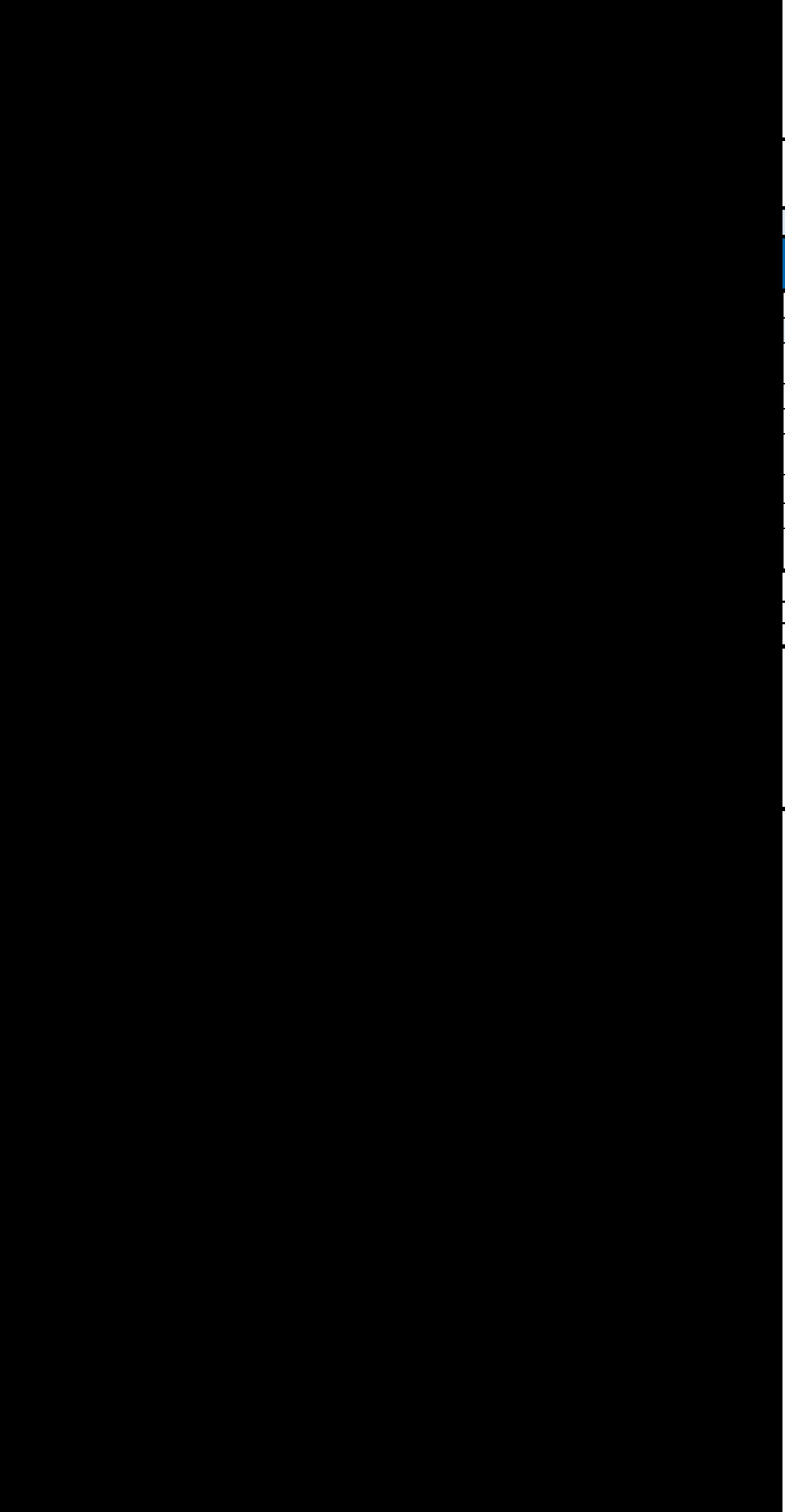
When examining (0.6 (0.2 (0.2 (0.2

Student data for Grades 7 through 12 or for up to 6 years of GEAR UP student participation were obtained. There was wide variation in participation (see Figure 2.3). About one-third of students (33%) had been in the cohort for all six years, and about a quarter (26%) had been in the cohort for only one year.

Figure 2.3: Texas GEAR UP SG Participation Over Time



Source. Texas Education Agency, Public Education Information



3. Summary and Conclusion

Key Findings

In this section, findings where the key variable of interest (i.e., cohort group or length of time in cohort) was a significant predictor in the covariate MLM will be discussed. There were several findings of mean differences between groups that disappeared once student characteristics and prior academic performance were taken into account. Because there were also differences found between group composition, including differences in the percentage of students who were economically disadvantaged, models that control for these pre-existing differences between groups are critical for understanding the results.

Advanced Course Completion

The most significant success of Texas GEAR UP SG was in encouraging students to take advanced coursework. The Texas GEAR UP State Grant Program Evaluation Grades 7-8 Comprehensive Report (Hutson et. al, 2018) detailed the success rate of getting students to complete Algebra I by Grade 8 – by the end of that grade, almost twice the percentage of

thus the primary cohort was subject to more challenging standards than the retrospective cohort for several assessments, particularly for U.S. History and English II. However, standards did not change for Meets Grade Level over time, and students in the retrospective cohort were more likely to reach this standard for two assessments, so changing standards cannot account for all the differences between groups.

References

Briggs, A., O'Donnel, B., Horwood, T., Sun, J., Devarics, C., Alexander, A., Sanderson, A. (2015, August). The Texas GEAR UP State Grant Program Evaluation: Annual Implementation Report for the 2013-14 School Year. Report prepared for the Texas Education Agency by ICF International. Available at Int2 Tc 0.007 Tw 0.337 0 Td283vEandutexass924 -/TT20 TTf c 0.067 Tw 0.3 (0 6.385(4 S)12...)-

Appendix A: Evaluation Questions and Project Goals

A.1 Evaluation Questions

Table A.1 provides an overview of the evaluation questions. Some questions are addressed in the Annual Implementation Reports. Other evaluation questions will be addressed in future reports. Throughout this comprehensive report, the specific evaluation questions being addressed were identified. The list of evaluation questions will be expanded as appropriate to each report. In addition, several of the research questions described below focus on understanding when and how implementation changes. For this report, the focus is on first period of implementation only.

Table A.1. Texas GEAR UP SG Evaluation Questions

Evaluation Qu estions
1. Implementation of Texas Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) State Grant (SG) Strategies and Identification of Potential Best Practices
1.1 To evaluate implementation of Texas GEAR UP SG strategies intended for teacher professional development (PD) to improve academic rigor and data -driven instruction
1.1.1 What types of PD implementation strategies were identified by grantees in their action plans?
1.1.2 Each year, when and to what extent did grantees implement PD strategies?
1.1.3 What percentage of core content teachers had the opportunity to participate in PD training regarding each of the following: differentiated instruction, advanced instructional strategies, project-based learning (PBL), other? What percentage of core content teachers actually participated in each PD opportunity? To what extent, if any, did teachers other than core content teachers have an opportunity to participate and actually participate in PD?
1.1.4 When and how did grantees provide PD regarding vertical team preparation and implementation to Middle School and High School teachers? Were appropriate teachers from all schools on the vertical team able to attend the PD?
1.1.5 What are perceptions of teachers who attend given PD regarding: training itself, impact on teacher practice, and impact on vertical alignment, as appropriate to training?
1.1.6 What facilitators and barriers can be identified to implementing PD opportunities? If barriers to implementing were identified, to what extend werc 0 Tw 11.04 0 0 11.04 50g0 0 11.04 78.12 6 (em)

Evaluation Qu estions
2.2 To evaluate the impact of GEAR UP on community alliances

Project Goal 1 - Improve instruction and expand academic opportunities in mathematics and science.

-*f*

- Project Objective 5.2: By the end of the project's sixth year, the percentage of students meeting criterion on the ACT/SAT will meet or exceed the state average.
- Project Objective 5.3: At the end of the project's sixth year, the number of students who graduate postsecondary education ready in mathematics and English will meet or exceed the state average.
- Project Objective 5.4: At the end of the project's sixth year, the cohort completion rate will meet or exceed the state average.
- Project Objective 5.5: At the beginning of the seventh year, more than 50% of cohort of students will enroll in postsecondary education in the fall after high school graduation.

Project Goal 6 - Meet or exceed state average for first-year college retention.

- Project Objective 6.1: The student retention rate for the second semester and the second year of college will meet or exceed the state average.
- Project Objective 6.2: At the end of the project's seventh year, the number of students on track to complete college will exceed the average postsecondary completion rate.

Project Goal 7 - Increase the availability of postsecondary information and knowledge-building opportunities.

- Project Objective 7.1: By the end of the first year, the state office will make information regarding college options, preparation, and financing will be made available to students, parents, and educators throughout the state.
- Project Objective 7.2: By the end of the first year, information and workshops aimed at linking college attendance to career success will be available to 100% of cohort students and their parents.
- Project Objective 7.3: Each year, at least 50% of cohort parents, including parents of current and former EL students, will attend at least three college awareness activities.
- Project Objective 7.4: By the end of the project's fifth year, teachers and counselors will complete training in the college admissions and financial aid process.

Project Goal 8 - Build and expand community alliances.

- Project Objective 8.1: All participating districts wille3g4 0 0 11.04 108 338.16 Tm [(-6.(nanc)-22.6 (e (w)

Appendix B ：Evaluation Design, Methods, and Analytics

This appendix provides a more detailed description of the Texas Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) State Grant (SG) evaluation design, as well as specific on methods and analyses used in this report.

B.1 Longitudinal Design

One important aspect of the evaluation design is to study Texas GEAR UP SG longitudinally. The Texas GEAR UP SG evaluation is based on a cohort model design. Texas GEAR UP SG services were first provided to Grade 7 students (called the primary cohort in this report) in participating districts during the 2012–13 school year and continues through the first year of enrollment at a postsecondary institution (the 2018–19 school year).

Table B. 2. School Level Matching Variables

School Level Matching Variable	Data Resource	Variable Nam e
Campus Type*	TAPR 2013–14	GRDTYPE
Grade Span*	TAPR 2013–14	GRDSPAN
Charter School*	TAPR 2013–14	CFLCHART
Final Accountability Rating*	TAPR 2013–14	C_RATING
All Students Count	TAPR 2013–14	CPETALLC
Student: African American %	TAPR 2013–14	CPETBLAP
Student: Hispanic %	TAPR 2013–14	CPETHISP
Student: Economically Disadvantaged %	TAPR 2013–14	CPETECOP
Student: At Risk %	TAPR 2013–14	CPETRSKP
Algebra I EOC % at Phase-in Satisfactory Standard or Above	TAPR 2013–14	CA00AA11S14R
4-year Graduation Rate	TAPR 2014–15 (from 2013–14 data)	CAGC4X14R

Source. Texas Education Agency, Texas Academic Performance Reports (TAPR), 2013–14.
*Exact matching was used for these variables because these variables are categorical.

THE PROPENSITY SCORE MATCHING (PSM) MODEL

The PSM model is based on the logistic regression model where the outcome is the membership of the schools (GEAR UP schools versus non-GEAR UP schools) and predictors are a set of covariates that describe the schools and help explain the difference between GEAR UP schools and non-GEAR UP schools. The following equation expresses the basic logistic regression modeling framework:

$$Log(p_k/1 \quad p_k) \quad E \quad E^{*} predictor_k \quad ...$$

where

- Postscripts k stands for school
- P is a probability that a school k is a GEAR UP school (as opposed to a non-GEAR UP school)
- β's are parameters to be estimated,
- "…" indicates that the model will include multiple predictors and corresponding parameters

Based on derived coefficients (βs) and the values of predictors, the logistic regression model produces a statistic called predicted probability or propensity score. The propensity score is a balancing score, meaning that it balances all pretreatment group differences in observed covariates. For each GEAR UP school, comparison school with the closest propensity score was chosen. As a result, a GEAR UP school and the matched comparison school were similar in observed characteristics that are important in predicting the outcome distinction between treatment and non-treatment GEAR UP. In deriving propensity score, the logistic regression algorithm took into account the relative weight of predictors in their covariate correlation with the outcome.

Decisions regarding three aspects of the PSM are described here: a. the ratio of intervention to control cases; b. the algorithm used for matching; c. the distance metric on which the matching is based.

examines the probability that students achieve a higher level in outcome variables than a lower level.

Table B.5. The Main Impact MLM Equations for Binary Outcomes

For binary outcomes:
Level 1: $\log(P/(1-P)) = \beta_{0j} + \beta_{1j} * \text{Pretest}_{ij} + \ldots$ Level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} * \text{Treatment} + u_{0j}$ Level 2: $\beta_{1j} = \gamma_{10}$

B.6.5 Cohort Data Cleaning Details

Comparison schools were selected by propensity score matching based on the similarity of schools participating in the Texas GEAR UP SG (see Appendix B, Section B.2.1). While the schools are similar and remain stable, students may enter or leave a given school at any point during the school year. In order to understand the impact of the Texas GEAR UP SG, it is crucial to understand to what extent students have been exposed to the program. In addition, it is important to ensure that students in the comparison group do not move to the TEXAS GEAR UP SG schools and do not participate in the program. Therefore, as for the first comprehensive report (Hutson et. al, 2018), prior to examining outcome data, decisions were made regarding students' placement as having been in the Texas GEAR UP SG or not. Generally, if students participated in any Texas GEAR UP SG activities between Grade 9 and Grade 12, they were retained in the GEAR UP cohort

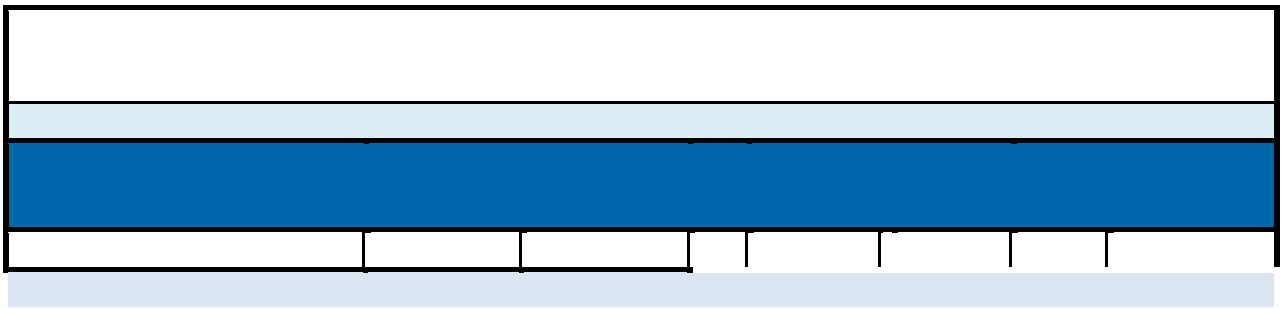


Table C.11. English I EOC Approaches Standard: Texas GEAR UP Primary Cohort versus Matched Comparison Schools Cohort

Initial Group Differences in Students Approaching the Achievement Standard

	Cohort Percentages			Number in Cohort		Test Results	
	Primary	Comparison		Primary	Comparison	F^2	sig
	45%	46%		2028	2225	0.01	ns

MLM Regression Models

	Main Model				Covariate Model			
Variable	B	SE	sig	OR	B	SE	sig	OR [a]
Intercept	-0.08	0.23	ns	NA	0.58	0.27	*	NA
Group (Primary cohort versus comparison cohort)	0.06	0.32	ns	NA	-0.08	0.17	ns	NA
Grade 8 STAAR Reading Scale Score (z-score)					2.00	0.08	***	NA
Female					0.52	0.10	***	1.69
Hispanic (versus White/Other)					0.13	0.23	ns	NA
African American (versus White/Other)					-0.07	0.27	ns	NA
English Learner					-0.53	0.18	**	0.59 (1.69)
Economically Disadvantaged					-0.27	0.15	ns	NA
At-Risk					-0.77	0.12	***	0.46 (2.16)
Number of students/schools				4253 / 12			3262 / 12	
School level variance	Intercept only		Main model		Covariate model			
	0.29		0.29		0.05			

Sources. Texas Education Agency, Texas GEAR UP SG Integrated Data Entry System (GUIDES) data through March 31, 2018; Texas Education Agency, Public Education Information Management System (PEIMS), 2014–2018; Texas Education Agency, State of Texas Assessments of Academic Readiness (STAAR), 2015–2018.

Notes. The reference categories in the model are: comparison group, male, White/Other, not Economically Disadvantaged, non-EL, not at-risk. Asterisks indicate the level of statistical significance ("sig"): * < 5%, ** < 1%, *** < 0.1%; ns indicates non-significant finding. NA indicates not applicable. Students must have been taking the STAAR EOC for the first time and have a score code of "S" and a test version of "S" or "L" to be included in these analyses.

[a] For ease of interpretation, odds ratios of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/odds ratio of the reference group. This reversed odds ratio is presented in parentheses.

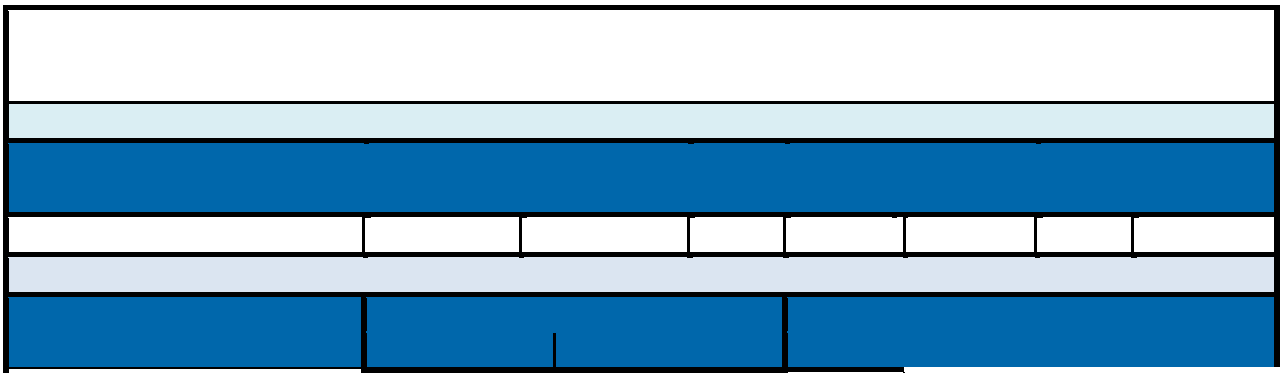


Table C.21. U.S. History EOC Meets Standard: Texas GEAR UP Primary Cohort versus Matched Comparison Schools Cohort

Initial Group Differences in Students Meeting the Achievement Standard

	Cohort Percentages			Number in Cohort		Test Results	
	Primary	Comparison		Primary	Comparison	F^2	sig
	45%	47%		1686	1698	1.67	ns

MLM Regression Models

	Main Model				Covariate Model			
Variable	B	SE	sig	OR	B	SE	sig	OR [a]
Intercept	-0.16	0.23	ns	NA	1.11	0.34	**	NA