

# Texas GEAR UP: Beyond Grad

## Biennial Impact Report

### Evaluation of Years 3 and 4

**Submitted to:**

Texas Education Agency  
William B. Travis Building  
1701 North Congress  
Avenue  
Austin, TX 78701-1494

**Submitted by:**

ICF  
1902 Reston Metro Plaza  
Reston, VA 20190

and

Agile Analytics  
1621 West 6th Street  
Austin, TX 78703

**Submitted on:**

September 2023



## **ACKNOWLEDGEMENTS**

The ICF evaluation team would like to acknowledge the many members of the Texas Education Agency (TEA), site/campus staff, and collaborative organizations for their support of this evaluation. They provided valuable information and feedback to ensure the evaluation team had a full understanding of the goals/objectives and implementation of Texas GEAR UP: Beyond Grad across participating sites and campuses. The evaluation team looks forward to the continued collaboration with TEA staff, site/campus staff, and other collaborators to provide a high-quality evaluation that can inform policy and practice for schools, nationally and in Texas.

ICF (NASDAQ: ICFI) partners with government and commercial clients to deliver consulting services and technology solutions in the social programs, health, energy, climate change, environment, transportation, defense, and emergency management markets. The firm combines passion for its work with industry expertise and innovative analytics to produce compelling results throughout the entire program life cycle—from analysis and design through implementation and improvement.

For additional information about ICF, please contact:

ICF

9300 Lee Highway

Fairfax, VA 22031

Phone: 703-934-3603 or 1-800-532-4783

Fax: 703-934-3740

Email: [info@icf.com](mailto:info@icf.com)

### ***Contributing Authors***

Andrea Hutson, PhD

Lindsay Lamb, PhD

Samira Rajesh Syal

Samantha Spinney, PhD

Thomas J. Horwood

### ***Prepared for***

Texas Education Agency

1701 North Congress Avenue

Austin, TX 78701-1494

Phone: 512-463-9734

Evaluation funded by the Texas Education Agency through funds provided by the U.S. Department of Education for the Texas GEAR UP: Beyond Grad State Grant



## COPYRIGHT NOTICE

The materials are copyrighted © and trademarked ™ as the property of the Texas Education Agency (TEA) and may not be reproduced without the express written permission of TEA, except under the following conditions:

- 1) Texas public school districts, charter schools, and Education Service Centers may reproduce and use copies of the Materials and Related Materials for the districts' and schools' educational use without obtaining permission from TEA;
- 2) residents of the state of Texas may reproduce and use copies of the Materials and Related Materials for individual personal use only without obtaining written permission of TEA;
- 3) any portion reproduced must be reproduced in its entirety and remain unedited, unaltered, and unchanged in any way; and
- 4) no monetary charge can be made for the reproduced materials or any document containing them; however, a reasonable charge to cover only the cost of reproduction and distribution may be charged.

Private entities or persons located in Texas that are **not** Texas public school districts, Texas Education Service Centers, or Texas charter schools or any entity, whether public or private, educational or non-educational, located **outside the state of Texas** *MUST* obtain written approval from TEA and will be required to enter into a license agreement that may involve the payment of a licensing fee or a royalty.

For information contact: Copyrights Office, Texas Education Agency, 1701 North Congress Ave., Austin, TX 78701-1494; phone 512-463-9041; email: [copyrights@tea.texas.gov](mailto:copyrights@tea.texas.gov).

State of Texas Assessments of Academic Readiness® (STAAR®) is a registered trademark of TEA. Other product and company names mentioned in this report may be the trademarks of their respective owners.

# Table of Contents

<b>Table of Contents</b> .....	<b>i</b>
<b>Tables</b> .....	<b>iii</b>
<b>Figures</b> .....	<b>viii</b>
<b>Acronyms and Abbreviations</b> .....	<b>x</b>
<b>Executive Summary</b> .....	<b>xi</b>
Mathematics Course Completion .....	xii
On-Time Promotion .....	xiii
STAAR EOC Performance .....	xiii
Limitations .....	xiv
<b>1. Introduction</b> .....	<b>1</b>
1.1. The Texas GEAR UP: Beyond Grad Program .....	1
1.2. Evaluating GEAR UP and the Purpose of this Report.....	2
Evaluation Questions .....	3
1.2.1. Evaluation Design: Longitudinal and Quasi-Experimental.....	3
1.2.2. Class of 2024 GEAR UP Cohort.....	4
1.2.3. Matched Comparison Cohort.....	5
1.2.4. Retrospective Cohort.....	7
1.2.5. Follow-On Cohort.....	8
1.3. Report Overview.....	9
<b>2. Student Outcomes</b> .....	<b>11</b>
2.1. Analysis Overview .....	12
2.2. Student Outcomes by School.....	12
2.2.1. Mathematics Course Completion.....	12
2.2.1.1 Algebra I Completion .....	12
2.2.1.2 Algebra II Completion .....	13
2.2.2. On-Time Promotion .....	14
2.2.2.1 On-Time Promotion from Grade 9 to 10 or Above.....	14
2.2.2.2 On-Time Promotion from Grade 10 to 11 or Above.....	15
2.2.3. STAAR EOC Exams .....	16
2.2.3.1 Algebra I EOC Exam for Grade 9 .....	16
2.2.3.2 Biology EOC Exam for Grade 9.....	17
2.2.3.3 English I EOC Exam for Grade 9.....	18
2.2.3.4 English II EOC Exam for Grade 10.....	19
2.3. Student Outcomes by Cohort: Matched Comparison.....	20
2.3.1. Mathematics Course Completion.....	21
2.3.1.1 Algebra I Course Completion by Grade 9.....	21
2.3.1.2 Algebra II Course Completion by Grade 10.....	21
2.3.2. On-Time Promotion .....	21
2.3.2.1 On-Time Promotion from Grade 9 to 10 .....	21
2.3.2.2 On-Time Promotion from Grade 10 to 11 .....	21
2.3.3. STAAR EOC Exam Performance .....	21
2.3.3.1 Grade 9 Algebra I EOC Exam .....	21
2.3.3.2 Grade 9 Biology EOC Exam.....	22
2.3.3.3 Grade 9 English I EOC Exam.....	22
2.3.3.4 Grade 10 English II EOC Exam.....	22
2.4. Student Outcomes by Cohort: Retrospective .....	22

2.4.1.	Mathematics Course Completion.....	23
2.4.1.1	Algebra II Course Completion by Grade 10.....	23
2.4.2.	On-Time Promotion .....	23
2.4.2.1	On-Time Promotion from Grade 10 to 11 .....	23
2.4.3.	STAAR EOC Exam Performance .....	24
2.4.3.1	Grade 10 English II EOC Exam.....	24
2.5.	Student Outcomes by Cohort: Follow-On.....	25
2.5.1.	Mathematics Course Completion.....	26
2.5.1.1	Algebra I Course Completion by Grade 9.....	26
2.5.2.	On-Time Promotion .....	27
2.5.2.1	On-Time Promotion from Grade 9 to 10 .....	27
2.5.3.	STAAR EOC Exam Performance .....	27
2.5.3.1	Grade 9 Algebra I EOC Exam .....	27
2.5.3.2	Grade 9 Biology EOC Exam.....	28
2.5.3.3	Grade 9 English I EOC Exam.....	28
2.6.	Length of Time in Cohort.....	28
2.6.1.	Mathematics Course Completion.....	29
2.6.1.1	Algebra I Course Completion by Grade 9.....	29
2.6.1.2	Algebra II Course Completion by Grade 10.....	30
2.6.2.	On-Time Promotion .....	32
2.6.2.1	On-Time Promotion from Grade 9 to 10 or Above.....	32
2.6.2.2	On-Time Promotion from Grade 10 to 11 or Above.....	33
2.6.3.	STAAR EOC Exam Performance .....	33
2.6.3.1	Grade 9 Algebra I EOC Exam .....	33
2.6.3.2	Grade 9 Biology EOC Exam.....	34
2.6.3.3	Grade 9 English I EOC Exam.....	35
2.6.3.4	Grade 10 English II EOC Exam.....	36
<b>3.</b>	<b>Summary and Conclusion.....</b>	<b>38</b>
3.1.	Key Findings.....	38
3.1.1.	Mathematics Course Completion.....	38
3.1.2.	On-Time Promotion .....	38
3.1.3.	STAAR EOC Exam Performance .....	38
3.2.	Limitations .....	39
3.3.	Recommendations .....	40
	<b>REFERENCES .....</b>	<b>41</b>
	<b>APPENDIX A: GEAR UP: Beyond Grad Strategies and Project Goals and Objectives ....</b>	<b>A-1</b>
A.1.	GEAR UP: Beyond Grad Strategies.....	A-1
A.2.	Project Goals and Objectives .....	A-1
	<b>APPENDIX B: Evaluation Design, Methods, and Analytics.....</b>	<b>B-1</b>
B.1.	GEAR UP Logic Model.....	B-1
B.2.	Evaluation Questions .....	B-3
B.3.	Analysis Procedures.....	B-3
	<b>APPENDIX C: Additional Technical Detail.....</b>	<b>C-1</b>
C.1.	Outcomes by School for Class of 2024 .....	C-1
C.2.	Outcomes by Cohort: Matched Comparison Cohort .....	C-5
C.3.	Comparisons by Cohort: Retrospective Cohort.....	C-25
C.4.	Comparisons by Cohort: Follow-On Cohort .....	C-35
C.5.	Length of Time in Cohort.....	C-53

## Tables

Table ES.1. Mathematics Course Completion Differences by Cohort Group .....	xiii
Table ES.2. On-Time Promotion Differences by Cohort Group .....	xiii
Table ES.3. STAAR EOC Exam Differences by Cohort Group .....	xiv
Table 1.1. Texas Districts and Schools Participating in GEAR UP .....	1
Table 1.2. GEAR UP Evaluation Timeline: Grade in School by Grant Year by Cohort Group.....	4
Table 1.3. Class of 2024 GEAR UP Cohort Key Demographics By School .....	5
Table 1.4. Class of 2024 and Matched Comparison Cohorts: Key Demographics for Propensity Score Matched Students, Grades 9 and 10.....	6
Table 1.5. Class of 2024 Cohort and Retrospective Cohort Key Demographics, Grade 10 .....	8
Table 1.6. Grade 9 Key Demographics: Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	9
Table 2.6. Length of Time in Cohort Counts by School for Class of 2024 .....	29
Table B.1. GEAR UP Impact Study Evaluation Questions .....	B-3
Table B.2. Outcomes Used in the Analysis.....	B-4
Table B.3. Variables Used for Matching at the School Level.....	B-7
Table B.4. Variables Used for Matching at the Student Level .....	B-8
Table B.5. Key Demographics for the Analytic Sample Comparing Students in GEAR UP Cohort for 1 or 2 Years to Those in Cohort for 3 or 4 Years .....	B-16
Table C.1.1. Key Demographics by School for Class of 2024 Students with All Student Characteristic Variables .....	C-1
Table C.1.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by School.....	C-2
Table C.1.3. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 by School.....	C-2
Table C.1.4. On-Time Promotion from Grade 9 (2020–21) to 10 (2021–22) for Class of 2024 by School .....	C-2
Table C.1.5. On-Time Promotion from Grade 10 (2021–22) to 11 (2022–23) for Class of 2024 by School .....	C-3
Table C.1.6. Algebra I EOC Performance for Class of 2024 Grade 9 (2020–2021) by School	C-3
Table C.1.7. Biology EOC Performance for Class of 2024 Grade 9 (2020–2021) by School...	C-3
Table C.1.8. English I EOC Performance for Class of 2024 Grade 9 (2020–2021) by School.	C-4
Table C.1.9. English II EOC Performance for Class of 2024 Grade 10 (2021–22) by School..	C-4
Table C.2.1. Completion of Algebra I by Grade 9 (2020–21): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-5

Table C.2.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohort.....	C-6
Table C.2.3. Completion of Algebra II by Grade 10 (2021–22): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-7
Table C.2.4. Completion of Algebra II by Grade 10 (2021–22) for Class of 2024 Cohort and Matched Comparison Cohort.....	C-8
Table C.2.5. On-Time Promotion from Grade 9 (2020–21) to 10 or Above (2021–22): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-9
Table C.2.6. On-Time Promotion from Grade 9 (2020–21) to 10 or Above (2021–22) for Class of 2024 and Matched Comparison Cohorts.....	C-10
Table C.2.7. On-Time Promotion from Grade 10 (2021–22) to 11 or Above (2022–23) Outcome: Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-11
Table C.2.8. On-Time Promotion from Grade 10 (2021–22) to 11 or Above (2022–23) for Class of 2024 and Matched Comparison Cohorts.....	C-12
Table C.2.9. Algebra I EOC Exam, Grade 9 (2020–2021): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-13
Table C.2.10. Approaches Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts.....	C-14
Table C.2.11. Masters Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts.....	C-15
Table C.2.12. Biology EOC Exam Grade 9 (2020–21): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-16
Table C.2.13. Approaches Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts.....	C-17
Table C.2.14. Masters Grade Level on Biology EOC Exam, Grade 9 (2020–2021) for Class of 2024 and Matched Comparison Cohorts.....	C-18
Table C.2.15. English I EOC Exam, Grade 9 (2020–21): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-19
Table C.2.16. Approaches Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts.....	C-20
Table C.2.17. Masters Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts.....	C-21
Table C.2.18. English II EOC Exam, Grade 10 (2021–22): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts.....	C-22

Table C.2.19. Approaches Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 and Matched Comparison Cohorts .....	C-23
Table C.2.20. Masters Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 and Matched Comparison Cohorts .....	C-24
Table C.3.1. Completion of Algebra II by Grade 10: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts .....	C-25
Table C.3.2. Algebra II Completion by Grade 10: Comparison by School for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts.....	C-26
Table C.3.3. Completion of Algebra II by Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts .....	C-27
Table C.3.4. On-Time Promotion from Grade 10 to 11 or Above: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts .....	C-28
Table C.3.5. On-Time Promotion from Grade 10 to 11 or Above: Comparison by School for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts.....	C-29
Table C.3.6. On-Time Promotion from Grade 10 to 11 or Above for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts.....	C-30
Table C.3.7. English II EOC: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22) and Retrospective (2022–23) Cohorts.....	C-31
Table C.3.8. English II EOC Exam, Grade 10: Comparison by School for Class of 2024 (2021–22) and Retrospective (2022–23) Cohorts.....	C-32
Table C.3.9. Approaches Grade Level Standard for English II EOC Exam, Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts.....	C-33
Table C.3.10. Masters Grade Level Standard for English II EOC Exam, Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts.....	C-34
Table C.4.1. Completion of Algebra I by Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-35
Table C.4.2. Algebra I Completion by Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-36
Table C.4.3. Completion of Algebra I by Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-37
Table C.4.4. On-Time Promotion from Grade 9 to 10 or Above: Key Demographics for Class of 2024 (2020–21 to 2021–22) and Follow-on (2021–22 to 2022–23) Cohorts .....	C-38
Table C.4.5. On-Time Promotion from Grade 9 to 10 or Above Comparison by School for Class of 2024 (2020–21 to 2021–22) and Follow-on Cohort (2021–22 to 2022–23):.....	C-39
Table C.4.6. On-Time Promotion from Grade 9 to 10 or Above for Class of 2024 (2020–21 to 2021–22) and Follow-on (2021–22 to 2022–23) Cohorts .....	C-40



Table C.4.7. Algebra I EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-41
Table C.4.8. Algebra I EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-42
Table C.4.9. Approaches Grade Level on Algebra I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-43
Table C.4.10. Masters Grade Level on Algebra I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-44
Table C.4.11. Biology EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-45
Table C.4.12. Biology EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-46
Table C.4.13. Approaches Grade Level on Biology EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-47
Table C.4.14. Masters Grade Level on Biology EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-48
Table C.4.15. English I EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-49
Table C.4.16. English I EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-50
Table C.4.17. Approaches Grade Level on English I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-51
Table C.4.18. Masters Grade Level on English I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-on (2021–22) Cohorts .....	C-52
Table C.5.1. Key Demographics for the Analytic Sample Comparing Students in GEAR UP Cohort for 1 or 2 Years to Those in Cohort for 3 or 4 Years .....	C-53
Table C.5.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort .....	C-54
Table C.5.3. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 Length of Time in Cohort .....	C-55
Table C.5.4. On-Time Promotion from Grade 9 to 10 or Above (2020–21 to 2021–22) for Class of 2024 by Length of Time in Cohort.....	C-56
Table C.5.5. On-Time Promotion from Grade 10 to 11 or Above (2021–22 to 2022–23) for Class of 2024 by Length of Time in Cohort.....	C-57
Table C.5.6. Approaches Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-58

Table C.5.7. Masters Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-59
Table C.5.8. Approaches Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-60
Table C.5.9. Masters Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-61
Table C.5.10. Approaches Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-62
Table C.5.11. Masters Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort.....	C-63
Table C.5.12. Approaches Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 by Length of Time in Cohort.....	C-64
Table C.5.13. Masters Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 by Length of Time in Cohort.....	C-65

## Figures

Figure 2.2.1. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by School .....	13
Figure 2.2.2. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 by School .....	14
Figure 2.2.3. On-Time Promotion from Grade 9 (2020–21) to Grade 10 or above (2021–22) for Class of 2024 by School .....	15
Figure 2.2.4. On-Time Promotion from Grade 10 (2021–22) to Grade 11 or 12 (2022–23) for Class of 2024 by School .....	16
Figure 2.2.5. Performance on Grade 9 (2020–21) Algebra I EOC Exam for Class of 2024 by School .....	17
Figure 2.2.6. Performance on Grade 9 (2020–21) Biology EOC Exam for Class of 2024 by School .....	18
Figure 2.2.7. Performance on Grade 9 (2020–21) English I EOC Exam for Class of 2024 by School .....	19
Figure 2.2.8. Performance on Grade 10 (2021–22) English II EOC Exam for Class of 2024 by School .....	20
Figure 2.4.1. Algebra II Completion by Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts .....	23
Figure 2.4.2. On-Time Promotion from Grade 10 to 11 for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts .....	24
Figure 2.4.3. Predicted Percentages for Approaches Grade Level Standard on Grade 10 English II EOC Exam for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts .....	25
Figure 2.5.1. Algebra I Completion by Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts .....	26
Figure 2.5.2. Percentages of Students Promoted On-Time from Grade 9 to Grade 10, Class of 2024 and Follow-On Cohorts .....	27
Figure 2.5.3. Percentages of Students Achieving Approaches and Masters Grade Level Standards on Grade 9 Algebra I EOC Exam, Class of 2024 and Follow-On Cohorts .....	28
Figure 2.6.1. Predicted Percentages of Students Completing Algebra I by Grade 9 by Length of Time in Cohort .....	30
Figure 2.6.2. Predicted Percentages of Students Completing Algebra II by Grade 10 by Length of Time in Cohort .....	31
Figure 2.6.3. Predicted Percentages of Students Promoted On-Time from Grade 9 to 10 or Above by Length of Time in Cohort .....	32
Figure 2.6.4. Predicted Percentages of Students Promoted On-Time from Grade 10 to 11 or above by Length of Time in Cohort .....	33

Figure 2.6.5. Predicted Percentages of Students Achieving Approaches Grade Level Standard on Grade 9 Algebra I EOC Exam by Length of Time in Cohort.....34

Figure 2.6.6. Percentages of Students Predicted to Achieve Approaches and Masters Grade Level Standards on Grade 9 Biology EOC Exam by Length of Time in Cohort.....35

Figure 2.6.7. Percentages of Students Predicted to Achieve Approaches Grade Level Standard on Grade 9 English I EOC Exam by Length of Time in Cohort .....36

Figure 2.6.8. Percentages of Students Predicted to Achieve Approaches and Masters Grade Level Standards on Grade 10 English II EOC Exam by Length of Time in Cohort.....37

Figure B.1. Texas Gaining Early Access to Undergraduate Programs (GEAR UP): Beyond Grad Logic Model ..... B-2

Figure B.2. Regional Education Service Centers..... B-6

## Acronyms and Abbreviations

AIC	Akaike Information Criterion
AP	Advanced Placement
BE	Baseline Equivalency
COVID-19	Coronavirus Disease 2019
ED	U.S. Department of Education
EB/EL	Emergent Bilingual Students/English Learners
EOC	End-of-course
ES	Effect Size
GEAR UP	Gaining Early Access and Readiness for Undergraduate Programs
IB	International Baccalaureate
ISD	Independent School District
MLM	Multilevel Model
OR	Odds Ratio
PD	Professional Development
PEIMS	Public Education Information Management System
PSM	Propensity Score Matching
STAAR	State of Texas Assessments of Academic Readiness
TAPR	Texas Academic Performance Reports
TEA	Texas Education Agency
TEKS	Texas Essential Knowledge and Skills
TNTP	Formerly referred to as The New Teacher Project, the organization changed its name to simply TNTP after its mission expanded beyond serving new teachers
TSIA	Texas Success Initiative Assessment
WWC	What Works Clearinghouse

## 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.

GEAR UP provides targeted services to a grade-specific **primary cohort** of students who are expected to graduate in the 2023–24 school year (i.e., the **class of 2024**) through their first year of postsecondary education. Services include targeted academic tutoring, teacher professional development to increase academic rigor, individualized college and career counseling, and workshops/events aimed at students and parents.

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 7-year grant (i.e., from school years 2018–19 to 2024–25).

## Evaluating GEAR UP and the Purpose of this Report

This report presents findings from the impact evaluation during the middle program years—school years 2020–21 (Year 3) and 2021–22 (Year 4) 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 compare to state averages?
- How do trends in outcomes for the class of 2024 GEAR UP cohort students compare to a carefully matched sample of class of 2024 students in similar districts (i.e., the matched comparison cohort)?
- How do trends in outcomes for the class of 2024 students compare to students who are in the priority cohort (e.g., the classes of 2023 and 2025, the retrospective and follow-on cohorts)?
- How do trajectories of outcomes differ based on the length of time students attended GEAR UP schools? For example, does Algebra II completion increase for students who attended GEAR UP schools in all grades compared to students who only attended in high school?

The external evaluation is a longitudinal design that spans 7 years and follows a cohort model. There are four 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 also from the class of 2024 attending similar districts who did not participate in GEAR UP.
- The **retrospective cohort** includes students who attended GEAR UP districts 1 year prior to the class of 2024. These students are from the class of 2023.
- The **follow-on cohort** includes students who attended the GEAR UP districts 1 year after the class of 2024. These students are from the class of 2025.

This report focuses on Years 3 and 4, when the class of 2024 was in Grade 9 and 10. The outcomes examined included Algebra I and II completion, on-time promotion from Grade 9 to 10, and performance on four State of Texas Assessments of Academic Readiness (STAAR) end-of-course (EOC) exams typically administered in Grades 9 and 10: Algebra I, Biology, English I, and English II. Outcomes for the class of 2024 were compared to those from the state of Texas and to those in the matched comparison, retrospective and follow-on cohorts. The number of years students were enrolled in a GEAR UP campus was also analyzed as a predictive factor for outcomes.

## Summary of Findings

### Mathematics Course Completion

Three in four (75%) students in the class of 2024 completed Algebra I by Grade 9; the class of 2024 missed the 85% completion target defined by Project Objective 1.1. A significantly higher percentage of class of 2024 students completed Algebra I by Grade 9 than students in the matched comparison cohort, but the effect size of the difference was small and there was substantial variation in Algebra I completion by school. Cohort was not a significant predictor of Algebra I completion in a multilevel model (MLM) that controlled for school and student characteristics. Algebra I completion was 80% by Grade 9 for the follow-on cohort; students in the follow-on cohort were significantly more likely to complete Algebra I by Grade 9 than students in the class of 2024—both at the group level and in the MLM.

Thirty-six percent of propensity score matching (PSM)-matched class of 2024 students completed Algebra II by Grade 10, significantly more than the matched comparison cohort (28%). However, as with the findings for Algebra I, there was significant variation by school, and cohort was not statistically significant in the MLM. Analyses comparing the class of 2024 to the retrospective cohort found that students in the retrospective cohort had even higher Algebra II completion levels by Grade 10 (46%), and cohort was a significant predictor of Algebra II completion in the MLM.

Length of time in cohort analyses revealed that students who had been in the class of 2024 cohort for more years were more likely to complete both Algebra I by Grade 9 and Algebra II by Grade 10 than those who had been in the cohort for fewer years, even when controlling for school and student characteristics. This finding indicates that the benefits of GEAR UP on advanced math course completion may require several years to develop (see Table ES.1).

**Table ES.1. Mathematics Course Completion Differences by Cohort Group**

Outcome	Class of 2024 vs. Comparison		Class of 2024 vs. Retrospective		Class of 2024 vs. Follow-On		Longer Time in Cohort
	Group Level	MLM	Group Level	Logistic Regression	Group Level	Logistic Regression	Logistic Regression
Algebra I by Grade 9	Higher	None	-	-	Lower	Lower	Higher
Algebra II by Grade 10	Higher	None	Lower	Lower	-	-	Higher

*Note.* MLM – Multilevel model. Color indicates the direction of effect (blue = class of 2024 higher, orange = class of 2024 lower) and confidence in the observed results (darker shaded items, from the MLMs or logistic regressions, indicate more reliability). “-” indicates that the outcome was not measured.

### On-Time Promotion

A significantly higher percentage of students in the matched comparison cohort than students in the class of 2024 were promoted on time from both Grade 9 and Grade 10 to a higher grade level. However, the effect sizes of these differences were small, and cohort was not a statistically significant predictor of on-time promotion at either grade level in the MLMs. Class of 2024 students were less likely to be promoted on time from Grade 9 to 10 or above than the follow-on cohort but were more likely to be promoted on time from Grade 10 to 11 or 12 than the retrospective cohort. Finally, students who were members of the class of 2024 cohort for a longer period of time were more likely to be promoted on time than students in the cohort for fewer years (see Table ES.2).

**Table ES.2. On-Time Promotion Differences by Cohort Group**

Outcome	Class of 2024 vs. Comparison		Class of 2024 vs. Retrospective		Class of 2024 vs. Follow-On		Longer Time in Cohort
	Group Level	MLM	Group Level	Logistic Regression	Group Level	Logistic Regression	Logistic Regression
Grade 9 to 10 or Above	Lower	None	-	-	Lower	Lower	Higher
Grade 10 to 11 or 12	Lower	None	Higher	Higher	-	-	Higher

*Note.* MLM – multilevel model. Color indicates the direction of effect (blue = class of 2024 higher, orange = class of 2024 lower) and confidence in the observed results (darker shaded items, from the MLMs or logistic regressions, indicate more reliability). “-” indicates that the outcome was not measured.

### STAAR EOC Performance

Compared to the matched comparison cohort, significantly more students in the class of 2024 achieved the Approaches Grade Level standard on the Algebra I and Biology EOC exams and Masters Grade Level standard on the Biology EOC exam. On the other hand, more students in the matched comparison cohort achieved the Approaches Grade Level standard for the English II EOC exam. However, the effect sizes of these differences were small, and cohort was not a statistically significant predictor of performance in any of the MLM models for the EOC exams.



Compared to the retrospective cohort, students in the class of 2024 were more likely to achieve the Approaches Grade Level standard on the English II EOC exam, both at the group level and in the MLM. On the other hand, students in the follow-on cohort were more likely to achieve the Approaches and Masters Grade Level standards on the Algebra I EOC exam than class of 2024 students.

Students who had been in the class of 2024 cohort for a longer period of time were more likely to achieve the Approaches Grade Level standards on all four STAAR EOC exams. They were more likely to achieve Masters Grade Level standard for the Biology EOC exam. On the other hand, students who were in the cohort for a longer period of time were less likely to meet the standard for Masters Grade Level on English II EOC exam than students who were newer to the cohort.

**Table ES.3. STAAR EOC Exam Differences by Cohort Group**

EOC Exam & Grade Level Standard	Class of 2024 vs. Comparison		Class of 2024 vs. Retrospective		Class of 2024 vs. Follow-On		Longer Time in Cohort
	Group Level	MLM	Group Level	Logistic Regression	Group Level	Logistic Regression	Logistic Regression
Algebra I Approaches	Higher	None	-	-	Lower	Lower	Higher
Algebra I Masters	None	None	-	-	Lower	Lower	None
Biology Approaches	Higher	None	-	-	None	None	Higher
Biology Masters	Higher	None	-	-	None	None	Higher
English I Approaches	None	None	-	-	None	None	Higher
English I Masters	None	None	-	-	None	None	None
English II Approaches	Lower	None	Higher	Higher	-	-	Higher
English II Masters	None	None	None	None	-	-	Lower

*Note.* MLM – multilevel model. Color indicates the direction of effect (blue = class of 2024 higher, orange = class of 2024 lower) and confidence in the observed results (darker shaded items, from the MLMs or logistic regressions, indicate more reliability). “-” indicates that the outcome was not measured.

## Limitations

- The study was negatively affected by the coronavirus disease 2019 (COVID-19) pandemic, and associated disruptions negatively impacted student achievement. It is difficult to accurately separate the impact of GEAR UP programming from the impact of the pandemic, particularly across school years.
- The study was quasi-experimental, and not a randomized controlled trial, which means there is a possibility that other factors—such as pre-existing differences between the cohorts—may have influenced the results.

- The study was conducted over a relatively short period of time, which may not have been sufficient to determine the full impact of GEAR UP programming. Therefore, some of the positive outcomes of the program may not be recognized until the end of the program.
- The study only looked at a limited number of outcomes that were available for participants and non-participants in GEAR UP. It is possible that GEAR UP programming had other positive impacts that were not measured in the study, such as knowledge of financial aid or interest in attending college.

## 1. Introduction

As a strategy to narrow the college achievement gap, the U.S. Department of Education’s (ED) Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) discretionary grant program provides 6- or 7-year grants to states to provide services to students in high-poverty middle and high schools and through the first year of postsecondary education. The most recent GEAR UP state grant awarded to the Texas Education Agency (TEA) in 2017 provides \$24.5 million over 7 years to close the college achievement gap for low-income students in Texas.<sup>1</sup>

### 1.1. The Texas GEAR UP: Beyond Grad Program

GEAR UP is a federal grant program that aims to increase college attendance and graduation via partnerships among K–12 institutions, universities, state agencies, and community organizations. The Texas GEAR UP: Beyond Grad grant program (referred to as “GEAR UP” in this report) serves approximately 10,000 students from six rural or semi-rural Texas independent school districts (ISDs) in West Texas, Southeast Texas, and the Coastal Bend (Table 1.1).

**Table 1.1. Texas Districts and Schools Participating in GEAR UP**

School District	Region	Middle School(s)	High School
Culberson County-Allamore ISD	West	Van Horn School	
Education Service Center 19 with San Elizario ISD	West	Ann M. Garcia-Enriquez Middle School	San Elizario High School
Mathis ISD	Coastal Bend	Mathis Middle School	Mathis High School
Sinton ISD	Coastal Bend	E. Merle Smith Middle School	Sinton High School
Sheldon ISD	Southeast	C.E. King Middle School, Michael R. Null Middle School	C.E. King High School
Cleveland ISD	Southeast	Cleveland Middle School	Cleveland High School

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. ISD – Independent school district.

GEAR UP provides targeted services to a grade-specific primary cohort of students at these schools. Students who were in Grade 7 during the 2018–19 school year and are expected to

<sup>1</sup> For information about TEA’s last GEAR UP state grant, awarded in 2012, please visit TEA’s [Program Evaluation website](#).

graduate at the end of Grade 12 in the 2023–24 school year (i.e., the class of 2024) are a part of this cohort. GEAR UP also provides basic services to a priority cohort of students consisting of all other students in Grades 9–12 attending participating high schools in the grantee districts during each year of the 7-year grant (i.e., from school years 2018–19 to 2024–25).

The core strategies conceptualized in GEAR UP to close the college achievement gap include increasing academic rigor, expanding college and career advising and resources for high school students, and developing local alliances (the full description of GEAR UP strategies is listed in Appendix A).

## 1.2. Evaluating GEAR UP and the Purpose of this Report

In November 2019, TEA contracted with ICF and Agile Analytics to conduct an external, mixed-method evaluation of GEAR UP to measure program impact, implementation, and sustainability, with a focus on identifying best and promising practices and examining statewide reach. The first GEAR UP impact report in 2021 presented findings from the first two program years—school years 2018–19 (Year 1) and 2019–20 (Year 2), when the class of 2024 students were in Grade 7 and 8 (Hutson et al., 2021).<sup>2</sup> Of note, the coronavirus disease 2019 (COVID-19) pandemic spread across the United States during that reporting period and substantially disrupted all aspects of schooling, including GEAR UP implementation, state testing, and the ICF team’s evaluation. For example, there was no State of Texas Assessments of Academic Readiness (STAAR) testing in the spring of 2020, and almost all students in the study across cohorts were promoted on time to the next grade level in the fall of 2020–21 (Hutson et. al, 2021).

The pandemic continued to affect schools in the current reporting period (Years 3 and 4; 2020–21 to 2021–22). In particular, the 2020–21 school year was “one of the most challenging for educators and students in our nation’s history” (Dorn et al., n.d.).<sup>3</sup> Many schools opened later in fall 2020 than usual and, when they did open, it was often via a virtual or hybrid model where students did much of their classwork remotely. Students who attended in person were required to mask or social distance and had to abide by quarantine protocols when exposed to the virus.

Planned GEAR UP programs and services (e.g., one-on-one counseling, tutoring, and college visits) were delayed or modified in 2020–21 due to the COVID-19 pandemic. Service delivery improved during 2021–22 (Year 4). This report presents findings from the impact evaluation of the 2020–21 to 2021–22 school years across a variety of outcomes: mathematics course completion, on-time grade-level promotion, and STAAR end-of-course (EOC) exam scores.

---

<sup>2</sup> [Texas GEAR UP: Beyond Grad Biennial Impact Report Evaluation of Years 1 and 2](#)

<sup>3</sup> [COVID-19 and Education: The Lingering Effects of Unfinished Learning](#).

## Evaluation Questions

This report focuses on five 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 compare to state averages?
- How do trends in outcomes for the class of 2024 GEAR UP cohort students compare to a carefully matched sample of class of 2024 students in similar districts (i.e., the matched comparison cohort)?
- How do trends in outcomes for the class of 2024 students compare to students who are in the priority cohort (e.g., the classes of 2023 and 2025, the retrospective and follow-on cohorts)?
- How do trajectories of outcomes differ based on the length of time students attended GEAR UP schools? For example, does Algebra II completion increase for students who attended GEAR UP schools in all grades compared to students who only attended in high school?

### 1.2.1. Evaluation Design: Longitudinal and Quasi-Experimental

The external evaluation is a longitudinal design that spans 7 years and follows a cohort model. There are four key cohort groups in the study, which are listed below.

- 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 also from the class of 2024 attending similar districts who did not participate in GEAR UP.
- The **retrospective cohort** includes students who attended GEAR UP districts and were one grade level ahead of the class of 2024 (i.e., the class of 2023).
- The **follow-on cohort** includes students who attended the GEAR UP districts and were one grade level behind the class of 2024. These students are from the class of 2025.

Table 1.2 illustrates the timeline and grade levels associated with the class of 2024 GEAR UP cohort across the grant period compared to the other cohorts of interest in which the majority of students were enrolled. This report focuses on Years 3 and 4, when the class of 2024 was in Grade 9 and 10. It is important to note that the cohorts were created based on the students' grade levels in Year 3 and Year 4. Students were considered to be a part of the class of 2024 if they attended a GEAR UP campus in Grade 9 in 2020–21 for Year 3 or Grade 10 in 2021–22 for Year 4. When referring to prior data, the grade in which most students in the cohort were enrolled in that year is used. For example, it is later stated in the report that the Algebra I course completion data were examined from Grade 6 (2017–18), but a handful of the class of 2024 students were in Grade 5 or Grade 7 in that school year.

**Table 1.2. GEAR UP Evaluation Timeline: Grade in School by Grant Year by Cohort Group**

Cohort Group	Biennial Impact Report 2021: Evaluation of Years 1 & 2 (Hutson et al., 2021)		Biennial Impact Report 2023: Evaluation of Years 3 & 4 (Current Report)		Biennial Impact Report 2025: Evaluation of Years 5 & 6 (Future Report)		First Year of College
	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	
<b>Class of 2024</b> GEAR UP Cohort	Year 1 2018–19	Year 2 2019–20*	Year 3 2020–21	Year 4 2021–22	Year 5 2022–23	Year 6 2023–24	Year 7 2024–25
<b>Matched Comparison Cohort</b>	2018–19	2019–20*	2020–21	2021–22	2022–23	2023–24	2024–25
<b>Retrospective Cohort</b> (GEAR UP districts pre-award)	2017–18	2018–19	2019–20*	2020–21	2021–22	2022–23	2023–24
<b>Follow-On Cohort 1</b> (GEAR UP districts post-intervention)	2019–20*	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26

Note. GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. COVID-19 – Coronavirus disease 2019.

\*STAAR data not available due to COVID-19. Light blue shading indicates grade levels assessed in this report.

### 1.2.2. Class of 2024 GEAR UP Cohort

There were 2,706 students in the sample for the GEAR UP class of 2024. Table 1.3 provides demographic information about the students by school. In future tables, to maintain confidentiality, schools are scrambled and masked by letters.

Four in five students in the sample were Hispanic; the remainder were African American, White, or from other races. Almost all were classified as economically disadvantaged and more than half were identified as at-risk.<sup>4</sup> About one-third of the students were emergent bilingual students/English learners (EB/EL), and a small percentage of students qualified for special education or gifted and talented services.

<sup>4</sup> At-risk status is reported annually in the Public Education Information Management System (PEIMS). There are 15 factors that determine if a student is classified as at-risk. They are listed in the [2022–23 Data Element Definitions in the Texas Education Data Standards](#) on pp. 325–326.

**Table 1.3. Class of 2024 GEAR UP Cohort Key Demographics by School**

Student Characteristic	C.E. King N = 1,055	Cleveland N = 923	Mathis N = 140	San Elizario N = 359	Sinton N = 197	Van Horn N = 32	All N = 2,706
<b>Gender (%)</b>							
Male	52%	53%	56%	53%	53%	53%	53%
<b>Race/Ethnicity (%)</b>							
African American	29%	4%	<4%	0%	<3%	0%	13%
Hispanic	66%	84%	92%	100%	80%	88%	80%
White	3%	10%	7%	0%	18%	<16%	7%
<b>Economic Status (%)</b>							
Economically Disadvantaged	80%	95%	81%	92%	68%	81%	86%
<b>Instructional Program or Special Population (%)</b>							
At-Risk	70%	52%	73%	74%	51%	81%	63%
EB/EL	23%	41%	<4%	49%	<3%	<16%	30%
Gifted and Talented	4%	3%	6%	7%	10%	<16%	5%
Special Education	8%	8%	15%	14%	12%	<16%	9%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22.

Note. GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. EB/EL – Emergent bilingual students/English learners. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 demographic variables, values from fall of Grade 10 were used (fall of the 2021–22 school year). To be included in this table, students must have been enrolled at a GEAR UP campus as a Grade 9 student 2020–21 and/or a Grade 10 student 2021–22 and have had data for at least one outcome for Grade 9 or 10. Cell counts of  $n < 5$  are masked.

### 1.2.3. Matched Comparison Cohort

To understand if participation in the GEAR UP intervention was associated with academic improvement, outcomes for the class of 2024 were compared to those from the matched comparison cohort, a statistically similar group of students from the same grade level and graduation cohort as the class of 2024 who attended schools not served by the GEAR UP program. The creation of the matched comparison cohort began by finding schools that were as similar as possible to GEAR UP campuses. Schools were selected based on similarity of region and student characteristics (e.g., percentage of students classified as economically disadvantaged). Because several of the GEAR UP campuses were small, and because it was important to make the best student-to-student match, several schools were matched with each GEAR UP campus. Next, propensity score matching (PSM) was used to find students at those schools who were statistically similar to the class of 2024 in terms of student characteristics (e.g., race/ethnicity, gender, economic status) and baseline academic achievement (i.e., STAAR Mathematics and STAAR Reading from Grade 7). Almost all (97%) students in the class of 2024 GEAR UP cohort were matched to a comparison student for a final sample size of 4,442 students. (See Appendix B for details on the PSM process.)

After completing the match, baseline equivalency (BE) was checked to determine how similar the groups were to each other. As demonstrated in Table 1.4, the two cohorts were quite similar. There were no significant differences between groups, and all effect sizes (ES) had Hedges'  $g \leq 0.05$ , indicating statistical equivalency.<sup>5,6</sup>

**Table 1.4. Class of 2024 and Matched Comparison Cohorts: Key Demographics for Propensity Score Matched Students, Grade 9 and 10**

Student Characteristic	Class of 2024 ( <i>n</i> =2,218)	Matched Comparison ( <i>n</i> =2,224)	sig	ES
<b>Gender (%)</b>				
Male	52%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	14%	14%	ns	0
Hispanic	80%	80%	ns	0
White	5%	5%	ns	0
<b>Economic Status (%)</b>				
Economically Disadvantaged	87%	87%	ns	0
<b>Instructional Program or Special Population (%)</b>				
At-Risk	66%	66%	ns	0
EB/EL	29%	27%	ns	0.04
Gifted and Talented	5%	4%	ns	0.05
Special Education	8%	8%	ns	0
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1614	1614	ns	0.01
Reading	1600	1599	ns	0

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges'  $g$ . Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in the fall of 2020 or 2021 and have been matched in the propensity score matching. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

Checking this initial BE was not enough, however, as cohort membership and available outcome data varied by student. For example, some students only attended a GEAR UP or matched comparison campus in Grade 9, so they were ineligible for outcome comparisons in Grade 10. Therefore, individual analytic samples were created for each grade level and outcome, and baseline differences were examined for each analytic sample (see Appendix C for results).

In each analytic sample comparison, there was at least one student characteristic with a small difference between the cohorts that violated BE assumptions. For example, the percentage of

<sup>5</sup> A difference is considered statistically significant if there is a low probability, or  $p$ , that the difference occurred by chance (generally, the chance level is set to 5%).

<sup>6</sup> Hedges'  $g$  is a measure of effect size (standardized difference between means) that includes a correction for sample size, making it more robust than Cohen's  $d$  per the [American Psychological Association](#).



students identified as African American was slightly higher for the matched comparison cohort when examining the analytic sample for the English I EOC exam. Any characteristic with an ES difference of  $> 0.05$  was added as a covariate in a statistical multilevel model (MLM).

Additionally, students were clustered by school in the MLMs to account for similarities between students attending the same schools (e.g., same physical school environment, similar teachers, similar peer group). More information about the composition of the matched comparison cohort is in Appendix B.

#### 1.2.4. Retrospective Cohort

Because GEAR UP was focused on the class of 2024, the class of 2023 (i.e., the retrospective cohort) provided a natural comparison group to examine the effects of targeted GEAR UP services on outcomes. Students in the retrospective cohort attended the same schools and shared a similar environment, teachers, and peers as the class of 2024. They had similar baseline course offerings and enrichment opportunities and would be expected to have similar student characteristics and baseline achievement scores as the class of 2024. The retrospective cohort was part of the priority cohort that received school-level GEAR UP services. Unlike the class of 2024, they did not receive targeted GEAR UP services such as one-on-one tutoring and virtual college visits.

The students in the retrospective cohort were in Grade 9 in 2019–20 and in Grade 10 in 2020–21. There were 179 students of the retrospective cohort in Grade 10 that were not promoted to Grade 11 on time and thus became part of the class of 2024 cohort. For the majority of analyses in this study (all but on-time promotion from Grade 10 to 11), they are considered part of the class of 2024 because they had the opportunity to receive targeted GEAR UP services.

Although it could reasonably be expected for the retrospective cohort and the class of 2024 to be very much alike, there were several factors that made the groups more different than expected. The first was the COVID-19 pandemic, which limited the outcome data that could be collected. In March 2020, all schools were closed and all spring activities were canceled. There was no spring 2020 STAAR testing. As reported in the previous impact study, in spring 2020, almost all students from GEAR UP campuses were promoted to the next grade level, which was not typical.<sup>7</sup> Additionally, some course completion information was incomplete. For these reasons, only Grade 10 outcomes are compared between the class of 2024 and the retrospective cohort in this report.

Analyses of student characteristics revealed that the demographic composition of districts had changed slightly over time (see Table 1.5). For example, the percentage of students who were classified as economically disadvantaged and EB/EL was significantly higher for the class of 2024, and the percentage of White students was significantly lower. Because participation by outcome varied, analytic samples for each outcome were created and all variables that had differences with  $ES > 0.05$  were added as covariates in logistic regression models. Additionally, school was added as a covariate to the models to account for similarities between students who attend the same schools (similar teachers, local environment, and so forth). More information

---

<sup>7</sup> [Texas GEAR UP: Beyond Grad Biennial Impact Report Evaluation of Years 1 and 2](#)

about the retrospective cohort can be found in Appendix B, and information about the analytic samples can be found in Appendix C.

**Table 1.5. Class of 2024 Cohort and Retrospective Cohort Key Demographics, Grade 10**

Student Characteristic	Class of 2024 (n=2,121)	Retrospective Cohort (n=1,771)	sig	ES
<b>Gender (%)</b>				
Male	52%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	13%	12%	ns	0.03
Hispanic	80%	80%	ns	0
White	6%	8%	*	0.08
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	82%	*	0.08
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	63%	ns	0.02
EB/EL	29%	25%	*	0.09
Gifted and Talented	5%	7%	ns	0.08
Special Education	9%	9%	ns	0
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1623	1634	**	0.10
Reading	1614	1617	ns	0.02

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2019–20 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. Demographic variables are primarily from the fall of Grade 9 (fall of the 2019–20 or 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2020–21 or 2021–22 school year). To be included in the table, students must have been enrolled in a GEAR UP campus as a Grade 10 student in fall of 2022 (class of 2024) or fall of 2021 (retrospective cohort) and have data for at least one Grade 10 outcome. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

### 1.2.5. Follow-On Cohort

The follow-on cohort includes students who attended GEAR UP campuses that are one grade level below the class of 2024 (i.e., the class of 2025). For example, the class of 2024 students were in Grade 9 in 2020–21 and the follow-on cohort students were in Grade 8.<sup>8</sup> Like the retrospective cohort, the follow-on cohort students received school-level GEAR UP services but did not receive targeted services. Analyses comparing the class of 2024 to the follow-on cohort revealed differences in student characteristics (see Table 1.6). The percentage of students classified as EB/EL was significantly higher for the follow-on cohort compared to the class of 2024.

<sup>8</sup> Grade 9 students in the class of 2024 who were not promoted to the higher grade level in 2020–21 became part of the follow-on cohort. However, they are included as part of the class of 2024 in these analyses because they had the opportunity to receive targeted GEAR UP services.

**Table 1.6. Grade 9 Key Demographics: Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Student Characteristic	Class of 2024 (n=2,148)	Follow-On (n=2,391)	sig	ES
<b>Gender (%)</b>				
Male	52%	52%	ns	0
<b>Race/Ethnicity (%)</b>				
African American	13%	13%	ns	0
Hispanic	80%	79%	ns	0.02
White	7%	7%	ns	0
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	85%	ns	0
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	61%	ns	0.02
EB/EL	27%	34%	***	0.15
Gifted and Talented	6%	5%	ns	0.04
Special Education	10%	8%	*	0.07
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1599	1597	ns	0.02
Reading	1534	1531	ns	0.02

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 or 2021–22 school year). In cases where class of 2024 students were missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). To be included in this table, students must have been enrolled in a GEAR UP campus as a Grade 9 student in fall of 2020 (class of 2024) or fall of 2021 (follow-on cohort) and have data for at least one outcome variable. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

Before analyses of differences between cohort outcomes were conducted, analytic samples for each outcome were created. All variables that had differences of ES > 0.05 were added as covariates in statistical models. Additionally, “school” was added as a covariate to the models to account for clustering within schools. More information about the follow-on cohort is in Appendix B, and information about the analytic samples can be found in Appendix C.

### 1.3. Report Overview

In the next chapter, analyses of student outcomes are reported. We first provide descriptive statistics associated with each of the outcomes to provide a foundation for the analyses that follow. Next, outcomes for the class of 2024 are compared to those from matched comparison, retrospective, and follow-on cohorts. A final set of analyses seeks to determine if the length of time in the GEAR UP cohort is predictive of academic outcomes.

Additional details about the methodology accompany each of the various models in the main text (Appendix B provides more details on analyses, including cohort construction and statistical methodology). Findings in this report may differ from the annual project outcomes reports produced for the GEAR UP: Beyond Grad evaluation due to differences in data availability and analytic methodology. Appendix C provides tables that include additional details on the findings reported as referenced throughout the chapter.

A summary of findings is presented in Chapter 3, along with conclusions, a discussion of limitations, and recommendations.

## 2. Student Outcomes

The overall goal of the federal GEAR UP program is to improve college readiness and postsecondary education enrollment (see Appendix A for a list of all GEAR UP project goals and objectives). This chapter focuses on Grade 9 and 10 outcomes: Algebra I and II completion, on-time promotion, and performance on STAAR EOC exams.

The first set of outcomes concerns completion of Algebra I and II. Project Objective 1.1 states that, by the end of Grade 8, 30% of class of 2024 students will have completed Algebra I, and by the end of Grade 9, 85% of students will have completed the course. Additionally, Objective 2.2 states that by the end of the project's sixth year, the percentage of class of 2024 students graduating on the Foundation High School Program with an endorsement and/or receiving the Distinguished Level of Achievement will meet or exceed the baseline state average. Completion of Algebra II is required for students to earn the Distinguished Level of Achievement.

There are several ways in which GEAR UP promotes Algebra I and II completion. First, schools are encouraged to have as many students as possible complete Algebra I in middle school, which puts the students on track for completing Algebra II by Grade 10. Schools have implemented summer academies and other strategies to prepare students for Algebra I. Once students are in the course, GEAR UP provides one-on-one tutoring to students on request. The program also provides one-on-one counseling services that in part advise students on course selection.<sup>9</sup>

The second set of outcomes concerns on-time promotion. Objective 4.1 is for the class of 2024's on-time graduation rate to exceed the average state on-time graduation rate. GEAR UP assists with improving graduation rates through several strategies, including one-on-one advising sessions about course selection and on-demand tutoring. In this report, on-time promotion from Grade 9 to 10 or above and Grade 10 to 11 or 12 is examined.

The final set of outcomes presented are the percentage of students achieving the Approaches Grade Level standard and Masters Grade Level standard on STAAR EOC exams typically administered in Grade 9 and 10: Algebra I, Biology, English I, and English II. Objective 5.2 states that, by the end of Grade 12, 50% of class of 2024 students attending GEAR UP schools will meet the college readiness criteria on the SAT, ACT, or the Texas Success Initiative Assessment (TSIA). Additionally, Objective 5.4 states that at least 60% of class of 2024 students who enroll in postsecondary education will place into college-level courses without the need for remediation. The percentage of students achieving the Approaches Grade Level standard and Masters Grade Level standard on STAAR exams are used to determine progress toward these college readiness objectives.

---

<sup>9</sup> See [Texas GEAR UP: Beyond Grad: Annual Implementation Report: Evaluation of Year 3](#) and [Texas GEAR UP: Beyond Grad: Annual Implementation Report: Evaluation of Years 1 and 2](#).

## 2.1. Analysis Overview

Following is a high-level overview of the content of each of the following sections in this chapter.

- Section 2.2, Student Outcomes by School, presents the results for each outcome by school for students in the class of 2024 GEAR UP cohort.
- Sections 2.3, 2.4, and 2.5 (Student Outcomes by Cohort) examine differences in outcomes for the class of 2024 to the matched comparison, retrospective, and follow-on cohorts. Each subsection includes comparisons by each relevant outcome, beginning with general descriptive data, then moving to a basic statistical comparison (i.e., chi-square test), and finally a statistical model predicting the impact of cohort while controlling for variables representing school and any student characteristic or prior academic performance variables that were inequivalent at baseline.
- Section 2.6, Length of Time in Cohort, examines the effect of participation in GEAR UP (i.e., from 1 to 4 years) on outcomes. Analyses in this section use a variable for the number of years of participation to predict academic outcomes.

## 2.2. Student Outcomes by School

### 2.2.1. Mathematics Course Completion

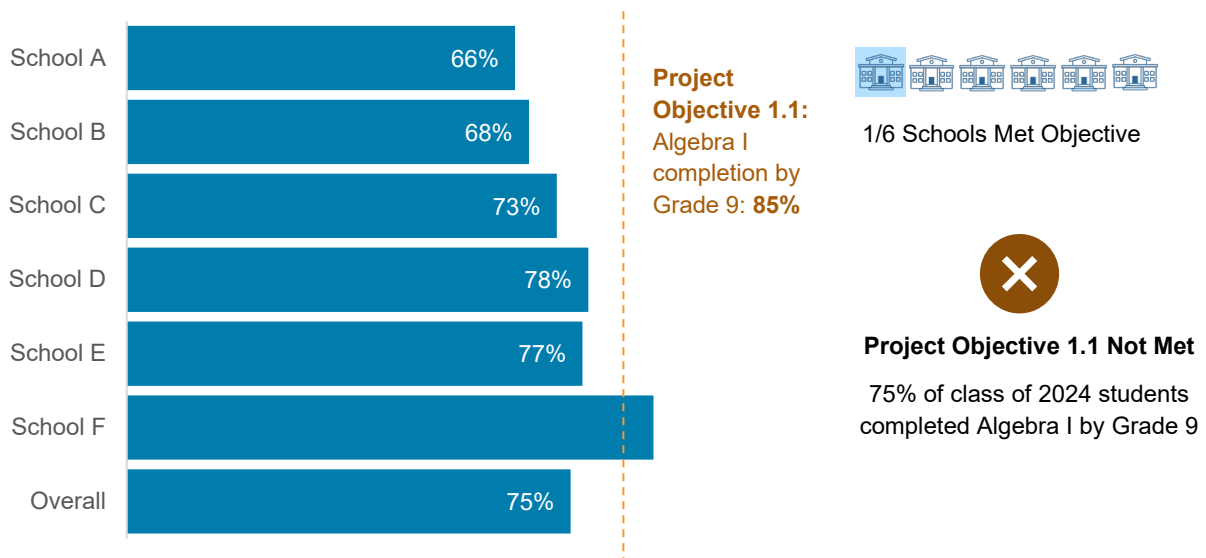
In this section, Algebra I completion by Grade 9 and Algebra II completion by Grade 10 by school are described for students in the class of 2024.

#### 2.2.1.1 Algebra I Completion

To measure Algebra I completion by Grade 9, Algebra I course completion data for all students who attended a GEAR UP school in Grade 9 were examined from Grade 6 (2017–18) to Grade 9 (2020–21).<sup>10</sup> Class of 2024 students did not meet the goal for Algebra I completion by Grade 9. Only 75% of students met the target, and only School F had 85% or more of its students complete Algebra I by Grade 9 (Figure 2.2.1 and Table C.1.2, Appendix C).

---

<sup>10</sup> In 2017–18, most class of 2024 students were in Grade 6. Some students were in other grade levels (e.g., Grade 7) during this school year. To be included in the sample, class of 2024 students must have been in Grade 9 in 2020–21.

**Figure 2.2.1. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by School**

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2020–21.

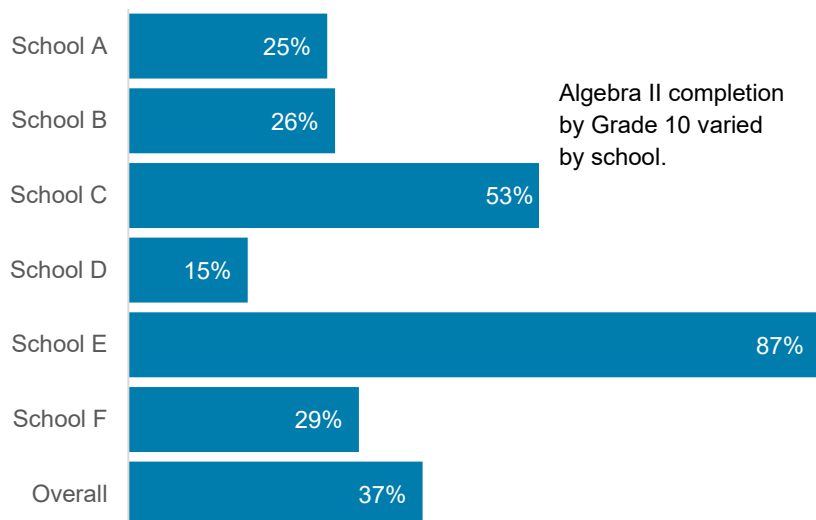
*Note.* Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. To be included in this sample ( $n = 2,148$ ), students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have data for at least one outcome in Grade 9.

### 2.2.1.2 Algebra II Completion

To measure the percentage of students who completed Algebra II by Grade 10, Algebra II course completion data were examined for class of 2024 students in Grade 9 (2020–21) and Grade 10 (2021–22). If students successfully completed the course within that time frame, they were categorized as Algebra II completers. If students had not attempted the course or had attempted it but had not successfully completed it, then they were categorized as non-completers.

Thirty-seven percent of students in the class of 2024 completed Algebra II by Grade 10. As shown in Figure 2.2.2 and Table C.1.3, Appendix C, Algebra II completion by Grade 10 varied greatly by school, with almost all students (87%) completing the course by Grade 10 at school E, and fewer than one in seven at school D (15%).

**Figure 2.2.2. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 by School**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22.

*Note.* Algebra II completers were defined as students who successfully completed Algebra II by Grade 10 (spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. To be included in this sample ( $n = 2,121$ ), students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and have data for at least one outcome in Grade 10.

## 2.2.2. On-Time Promotion

In this section, promotion data from Grade 9 to 10 or above and from Grade 10 to 11 or above are described by school for the class of 2024.

### 2.2.2.1 On-Time Promotion from Grade 9 to 10 or Above

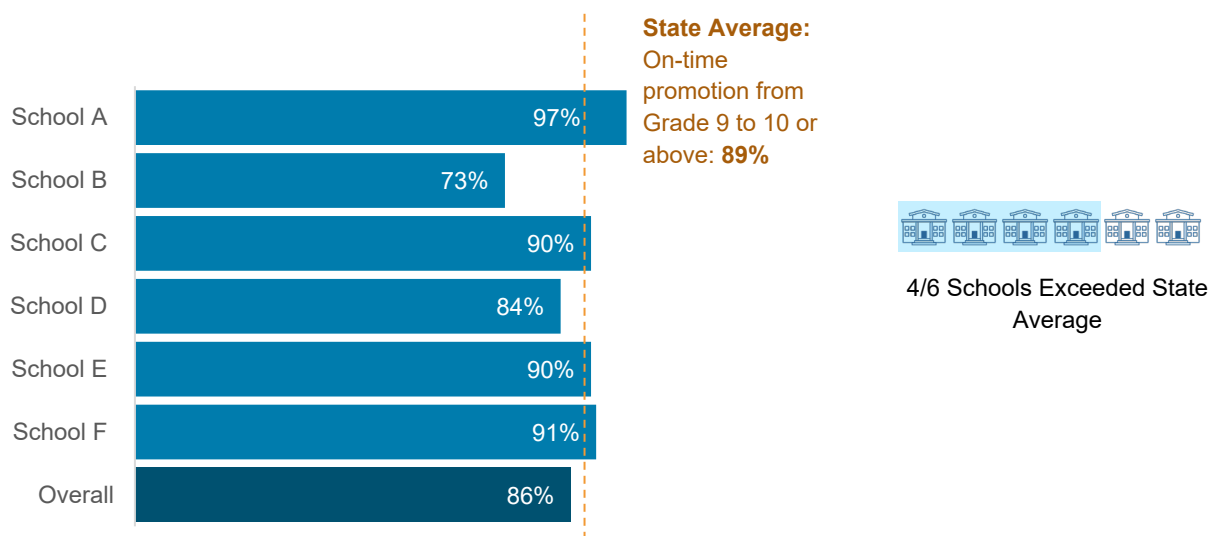
The on-time promotion rate from Grade 9 to 10 or above in 2020–21 was 89% statewide and 86% for the class of 2024 (see Figure 2.2.3 and Appendix C.1.4).<sup>11,12</sup> Four of the six campuses exceeded the average on-time promotion rate, even though the average for the class of 2024 was below the state rate. School B had a much lower promotion rate than did the other schools, moving only about 3 in 4 students (73%) to Grade 10 or above in 2021–22.

<sup>11</sup> [Grade Level Retention, by Grade, Texas Public Schools 2020–21 | Texas Education Agency.](#)

<sup>12</sup> Students who were enrolled in Grade 9 as of the fall snapshot (fall 2020) and in Grade 10 or above in the fall snapshot of the subsequent year (fall 2021) were considered to have been promoted on time. For more information about how promotion and retention are calculated, see [Grade-Level Retention, 2020-21 | Texas Education Agency](#)



**Figure 2.2.3. On-Time Promotion from Grade 9 (2020–21) to Grade 10 or above (2021–22) for Class of 2024 by School**



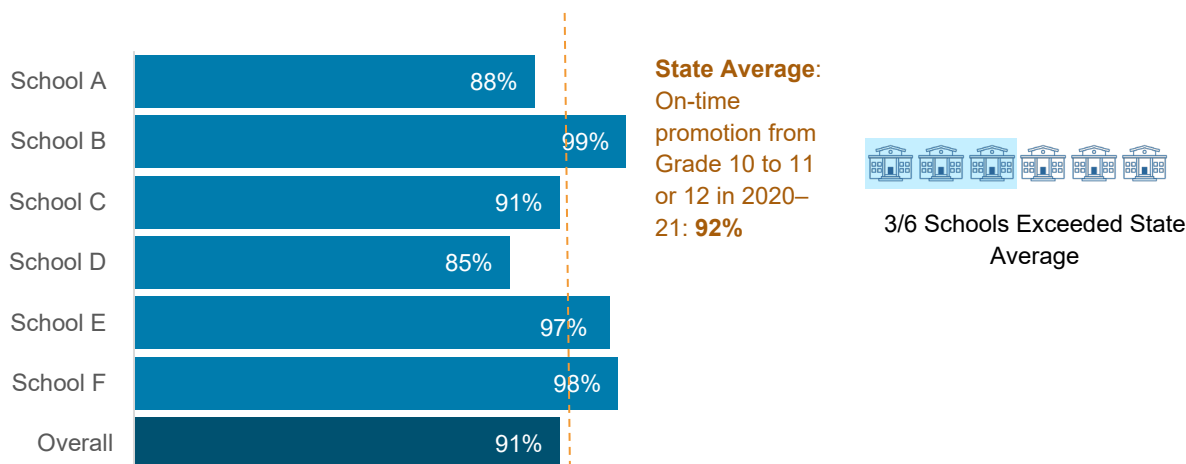
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), [Grade Level Retention, by Grade, Texas Public Schools, 2020–21](#). *Note.* For the GEAR UP sample, promotion was determined by examining the grade in which class of 2024 GEAR UP cohort students were enrolled in fall 2021, when they should have been enrolled in Grade 10. Students who were still enrolled in Grade 9 were classified as being retained, while students enrolled in Grade 10 or above were classified as promoted on time. To be included in the sample ( $n = 2,044$ ), students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and must have been enrolled in a Texas public school in the fall of the 2021–22 school year. See [Grade-Level Retention, 2020-21 | Texas Education Agency](#) for more information on how the state average was calculated.

### 2.2.2.2 On-Time Promotion from Grade 10 to 11 or Above

The statewide on-time promotion rate from Grade 10 to 11 or above in 2020–21, the latest school year for which data were available, was 92%.<sup>13</sup> The rate for the class of 2024 was 91% (see Figure 2.2.4 and Appendix C.1.5). Three of the six campuses exceeded the average on-time promotion rate. School B, which had the lowest rate of on-time promotion from Grade 9 (Figure 2.2.3) had the highest on-time promotion rate from Grade 10, with 99% of Grade 10 students promoted on time.

<sup>13</sup> [Grade Level Retention, by Grade, Texas Public Schools, 2020–21 | Texas Education Agency](#).

**Figure 2.2.4. On-Time Promotion from Grade 10 (2021–22) to Grade 11 or 12 (2022–23) for Class of 2024 by School**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2021–22 to 2022–23; Texas Education Agency (TEA), [Grade Level Retention, by Grade, Texas Public Schools, 2020–21](#). *Note.* Promotion was determined by examining the grade in which class of 2024 GEAR UP cohort students were enrolled in fall 2022, when they should have been enrolled in Grade 11. Students who were still enrolled in Grade 10 were classified as retained, while students enrolled in Grade 11 or above were classified as promoted on time. To be included in the sample ( $n = 2,003$ ), students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and must have been enrolled in a Texas public school in the fall of the 2022–23 school year. State average promotion data are from 2020–21, the latest data available when this report was written.

## 2.2.3. STAAR EOC Exams

In this section, the percentage of students achieving the Approaches Grade Level and Masters Grade Level standards for four EOC exams—Algebra I, Biology, English I, and English II—are described by school.

### 2.2.3.1 Algebra I EOC Exam for Grade 9

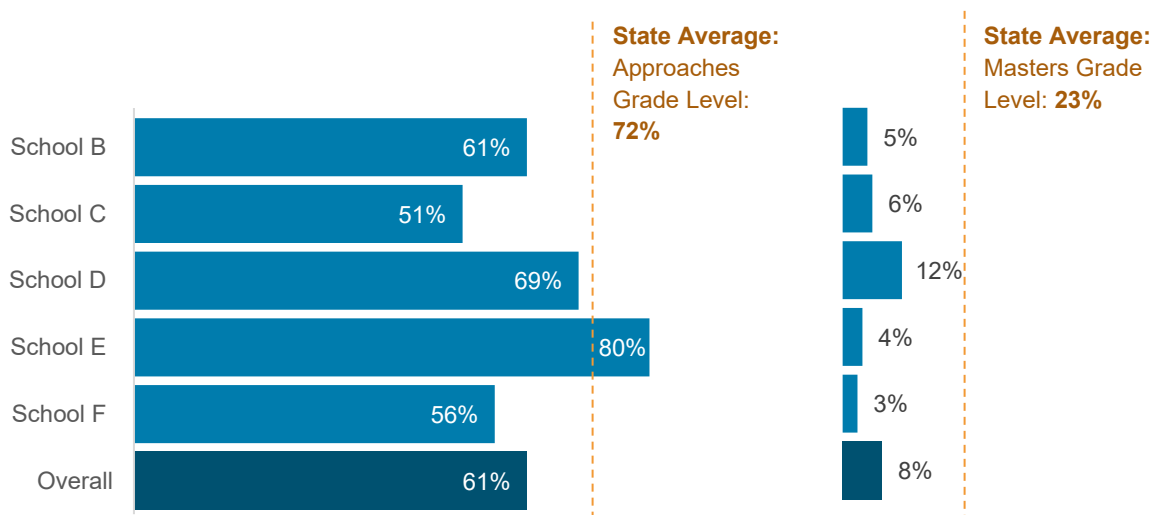
Sixty-one percent of students in the class of 2024 achieved the Approaches Grade Level standard and 8% achieved Masters Grade Level standard (see Figure 2.2.5 and Table C.1.6, Appendix C) on the Grade 9 Algebra I EOC exam. These rates were lower than the state average of 72% for the Approaches Grade Level standard and 23% for the Masters Grade Level standard.<sup>14</sup> Only School E had more students achieve Approaches Grade Level standard than the state average. None of the schools were at or above the state average for Masters Grade Level standard.

It is important to realize that the state does not disaggregate EOC exam results by grade level and many students who are high achievers in math take the Algebra I EOC exam prior to Grade 9. The sample of students represented from the class of 2024 does not include any of the students who took the Algebra I EOC exam in Grade 8 or before. Because the COVID-19

<sup>14</sup> STAAR Statewide Summary Reports, [Algebra I EOC exam, spring 2021 | Texas Education Agency](#).

pandemic caused state testing to be suspended for spring of 2020, there are no EOC exam scores for class of 2024 students who took Algebra I in Grade 8.

**Figure 2.2.5. Performance on Grade 9 (2020–21) Algebra I EOC Exam for Class of 2024 by School**



Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021; Texas Education Agency (TEA), STAAR Statewide Summary Reports, [Algebra I EOC exam, spring 2021](#).

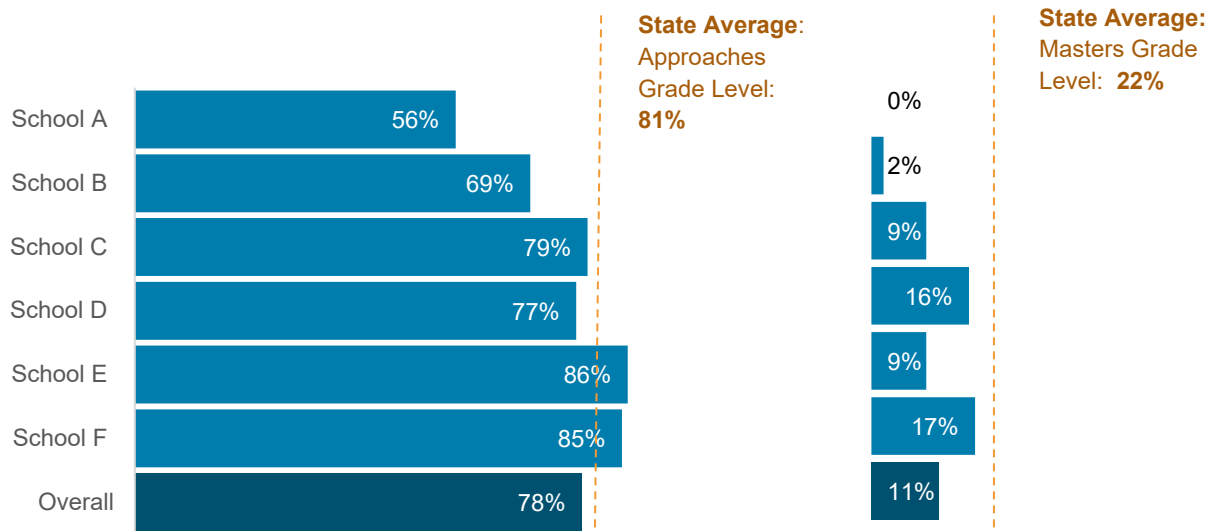
Note. EOC – End-of-course. School A had no students who took the EOC exam in spring 2021. Data from the spring administration of the exam in 2021 were used. To be included in the sample ( $n = 1,433$ ), students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored Algebra I EOC exam from spring 2021.

### 2.2.3.2 Biology EOC Exam for Grade 9

Seventy-eight percent of students in the class of 2024 achieved Approaches Grade Level standard and 11% achieved Masters Grade Level standard on the Grade 9 Biology EOC exam (see Figure 2.2.6 and Table C.1.7, Appendix C). These rates were lower than the state average of 81% for Approaches Grade Level standard and 22% for Masters Grade Level standard (TEA, 2021).<sup>15</sup> Two of the six schools (Schools E and F) exceeded the state average for Approaches Grade Level but none exceeded the state average for Masters Grade Level standard.

<sup>15</sup> STAAR Statewide Summary Reports, [Biology EOC exam, spring 2021 | Texas Education Agency](#).

**Figure 2.2.6. Performance on Grade 9 (2020–21) Biology EOC Exam for Class of 2024 by School**



Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021; Texas Education Agency (TEA), STAAR Statewide Summary Reports, [Biology EOC exam, spring 2021](#).

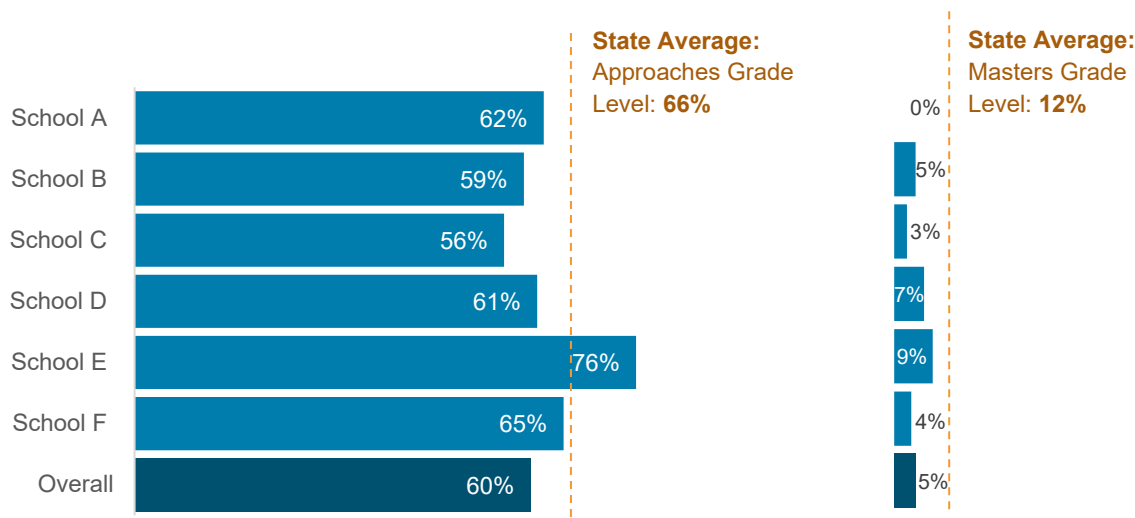
Note. EOC – End-of-course. Data from the spring administration of the exam in 2021 were used. To be included in the sample ( $n = 1,705$ ), students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored Biology EOC exam from spring 2021.

### 2.2.3.3 English I EOC Exam for Grade 9

Sixty percent of students in the class of 2024 achieved Approaches Grade Level standard and 5% achieved Masters Grade Level standard (see Figure 2.2.7 and Table C.1.8, Appendix C) on the Grade 9 English I EOC exam. These percentages were lower overall than the state average of 66% for Approaches Grade Level standard and 12% for Masters Grade Level standard.<sup>16</sup> One school (School E) exceeded the state average for Approaches Grade Level standard, but none of the six schools exceeded the average for Masters Grade Level.

<sup>16</sup> STAAR Statewide Summary Reports, [English I EOC exam, spring 2021 | Texas Education Agency](#).

**Figure 2.2.7. Performance on Grade 9 (2020–21) English I EOC Exam for Class of 2024 by School**



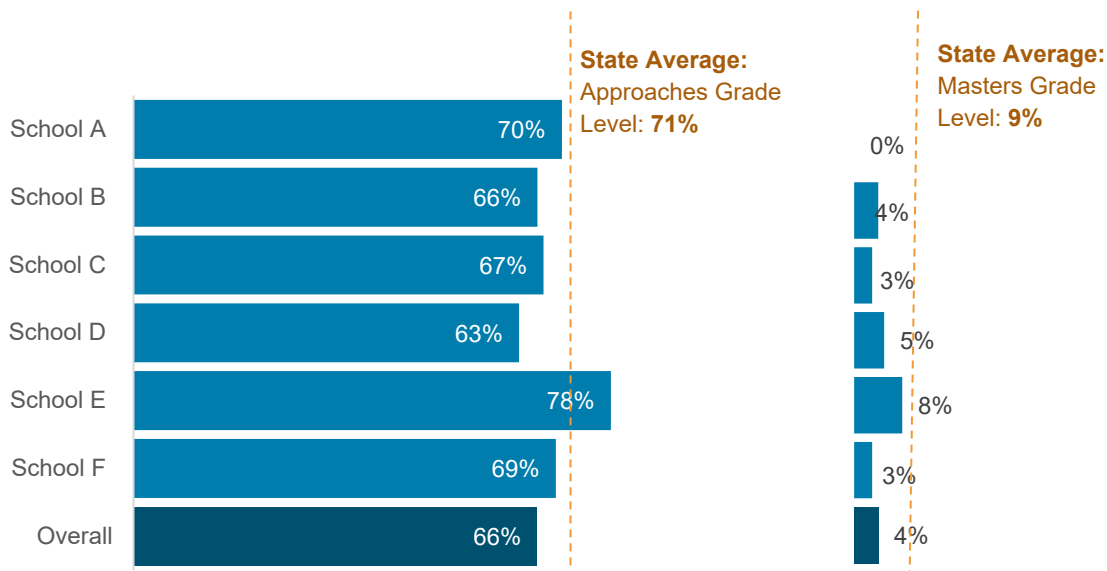
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021; Texas Education Agency (TEA), STAAR Statewide Summary Reports, [English I EOC exam, spring 2021](#).  
*Note.* EOC – End-of-course. Data from the spring administration of the exam in 2021 were used. To be included in the sample ( $n = 1,800$ ), students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored English I EOC exam from spring 2021.

### 2.2.3.4 English II EOC Exam for Grade 10

Almost two-thirds (66%) of the class of 2024 achieved Approaches Grade Level standard and 4% achieved Masters Grade Level standard on the Grade 10 English II EOC exam (see Figure 2.2.6 and Table C.1.9, Appendix C). These rates were lower than the state average of 71% for Approaches Grade Level standard and 9% for Masters Grade Level standard.<sup>17</sup> Similar to the results for English I, School E exceeded the state average for Approaches Grade Level standard, and none of the campuses exceeded the average for Masters Grade Level.

<sup>17</sup> STAAR Statewide Summary Reports, [English II EOC exam, spring 2022 | Texas Education Agency](#).

**Figure 2.2.8. Performance on Grade 10 (2021–22) English II EOC Exam for Class of 2024 by School**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2022; Texas Education Agency (TEA), STAAR Statewide Summary Reports, [English II EOC exam, spring 2022](#).

*Note.* EOC – End-of-course. Data from the spring administration of the exam in 2022 were used. To be included in the sample ( $n = 1,844$ ), students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and have a scored English II EOC exam from spring 2022.

### 2.3. Student Outcomes by Cohort: Matched Comparison

This section compares outcomes for students in the class of 2024 to those in a carefully matched comparison cohort. Outcomes were first compared at the group level with chi-squared analyses. Next, MLMs were created that accounted for clustering of students by school and student characteristics that had baseline inequivalences. For more information on how the matched comparison cohort was created and how the MLMs were structured, see Section 1.2.3 and Appendix B.

Initially, there appeared to be significant differences at the cohort level on several outcomes, some favoring the class of 2024 (such as Algebra II completion, and performance on the Algebra I and Biology EOC exams) and others favoring the matched comparison group (such as performance on the English II EOC exam and on-time promotion). However, cohort was not significant in any of the MLMs, indicating that the variation by school better explained differences than GEAR UP participation. Detailed findings are presented in the subsections that follow.

### 2.3.1. Mathematics Course Completion

#### 2.3.1.1 Algebra I Course Completion by Grade 9

The class of 2024 was significantly more likely to complete Algebra I by Grade 9 than the matched comparison cohort as a group (75% versus 71%).<sup>18</sup> However, the ES of the difference was small, and there was substantial variation in completion rates by school. MLMs revealed that cohort group was not predictive of Algebra I course completion (Table C.2.2, Appendix C), indicating that school membership was a better predictor of Algebra I completion than participation in GEAR UP.

#### 2.3.1.2 Algebra II Course Completion by Grade 10

As a group, students in the class of 2024 were significantly more likely to complete Algebra II by Grade 10 than were students in the matched comparison cohort.<sup>19</sup> Completion rates were 36% and 28%, respectively. However, similar to the results for Algebra I, there was substantial variation in Algebra II completion by school, and cohort was not a significant predictor of on-time promotion in the MLMs, indicating that school membership accounted for more variance in Algebra II completion than cohort (Table C.2.4, Appendix C).

### 2.3.2. On-Time Promotion

#### 2.3.2.1 On-Time Promotion from Grade 9 to 10

Students in the matched comparison cohort were significantly more likely to be promoted on time from Grade 9 to 10 than were students in the class of 2024 (90% versus 86%).<sup>20</sup> However, the ES of the difference was small, and cohort was not a significant predictor of promotion in the MLMs, indicating that school membership better explained the difference in promotion rates than cohort membership (Table C.2.6, Appendix C).

#### 2.3.2.2 On-Time Promotion from Grade 10 to 11

Students in the matched comparison cohort were significantly more likely to be promoted on time from Grade 10 to 11 than were students in the class of 2024 (93% versus 91%).<sup>21</sup> Once again, the ES of the difference was small, and in the MLMs—once school was added to the model—cohort was not a predictor of on-time promotion (Table C.2.8, Appendix C).

### 2.3.3. STAAR EOC Exam Performance

#### 2.3.3.1 Grade 9 Algebra I EOC Exam

The class of 2024 was significantly more likely to meet Approaches Grade Level standard (61%) on the Grade 9 Algebra I EOC exam than the matched comparison cohort (57%).<sup>22</sup> However, the effect size of the difference was small, and once school was entered in the MLM, cohort membership did not predict differences in performance (Table C.2.10, Appendix C). There was

<sup>18</sup>  $\chi^2(1, n = 3,752) = 7.5, p < .01$

<sup>19</sup>  $\chi^2(1, n = 3,553) = 26.5, p < .001$

<sup>20</sup>  $\chi^2(1, n = 3,584) = 13.9, p < .001$

<sup>21</sup>  $\chi^2(1, n = 3,429) = 5.2, p < .05$

<sup>22</sup>  $\chi^2(1, n = 2,597) = 4.3, p < .05$

no difference between groups in the percentage of students who met the Masters Grade Level standard on the Grade 9 Algebra I EOC exam (Table C.2.11, Appendix C).

### 2.3.3.2 Grade 9 Biology EOC Exam

The class of 2024 was significantly more likely to meet the Approaches Grade Level standard for the Grade 9 Biology EOC exam (79%) than the matched comparison cohort (74%).<sup>23</sup> Additionally, the class of 2024 was significantly more likely to meet the Masters Grade Level standard (10%) than the matched comparison cohort (8%).<sup>24</sup> However, the ES of these differences were small, and when school was entered into the MLM, cohort was not predictive of differences in meeting either standard on the Biology EOC exam (Tables C.2.13 and C.2.14, Appendix C).

### 2.3.3.3 Grade 9 English I EOC Exam

There were no significant differences between cohorts in meeting either Approaches Grade Level standard or Masters Grade Level standard either at the group level or in the MLM models (Tables C.2.16 and C.2.17, Appendix C).

### 2.3.3.4 Grade 10 English II EOC Exam

Students in the class of 2024 were significantly less likely to achieve the Approaches Grade Level Standard than were students in the matched comparison cohort (68% versus 71%)<sup>25</sup> on the Grade 10 English II EOC exam. However, the ES of the difference was small, and cohort was not a predictor of achieving the standard in the MLMs (Table C.2.19, Appendix C). There were no differences between cohorts in achieving Masters Grade Level standard on the Grade 10 English II EOC exam (Table C.2.20, Appendix C).

## 2.4. Student Outcomes by Cohort: Retrospective

This section compares Grade 10 outcomes for students in the class of 2024 to those in the retrospective cohort: Algebra II completion by Grade 10, on-time promotion from Grade 10 to 11, and performance on the Grade 10 English II EOC exam. As shown earlier in Table 1.5, there were several differences in student demographics, program participation, and prior STAAR performance between the retrospective cohort and the class of 2024. Interpreting results without taking these differences into account may lead to incorrect conclusions about the effect of targeted GEAR UP services on outcomes. For this reason, comparisons of group means are paired with logistic regressions that include school membership and student characteristics with baseline inequivalences for each outcome. (Logistic regressions were used instead of MLMs because of the relatively small number of schools—six.) See Section 1.2.4 and Appendix B for more about the retrospective cohort.

Results indicated that students in the retrospective cohort were significantly more likely to complete Algebra II by Grade 10 than were students in the class of 2024. On the other hand,

<sup>23</sup>  $\chi^2 (1, n = 3,030) = 9.8, p < .01$

<sup>24</sup>  $\chi^2 (1, n = 3,030) = 7.6, p < .01$

<sup>25</sup>  $\chi^2 (1, n = 3,111) = 4.4, p < .05$



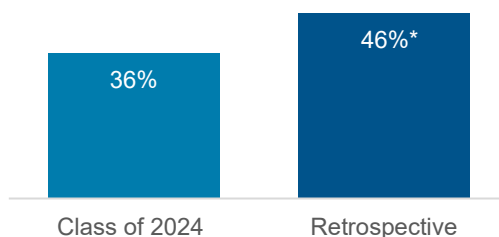
students in the class of 2024 were significantly more likely to be promoted to Grade 11 on time and were more likely to achieve the Approaches Grade Level standard on the English II EOC exam. Detailed findings are presented in the subsections that follow.

## 2.4.1. Mathematics Course Completion

### 2.4.1.1 Algebra II Course Completion by Grade 10

Retrospective cohort students were significantly more likely to complete Algebra II by Grade 10 than were students in the class of 2024 (Figure 2.4.1). This difference was significant both at the group level and in a logistic regression that controlled for school and other variables with baseline inequivalences (*Odds Ratio [OR]* = 0.55,  $p < .001$ ; see Table C.3.1, Table C.3.2, and Table C.3.3, Appendix C).<sup>26</sup>

**Figure 2.4.1. Algebra II Completion by Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2019–20 to 2021–22.

*Note.* OR – Odds ratio.  $\chi^2$  – chi-squared statistic. \* indicates statistical significance ( $p < .001$ ). The difference, displayed above, was significant at the group level ( $\chi^2 (1, n = 3,354) = 34.4, p < .001$ ). Additionally, the difference was also significant in the logistic regression model ( $OR = 0.55, p < .001$ ).

## 2.4.2. On-Time Promotion

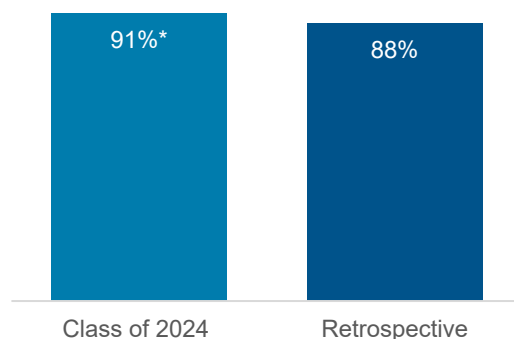
### 2.4.2.1 On-Time Promotion from Grade 10 to 11

Students in the class of 2024 were significantly more likely to be promoted on time from Grade 10 to 11 than were students in the retrospective cohort (Figure 2.4.2).<sup>27</sup> The difference persisted in the logistic regression model that controlled for school and student characteristic variables with baseline inequivalences ( $OR = 1.28, p < .05$ ; see Table C.3.4, Table C.3.5 and Table C.3.6, Appendix C).

<sup>26</sup>  $\chi^2 (1, n = 3,354) = 34.4, p < .001$

<sup>27</sup>  $\chi^2 (1, n = 3,272) = 5.1, p < .05$

**Figure 2.4.2. On-Time Promotion from Grade 10 to 11 for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts**



Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23.

Note. OR – Odds ratio.  $\chi^2$  – chi-squared statistic. \*indicates statistical significance ( $p < .05$ ). The difference, displayed above, was significant at the group level ( $\chi^2(1, n = 3,272) = 5.1, p < .05$ ). Additionally, the difference was significant in the logistic regression model ( $OR = 1.28, p < .05$ ).

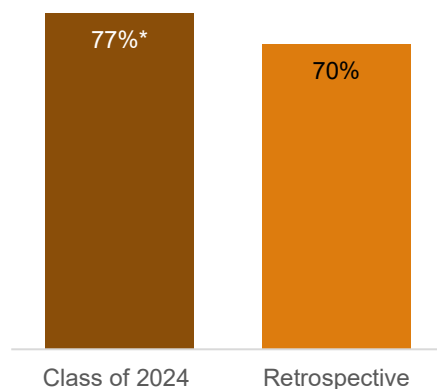
## 2.4.3. STAAR EOC Exam Performance

### 2.4.3.1 Grade 10 English II EOC Exam

Initially, there were no differences between cohort groups on achieving Approaches Grade Level standard for the English II EOC exam. However, cohort was a significant predictor of achieving the standard in the logistic regression. Students in the class of 2024 were predicted to be significantly more likely to meet Approaches Grade Level standard than the retrospective cohort once school and student characteristics with baseline inequivalencies were added to the model ( $OR = 1.45, p < .001$ , see Table C.3.7, Table C.3.8 and Table C.3.9, Appendix C).

Model predictions based on the values presented in Table C.3.9, Appendix C are displayed in Figure 2.4.3. The figure shows the predicted percentage of students achieving the Approaches Grade Level standard for the Grade 10 English II EOC exam based on the values from the logistic regression. To create these figures, all values for variables were held constant at the mean value for the variable in the analytic sample (see Table C.3.7, Appendix C). For example, the percentage of White students across the two cohorts was 7% in the analytic sample, so this variable is set to 0.07 in the model. Because predicted values take school membership and prior performance into account, and because these average values are used, the predictions do not align with the actual percentage observed and should only be used as an illustration of the magnitude of the differences between the cohorts.

**Figure 2.4.3. Predicted Percentages for Approaches Grade Level Standard on Grade 10 English II EOC Exam for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021, spring 2022.

*Note.* OR – Odds ratio. \* indicates statistical significance ( $p < .05$ ). This figure displays predicted scores from the logistic regression (OR = 1.45,  $p < .001$ ) that controlled for school and various student characteristics. Detailed results are in Table C.3.9, Appendix C. To create this figure, values for all variables but cohort were held constant at the mean value for the sample (for example, the percentage of students with Economic Status = Economically Disadvantaged for the analytic sample across the cohorts was 84%, so the value for this variable was 0.84 in the model). Because predicted values take school membership and prior performance into account, and because these average values are used, the predictions do not align with the actual percentage of students achieving Approaches Grade Level standard on the English II EOC exam and should only be used as an illustration of the magnitude of the differences between the cohorts.

There were no significant differences in meeting Masters Grade Level standard on the English II EOC exam by cohort, and cohort was not a significant predictor in the logistic regression analysis (Table C.3.10, Appendix C).

## 2.5. Student Outcomes by Cohort: Follow-On

This section compares outcomes for the class of 2024 to the follow-on cohort. In the most recent year that data were available, students in the follow-on cohort had just completed Grade 9, so this section only focuses on those outcomes: Algebra I course completion by Grade 9; on-time promotion from Grade 9 to 10; and performance on the Algebra I, Biology, and English I EOC exams. As shown earlier in Table 1.6, similar to the retrospective cohort, there were significant differences in student characteristics between the follow-on cohort and the class of 2024. Additionally, there were significant variations in outcomes by school. For this reason, logistic regression models that control for school membership and certain student

characteristics are better indicators of the true effect of targeted GEAR UP services on outcomes than merely examining differences in means. See Section 1.2.5 for more about the follow-on cohort and Appendix B for more on the analysis strategy used.

Results indicated that the follow-on cohort was significantly more likely to complete Algebra I by Grade 9, be promoted on time from Grade 9 to 10 or above, and perform better on the Grade 9 STAAR EOC Algebra I exam than students in the class of 2024. There were no differences between groups on the STAAR Biology and English I exams.

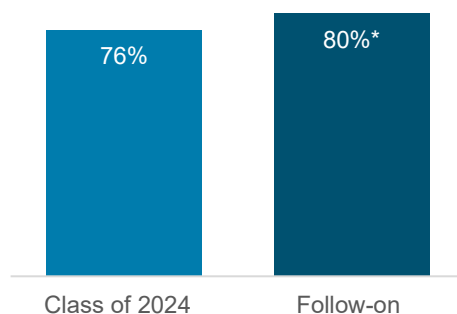
To put the findings in context, it is important to remember that the 2020–21 school year—the year outcomes were collected for the class of 2024—was heavily impacted by the COVID-19 pandemic, including severe declines for STAAR scores. Student performance improved in the 2021–22 school year.<sup>28</sup> Some of these findings could be related to this bounce back rather than the impacts of the GEAR UP program. Detailed findings are presented in the subsections that follow.

## 2.5.1. Mathematics Course Completion

### 2.5.1.1 Algebra I Course Completion by Grade 9

Students in the follow-on cohort were significantly more likely to complete Algebra I by Grade 9 than the class of 2024 (80% versus 76%).<sup>29</sup> The difference persisted in the logistic regression analysis that took school and student characteristics into account (Figure 2.5.1, Table C.4.3, Appendix C).

**Figure 2.5.1. Algebra I Completion by Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2021–22.

*Note.* OR – Odds ratio.  $\chi^2$  – chi-squared statistic. \* indicates statistical significance ( $p < .001$ ). The cohort difference, displayed above, was significant at the group level ( $\chi^2 (1, n=4052) = 11.7, p < .001$ ). Additionally, the difference was significant in the logistic regression model (OR = 0.75  $p < .001$ ).

<sup>28</sup> [2022 STAAR Results Summary | Texas Education Agency](#)

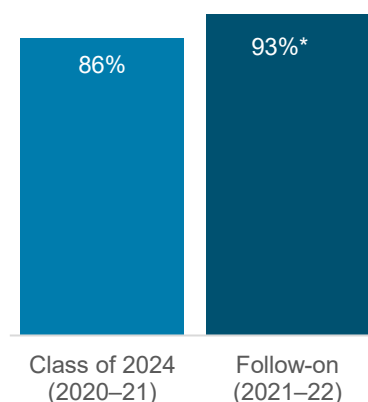
<sup>29</sup>  $\chi^2 (1, n = 4,052) = 11.7, p < .001$

## 2.5.2. On-Time Promotion

### 2.5.2.1 On-Time Promotion from Grade 9 to 10

A significantly higher proportion of students were promoted on time from Grade 9 to 10 in the follow-on cohort (93%) than in the class of 2024 (86%).<sup>30</sup> This difference persisted in the logistic regression analysis (OR = 0.44,  $p < .001$ ; see Figure 2.5.2 and Table C.4.6, Appendix C)

**Figure 2.5.2. Percentages of Students Promoted On-Time from Grade 9 to Grade 10, Class of 2024 and Follow-On Cohorts**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23.

*Note.* OR – Odds ratio.  $\chi^2$  – chi-squared statistic. \* indicates statistical significance ( $p < .001$ ). The cohort difference, displayed above, was significant at the group level ( $\chi^2 (1, n = 3,908) = 48.9, p < .001$ ). Additionally, the difference was significant in the logistic regression model (OR = 0.44,  $p < .001$ ).

## 2.5.3. STAAR EOC Exam Performance

### 2.5.3.1 Grade 9 Algebra I EOC Exam

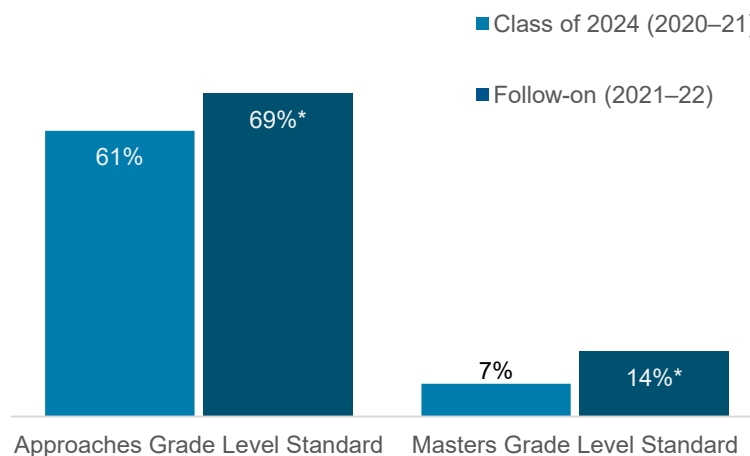
There was a significant difference in the percentage of students who met the Approaches Grade Level standard on the Algebra I EOC exam in Grade 9. Students in the class of 2024 were less likely to meet this standard (61%) than were students in the follow-on cohort (69%).<sup>31</sup> The difference remained significant in the covariate logistic regression (OR= 0.59,  $p < .001$ ; see Table C.4.9, Appendix C). Relative differences between cohorts were even greater for achieving the Masters Grade Level standard. Twice as many students met the standard in the follow-on cohort (14%) compared to the class of 2024 (7%).<sup>32</sup> The difference remained significant in the covariate logistic regression (OR = 0.39,  $p < .001$ ; see Figure 2.5.3 and Table C.4.10, Appendix C).

<sup>30</sup>  $\chi^2 (1, n = 3,908) = 48.9, p < .001$

<sup>31</sup>  $\chi^2 (1, n = 2,761) = 18.5, p < .001$

<sup>32</sup>  $\chi^2 (1, n = 2,761) = 30.5, p < .001$

**Figure 2.5.3. Percentages of Students Achieving Approaches and Masters Grade Level Standards on Grade 9 Algebra I EOC Exam, Class of 2024 and Follow-On Cohorts**



Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021, spring 2022.

Note. OR – Odds ratio.  $\chi^2$  – chi-squared statistic. \* indicates statistical significance ( $p < .001$ ). The cohort difference for Approaches Grade Level standard was significant at the group level ( $\chi^2 (1, n = 2,761) = 18.5, p < .001$ ) and in the logistic regression model (OR = 0.59,  $p < .001$ , Table C.4.9, Appendix C). The cohort difference for Masters Grade Level standard was significant at the group level ( $\chi^2 (1, n = 2,761) = 30.5, p < .001$ ) and in the logistic regression model (OR = 0.39,  $p < .001$ , Table C.4.10, Appendix C).

### 2.5.3.2 Grade 9 Biology EOC Exam

There were no significant differences between cohorts in meeting either Approaches Grade Level standard or Masters Grade Level standard either at the group level or in the logistic regression models (Tables C.4.13 and C.4.14, Appendix C) for the Grade 9 Biology EOC exam.

### 2.5.3.3 Grade 9 English I EOC Exam

There were no significant differences between cohorts in meeting either Approaches Grade Level standard or Masters Grade Level standard either at the group level or in the logistic regression models (Tables C.4.17 and C.4.18, Appendix C) for the Grade 9 English I EOC exam.

## 2.6. Length of Time in Cohort

The next set of analyses are intended to give insight into how outcomes are associated with the length of time students are in the GEAR UP cohort. That is, do students who have attended GEAR UP campuses for more years have better outcomes than those who have attended GEAR UP campuses for fewer years? The GEAR UP: Beyond Grad program has been in place since the 2018–19 school year when students in the class of 2024 entered Grade 7. Therefore, the number of potential years of treatment ranges from 1 to 4, representing the years 2018–19 to 2021–22. As shown in Table 2.6, there was an uneven distribution of students across years.

**Table 2.6. Length of Time in Cohort Counts by School for Class of 2024**

Length of Time in Cohort	School A	School B	School C	School D	School E	School F	All
All students (N = 2,706)							
1 Year	3%	31%	24%	34%	20%	16%	27%
2 Years	6%	6%	11%	18%	9%	11%	12%
3 Years	13%	23%	15%	15%	16%	17%	16%
4 Years	78%	40%	51%	32%	55%	57%	44%
Students with data for all student characteristic variables (N = 2,291)							
1 Year	0%	21%	19%	29%	17%	18%	22%
2 Years	3%	4%	9%	15%	7%	8%	10%
3 Years	13%	26%	16%	18%	17%	22%	18%
4 Years	83%	49%	57%	39%	59%	51%	50%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22.

Note. Response percentages may not total to 100% due to rounding. To be included in this table, students must have been enrolled at a GEAR UP campus as a Grade 9 student in the 2020–21 school year and/or a Grade 10 student in 2021–22 and have had data for at least one outcome for Grade 9 or 10.

Analyses comparing students who had participated in GEAR UP for 1 or 2 years to those who had participated for 3 or 4 years indicated many differences with  $BE > 0.05$  in student characteristics, including gender, race/ethnicity, economic status, instructional programs, and scale scores on Grade 7 STAAR (Table B.5, Appendix B). For that reason, a standard set of variables were used as covariates in all logistic regression analyses.<sup>33</sup>

Results indicated that students who had been in the cohort for a longer period of time tended to have better outcomes than those who had been in the cohort for a shorter period of time. Students who had been in the cohort for more years were more likely to complete Algebra I and II by Grades 9 and 10, respectively. They were more likely to be promoted on-time to the next grade level. Finally, they were more likely to achieve Approaches Grade Level standard for the Algebra I, Biology, English I, and English II EOC exams, and were more likely to reach Masters Grade Level standard for the Algebra I and Biology EOC exams. Detailed results are presented in the sections that follow.

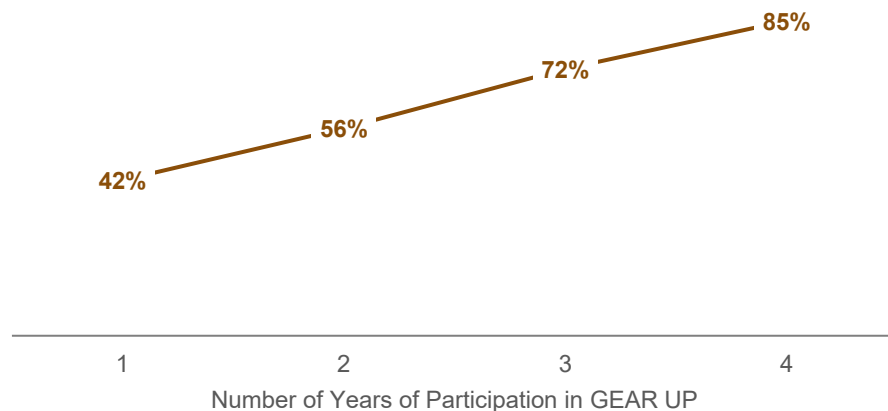
## 2.6.1. Mathematics Course Completion

### 2.6.1.1 Algebra I Course Completion by Grade 9

Length of time in cohort was a significant predictor of Algebra I completion in a logistic regression model that controlled for school and student characteristics. Students who participated for more years of the program were more likely to have completed Algebra I by Grade 9 than were students who participated in the program for fewer years ( $OR = 1.98$ ,  $p < .001$ ; see Figure 2.6.1 and Table C.5.2, Appendix C).

<sup>33</sup> Those covariates were: gender; race/ethnicity: African American and Hispanic; economic status: economically disadvantaged; instructional population, or special program: EB/EL, gifted and talented, special education; school; and Grade 7 STAAR Reading and Mathematics scale scores.

**Figure 2.6.1. Predicted Percentages of Students Completing Algebra I by Grade 9 by Length of Time in Cohort**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

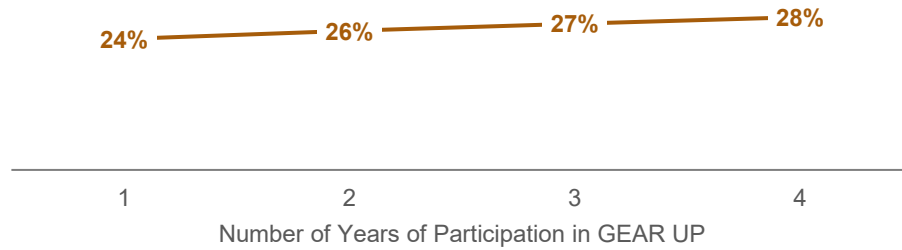
*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Table C.5.2, Appendix C, to model the effect of length of time in cohort ( $n = 1,894$ ,  $OR = 1.98$ ,  $p < .001$ ). To create this figure, values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of male students in the analytic sample was 52%, so the value for this variable was 0.52 in the model).

### 2.6.1.2 Algebra II Course Completion by Grade 10

Length of time in cohort was also a significant predictor of Algebra II completion by Grade 10 in a logistic regression model that controlled for school and student characteristics. Students who participated for more years of the program were more likely to have completed Algebra II by Grade 10 than were students who participated in the program for fewer years ( $OR = 1.11$ ,  $p < .05$ ; Figure 2.6.2; Table C.5.3, Appendix C).



**Figure 2.6.2. Predicted Percentages of Students Completing Algebra II by Grade 10 by Length of Time in Cohort**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

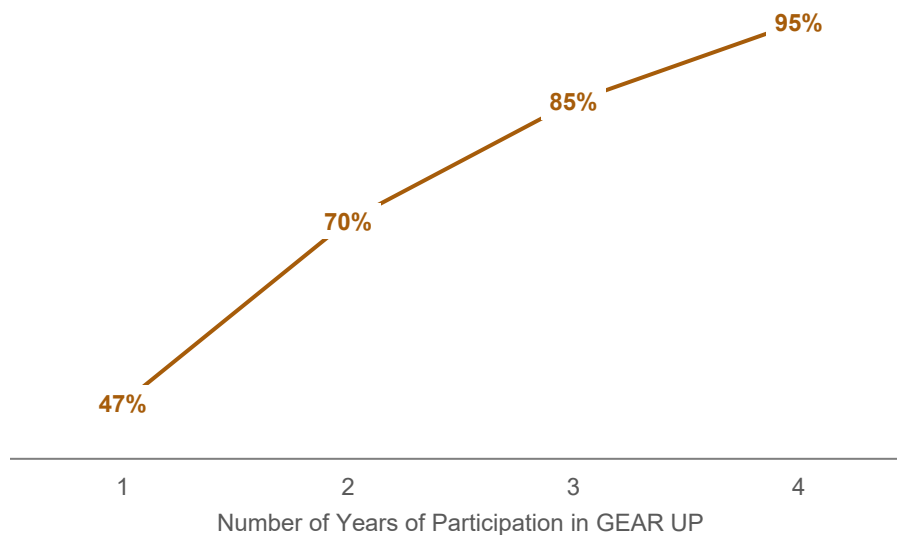
*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Table C.5.3, Appendix C, to model the effect of length of time in cohort ( $n = 1,826$ , OR = 1.11,  $p .05$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 52%, so the value for the variable was 0.52 in the model).

## 2.6.2. On-Time Promotion

### 2.6.2.1 On-Time Promotion from Grade 9 to 10 or Above

Length of time in cohort was a significant predictor of on-time promotion from Grade 9 to 10 or above (OR = 2.94,  $p < .001$ ; Figure 2.6.3; Table C.5.4, Appendix C.) Students who had been in the cohort for a longer period of time were more likely to be promoted on time than students who had been in the cohort for fewer years once school and student characteristics were taken into account.

**Figure 2.6.3. Predicted Percentages of Students Promoted On-Time from Grade 9 to 10 or Above by Length of Time in Cohort**



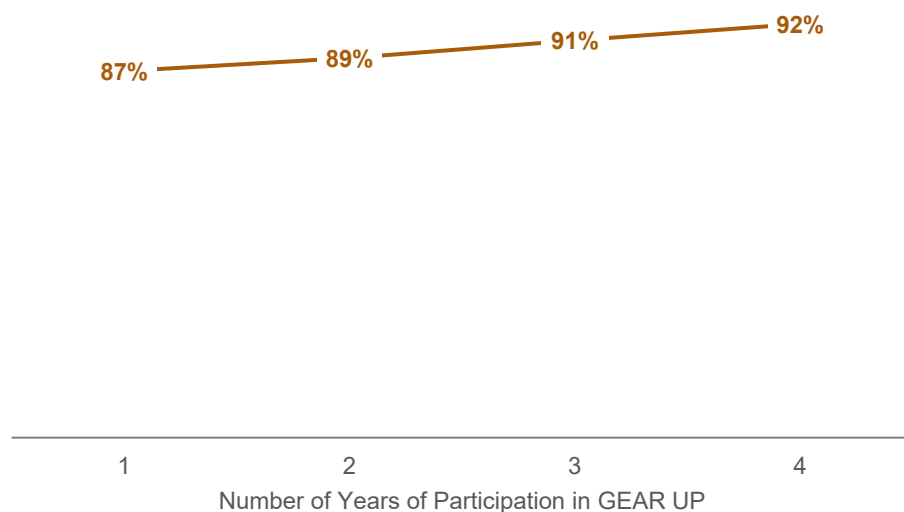
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Table C.5.4, Appendix C, to model the effect of length of time in cohort ( $n = 1,825$ , OR = 2.94,  $p < .001$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 52%, so the value for this variable was 0.52 in the model).

### 2.6.2.2 On-Time Promotion from Grade 10 to 11 or Above

Similar to on-time promotion from Grade 9, length of time in cohort was a significant predictor of on-time promotion from Grade 10 to 11 or above ( $OR = 1.20$ ,  $p < .01$ ; see Figure 2.6.4, Table C.5.5, Appendix C.) Students who had been in the cohort for a longer period of time were more likely to be promoted on time than were students who had been in the cohort for fewer years once school and student characteristics were taken into account.

**Figure 2.6.4. Predicted Percentages of Students Promoted On-Time from Grade 10 to 11 or above by Length of Time in Cohort**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

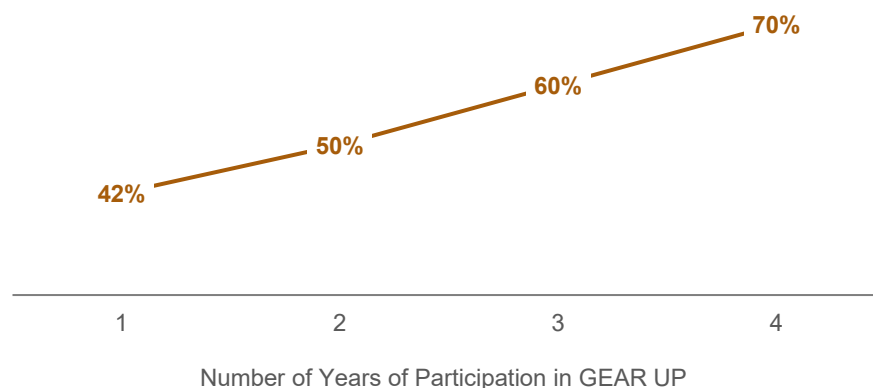
*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs.  $OR = Odds Ratio$ . This figure uses predicted scores from the logistic regression in Table C.5.5, Appendix C to model the effect of length of time in cohort ( $n = 1,747$ ,  $OR = 1.20$ ,  $p < .01$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 51%, so the value for this variable was 0.51 in the model).

### 2.6.3. STAAR EOC Exam Performance

#### 2.6.3.1 Grade 9 Algebra I EOC Exam

Length of time in cohort significantly predicted achieving Approaches Grade Level standard on the Grade 9 Algebra I EOC exam. Students who had attended a GEAR UP campus for more years were more likely to meet the standards than were those students who had attended for fewer years, once school and student characteristics were taken into account ( $OR = 1.49$ ,  $p < .001$ ; see Figure 2.6.5; Table C.5.6, Appendix C). Length of time in cohort was not related to achieving Masters Grade Level standard on the Grade 9 Algebra I EOC exam (Table C.5.7, Appendix C).

**Figure 2.6.5. Predicted Percentages of Students Achieving Approaches Grade Level Standard on Grade 9 Algebra I EOC Exam by Length of Time in Cohort**



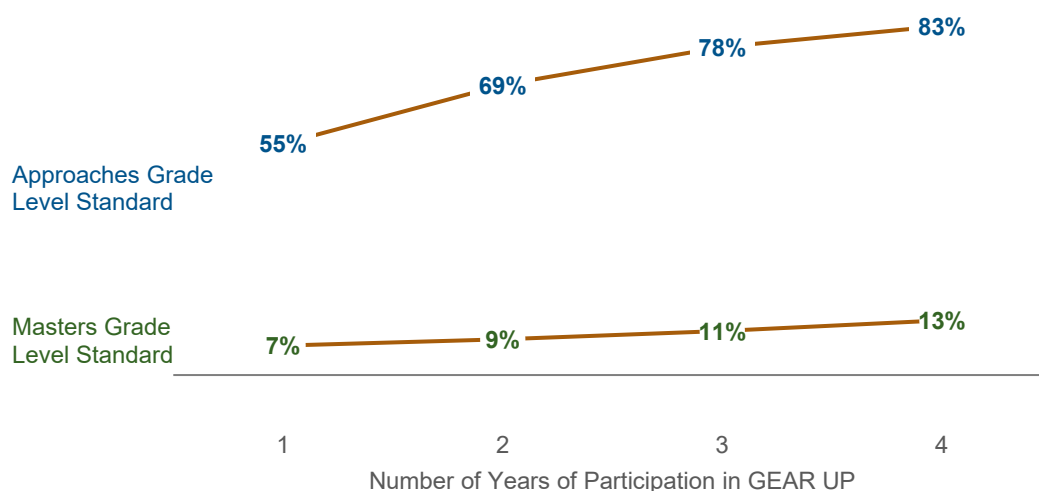
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Table C.5.6, Appendix C to model the effect of length of time in cohort ( $n = 1,330$ ; Approaches Grade Level standard  $OR = 1.49$ ,  $p < .001$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 51%, so the value for this variable was 0.51 in the model).

### 2.6.3.2 Grade 9 Biology EOC Exam

The length of time spent in a GEAR UP school was a significant predictor of achieving Approaches Grade Level and Masters Grade Level standards on the Grade 9 Biology EOC exam. Students who attended a GEAR UP campus for a longer amount of time were more likely to meet both standards than students who attended a GEAR UP campus for a shorter period of time once student characteristics and school were taken into account. ( $OR = 1.67$ ,  $p < .001$  for Approaches Grade Level standard and  $OR = 1.71$ ,  $p < .01$  for Masters Grade Level Standard; see Figure 2.6.6 and Tables C.5.8 and C.5.9, Appendix C.)

**Figure 2.6.6. Percentages of Students Predicted to Achieve Approaches and Masters Grade Level Standards on Grade 9 Biology EOC Exam by Length of Time in Cohort**



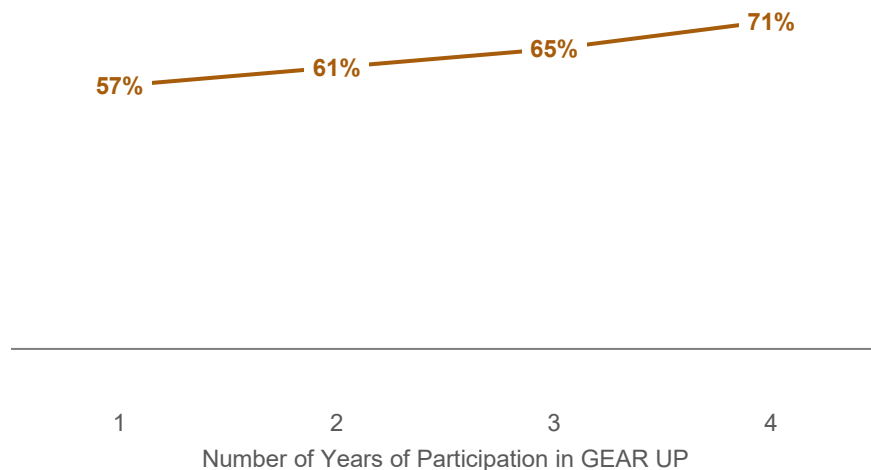
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Tables C.5.8 and C.5.9, Appendix C to model the effect of length of time in cohort ( $n = 1,534$ ; Approaches Grade Level standard  $OR = 1.67$ ,  $p < .001$ , Masters Grade Level standard  $OR = 1.71$ ,  $p < .01$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 51%, so the value for this variable was 0.51 in the model).

### 2.6.3.3 Grade 9 English I EOC Exam

The length of time students spent in a GEAR UP school was a significant predictor of achieving the Approaches Grade Level standard on the Grade 9 English I EOC exam. Students who attended a GEAR UP campus for more years were predicted to be more likely to meet the standards than those who attended a GEAR UP campus for fewer years once school and student characteristics were added to a logistic regression ( $OR = 1.30$ ,  $p < .01$ ; see Figure 2.6.7, Table C.5.10 Appendix C). Length of time in cohort was not a predictor of achieving the Masters Grade Level standard on the English I EOC exam (Table C.5.11, Appendix C).

**Figure 2.6.7. Percentages of Students Predicted to Achieve Approaches Grade Level Standard on Grade 9 English I EOC Exam by Length of Time in Cohort**



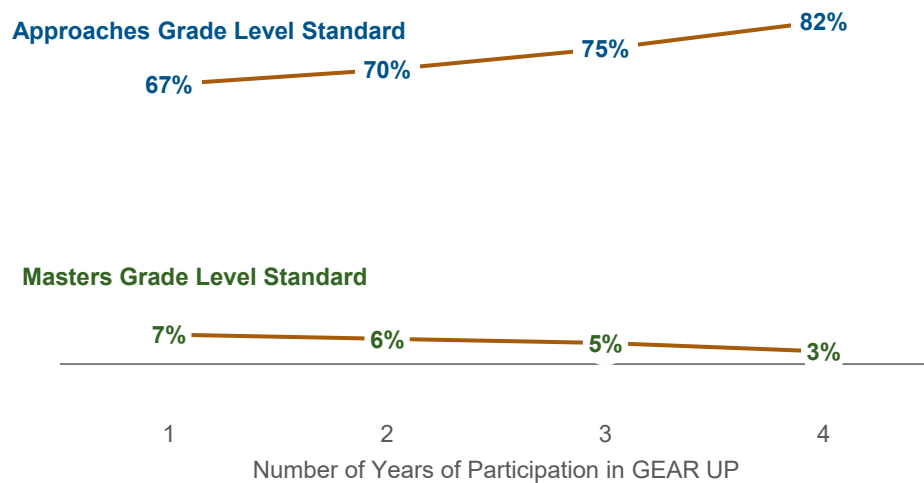
*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Table C.5.10, Appendix C to model the effect of length of time in cohort ( $n = 1,621$ ;  $OR = 1.30$ ,  $p < .01$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 51%, so the value for this variable was 0.51 in the model).

### 2.6.3.4 Grade 10 English II EOC Exam

The length of time spent in a GEAR UP school was a significant predictor of achieving Approaches Grade Level standard on the Grade 10 English II EOC exam. Students who were in the class of 2024 cohort for a longer amount of time were predicted to be more likely to meet this standard than were those students who were in the cohort for a shorter period of time, once school and student characteristics were taken into account. ( $OR = 1.32$ ,  $p < .001$ ; see Figure 2.6.8; Table C.5.12, Appendix C). However, length of time in cohort was significantly negatively related to achieving Masters Grade Level standard on the English II EOC exam ( $OR = .070$ ,  $p < .01$ ; see Figure 2.6.8; Table C.5.13, Appendix C). Students who attended a GEAR UP campus for a longer amount of time were predicted to be less likely to meet Masters Grade Level standard than were those students who attended a GEAR UP campus for a shorter period of time.

**Figure 2.6.8. Percentages of Students Predicted to Achieve Approaches and Masters Grade Level Standards on Grade 10 English II EOC Exam by Length of Time in Cohort**



*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2022.

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. OR = Odds Ratio. This figure uses predicted scores from the logistic regression in Tables C.5.12 and C.5.13, Appendix C to model the effect of length of time in cohort ( $n = 1,617$ ; Approaches Grade Level standard  $OR = 1.32$ ,  $p < .001$ , Masters Grade Level standard  $OR = 0.70$ ,  $p < .01$ ). Values for all variables but the number of years in cohort (1, 2, 3, and 4) were held constant at the mean value for the sample as a whole (for example, the percentage of students who were identified as male for the analytic sample was 51%, so the value for this variable was 0.51 in the model).

## 3. Summary and Conclusion

### 3.1. Key Findings

#### 3.1.1. Mathematics Course Completion

Seventy-five percent of students in the class of 2024 completed Algebra I by Grade 9, missing the Algebra I completion target of 85% specified in Project Objective 1.1. Cohort was not a predictor of Algebra I completion in MLMs comparing the class of 2024 to the matched comparison cohort. More students completed Algebra I by Grade 9 in the follow-on cohort than the class of 2024. Length of time in cohort was a significant predictor of Algebra I completion by Grade 9 for class of 2024 students: Students who had been in the class of 2024 cohort for a longer period of time were more likely to have completed Algebra I by Grade 9 than those who were in the cohort for a shorter period of time.

About one-third of students in the class of 2024 completed Algebra II by Grade 10. Cohort was not a predictor of Algebra II completion in MLMs comparing the class of 2024 to the matched comparison cohort. Students in the class of 2024 were less likely to complete Algebra II by Grade 10 than were students in the retrospective cohort. Analyses of length in time in cohort revealed that students who had been in the cohort for a longer period of time were more likely to have completed Algebra II by Grade 10 than students who were in the cohort for a shorter amount of time.

#### 3.1.2. On-Time Promotion

Class of 2024 students were less likely than follow-on cohort students to be promoted on time from Grade 9 but were more likely than students in the retrospective cohort to be promoted on time from Grade 10. Students who were in the cohort for more years were more likely to be promoted on time than students in the cohort for fewer years.

#### 3.1.3. STAAR EOC Exam Performance

The examination of STAAR EOC exam performance yielded mixed results. When school and student characteristics were taken into account in MLMs, there were no differences between the class of 2024 and the matched comparison cohort on any of the STAAR EOC exams. In logistic regression models, students in the follow-on cohort were more likely than were students in the class of 2024 to achieve the Approaches Grade Level and Masters Grade Level standards on the Algebra I EOC exam, and students in the class of 2024 were more likely to achieve the Approaches Grade Level standard than the retrospective cohort on the English II EOC exam.

The evaluation of the influence of longevity in the program found that students who had been in the class of 2024 cohort for a longer period of time performed better on Grade 9 STAAR EOC exams (Algebra I, Biology, English I) and were more likely to achieve the Approaches Grade Level standard on the English II EOC exam than students who were in the cohort for a shorter amount time. On the other hand, students in the cohort for a longer period of time were less likely to meet the standard for Masters Grade Level on the English II EOC exam than were students who were newer to the cohort.



## 3.2. Limitations

It is important to consider the limitations that affected this study. The first and largest limitation was the disruption caused by the COVID-19 pandemic. Schools were forced to close in spring of 2020, and STAAR was not administered in the spring of that year, limiting available data for comparison across years. The 2020–21 school year was marked by large disruptions to school procedures, including late starts, virtual learning, and mandatory quarantine periods after exposure to COVID-19. These disruptions had a negative impact on student learning, seemingly erasing years of improvement in scores on STAAR-Reading and STAAR-Mathematics (TEA, 2021).<sup>34</sup> Scores recovered in 2021–22; although many were still below the average for 2018–19 (TEA, 2022).<sup>35</sup> Many of the significant differences between the class of 2024 and the retrospective and follow-on cohorts favored the outcome measured in 2021–22 and not 2020–21. It is possible that these differences were due to the impact of COVID-19 and subsequent recovery efforts on outcomes; it is not possible to tease apart the impact of GEAR UP programming and the impact of the COVID-19 pandemic.

Second, this study is a quasi-experimental design, which cannot prove causality. Even when analyses are carefully controlled, ascertaining whether participation in GEAR UP caused observed differences between cohorts is not possible. Thus, the study can determine whether GEAR UP implementation was *associated* (or not) with differences in outcomes, but not whether implementation *caused* the changes.

Third, for purposes of this study, students were included in the class of 2024 GEAR UP cohort if they were enrolled in a GEAR UP district during the fall of Grade 9 or 10. They were not required to have received services to be a part of the cohort. For example, there were students who were originally part of the retrospective cohort who were retained in Grade 10. They were included as members of the class of 2024 for all analyses except for those relating to on-time promotion. However, class of 2024 students who were retained in Grade 9 were still considered to be part of the class of 2024 (and not the follow-on cohort) in these analyses because they might have potentially received GEAR UP services at some point in the school year.

Fourth, there was no information on the fidelity of implementation of GEAR UP programming at each of the schools. Some of the initial analyses comparing students in the class of 2024 to the matched comparison cohort found small initial differences in academic achievement that tended to favor the class of 2024, but once school was added to the MLM, the effect disappeared. Some schools may have been more successful at implementing the program than others in certain areas (e.g., early Algebra I course taking), which led to these large school-by-school differences. Because measurements on fidelity of implementation were not collected, it was not possible to formally assess if differences in schoolwide implementation caused the outcome differences between schools.

Finally, length of time in cohort was found to be significantly and positively related to many outcomes. However, students who were in the cohort for a longer period of time likely differed from their counterparts in unmeasurable ways. For example, they likely had more stability in

---

<sup>34</sup> [Impacts of COVID-19 and accountability updates for 2022 and beyond | Texas Education Agency](#)

<sup>35</sup> [2022 STAAR Results Summary | Texas Education Agency](#)

their school lives (e.g., consistent friends, knowing the teachers at school) and quite possibly their personal lives (e.g., less likely to have moved or to have recently experienced a parent with a job loss).

### 3.3. Recommendations

Based on the results from this analysis, it is recommended that program staff **continue monitoring the long-term effects of the program**. Analyses presented in this report suggest that the longer a student participates in GEAR UP, the greater the yield of positive effects. TEA may want to consider sharing this finding to help encourage longevity of students participating in GEAR UP. Second, the program should consider **gathering systematic data about the fidelity of implementation** which could contribute to the understanding of how the level of implementation relates to improvements in outcomes.

## REFERENCES

- Dorn, E., Hancock, B., Sarakatstannis, J. & Viruleg, E. (n.d.). COVID-19 and education: The lingering effects of unfinished learning. *McKinsey & Company*.  
<https://www.mckinsey.com/industries/education/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning#/>
- Hutson, A., Sun, J., Spinney, S., Kennedy, L., & Horwood, T. (2021). *Texas GEAR UP: Beyond Grad biennial impact report: Evaluation of Years 1 and 2*. Texas Education Agency.  
<https://tea.texas.gov/reports-and-data/program-evaluations/program-evaluations-middle-school-high-school-and-college-preparation/program-evaluation-middle-school-high-school-and-college-preparation-initiatives>
- Texas Education Agency (TEA). (2021). *Impacts of COVID-19 and accountability updates for 2022 and beyond* [Paper presentation]. 2021 Texas Assessment Conference, Round Rock, TX, United States. <https://tea.texas.gov/sites/default/files/2021-tac-accountability-presentation-final.pdf>
- Texas Education Agency (TEA). (2022). *Grade-level retention in Texas public schools, 2020–21*. <https://rptsvr1.tea.texas.gov/acctres/retention/2021/ret-report-2021.html>
- Texas Education Agency (TEA). (2022). *2022 STAAR results summary*.  
<https://tea.texas.gov/texas-schools/accountability/academic-accountability/performance-reporting/2022-staar-results-summary.pdf>
- What Works Clearinghouse (WWC). (2017). *Procedures Handbook, Version 4.0*.  
[https://ies.ed.gov/ncee/wwc/Docs/ReferenceResources/wwc\\_procedures\\_handbook\\_v4\\_draft.pdf](https://ies.ed.gov/ncee/wwc/Docs/ReferenceResources/wwc_procedures_handbook_v4_draft.pdf)

## APPENDIX A: GEAR UP: Beyond Grad Strategies and Project Goals and Objectives

### A.1. GEAR UP: Beyond Grad Strategies

The core strategies conceptualized in the Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP): Beyond Grad program to close the college achievement gap are as follows:

- 1) Increasing academic rigor by facilitating an increase in access to, perceived value of, and student success in academically rigorous courses through extensive professional development for teachers, counselors, and administrators and targeted tutoring for students;
- 2) Preparing middle school students by empowering them with pathway information early on, through individualized college and career advising in middle school and adoption of a high-quality, Texas Essential Knowledge and Skills (TEKS)-aligned career exploration course;
- 3) Expanding college and career advising and resources for high school students by mitigating the effects of high student-to-counselor ratios and providing robust, individualized college and career advising through the adoption of a college and career readiness advising model in GEAR UP: Beyond Grad;
- 4) Leveraging technology by expanding advisor capacity and amplifying high-quality resources through the adoption of targeted, user-centered technology tools for advisors, counselors, administrators, students, and parents; and
- 5) Developing local alliances by establishing or expanding existing alliances with business, higher education, and community partners that support student achievement and offer opportunities for career exploration.

### A.2. Project Goals and Objectives

The Texas Education Agency (TEA) established the following goals and objectives for GEAR UP:

#### **Project Goal 1: Increase access to rigorous courses in order to reduce the need for remediation**

- ▶ Objective 1.1: By the end of the class of 2024's second year (Grade 8), 30% of class of 2024 students will complete Algebra I. By the end of the class of 2024's third year (Grade 9), 85% of class of 2024 students will complete Algebra I.<sup>36</sup>

---

<sup>36</sup> The goals and objectives originally referred to the class of 2024 as the "primary cohort." These have been edited here to use "class of 2024" for consistency with the rest of the report and to clearly distinguish this cohort from the priority cohort.

- ▶ Objective 1.2: By the end of the class of 2024's fifth year (Grade 11), 60% of class of 2024 students will complete a Pre-Advanced Placement (AP), Pre-International Baccalaureate (IB), AP, or IB course.
- ▶ Objective 1.3: Each year, 90% of class of 2024 students who receive a failing grade on a progress report will receive targeted academic tutoring.

### **Project Goal 2: Graduating prepared for college and career**

- ▶ Objective 2.1: By the end of the project's sixth year, 60% of class of 2024 students will be eligible to earn college credit through achievement of a passing score on the AP exam, IB exam, or completion of a rigorous dual credit course.
- ▶ Objective 2.2: By the end of the project's sixth year, the percentage of class of 2024 students graduating on the Foundation High School Program with an endorsement and/or receiving the Distinguished Level of Achievement will meet or exceed the baseline state average.

### **Project Goal 3: Provide educator training and professional development for rigorous academic programs**

- ▶ Objective 3.1: Each year, 50% of high school core content teachers will participate in professional development that supports a rigorous curriculum (e.g., project-based learning, advanced instructional strategies, teacher externships, student engagement, etc.).
- ▶ Objective 3.2: Each year, teams of educators and administrators (middle school, high school, and institutions of higher education) will complete at least five days of vertical teaming in order to align curriculum and reduce the need for remediation at the postsecondary level.
- ▶ Objective 3.3: Each year, 20% of high school class of 2024 core content teachers will participate in at least three individualized educator coaching and/or mentoring sessions.
- ▶ Objective 3.4: By the end of the project's second year, all high school counselors will complete training in college and career advising.

### **Project Goal 4: Increase high school graduation**

- ▶ Objective 4.1: The class of 2024 completion rate will meet or exceed the baseline state average completion rate.
- ▶ Objective 4.2: At the end of the class of 2024's second year (Grade 8), the on-time promotion rate will exceed the baseline state average promotion rate.

### **Project Goal 5: Support participation in postsecondary education and career preparation**

- ▶ Objective 5.1: Each year, 85% of tenth graders will take the Preliminary SAT (PSAT) or ACT Aspire exam. Each year, 85% of eleventh graders will take the SAT or ACT exam.
- ▶ Objective 5.2: By the end of the class of 2024's sixth year (Grade 12), 50% of class of 2024 students will meet the college readiness criterion on the SAT, ACT, or the Texas Success Initiative Assessment (TSIA).

- ▶ Objective 5.3: At least 60% of class of 2024 students will enroll in postsecondary education in the fall after high school graduation.
- ▶ Objective 5.4: At least 60% of class of 2024 students who enroll in postsecondary education will place into college-level courses without the need for remediation.
- ▶ Objective 5.5: The number of class of 2024 students who complete the first year of college will meet or exceed the baseline district average.

#### **Project Goal 6: Provide postsecondary and career preparation information to students and families**

- ▶ Objective 6.1: Each year in ninth grade, students will receive information about the school's high-quality pathways and programs of study that align to postsecondary programs and high-demand careers available to them.
- ▶ Objective 6.2: Each year, students and parents will receive information about postsecondary and career options, preparation, and financing.
- ▶ Objective 6.3: Each year, 90% of class of 2024 students will receive at least one comprehensive, individualized college and career counseling session.
- ▶ Objective 6.4: By the end of the third year, 50% of class of 2024 parents will receive at least one individualized college and career counseling session.
- ▶ Objective 6.5: Each year, class of 2024 parent attendance at Texas GEAR UP events and services will increase.

#### **Project Goal 7: Increase educational expectations for and awareness about postsecondary and career options**

- ▶ Objective 7.1: Each year, 75% of class of 2024 students will attend at least one college visit.
- ▶ Objective 7.2: By the end of the class of 2024's sixth year (Grade 12), 85% of class of 2024 students will complete the Federal Application for Federal Student Aid (FAFSA).
- ▶ Objective 7.3: By the end of the class of 2024's sixth year (Grade 12), 85% of class of 2024 students will complete at least two college applications.
- ▶ Objective 7.4: Each year, 30% of class of 2024 students will attend a summer program (academic acceleration, enrichment, college exploration, etc.).
- ▶ Objective 7.5: Each year, 30% of class of 2024 and priority cohort students will participate in a work-based learning opportunity.

#### **Project Goal 8: Build and expand community partnerships**

- ▶ Objective 8.1: All participating districts will form business alliances that support higher student achievement and offer opportunities for career exploration.
- ▶ Objective 8.2: All participating districts will form alliances with governmental entities and community groups to enhance the information available to students regarding high school pathways, scholarships, financial aid, and college awareness.

**Project Goal 9: Enhance statewide college and career readiness**

- ▶ Objective 9.1: Each year, tri-agency partners (TEA, Texas Higher Education Coordinating Board, and Texas Workforce Commission) will convene quarterly to ensure alignment of statewide initiatives around college and career readiness.
- ▶ Objective 9.2: By the end of the project’s fourth year, class of 2024 and priority cohort students will have access to a student-focused online resource to assist them in making informed decisions about their education and career pathway options.
- ▶ Objective 9.3: Annually increase the number of educators, counselors, and community members that complete specialized college and career readiness training.

## APPENDIX B: Evaluation Design, Methods, and Analytics

The Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP): Beyond Grad evaluation is designed to produce credible, timely, and actionable information to support successful implementation, inform project personnel and stakeholders of the program’s outcomes and impact, identify potential best/promising practices, and support program sustainability. Evaluation findings will support program improvement in the six districts participating in GEAR UP and also help the Texas Education Agency (TEA) scale initiatives across the state.

This appendix describes the evaluation design, methodology, and analytic approach used for the impact study component of the evaluation—the findings of which are shared in this report.

### B.1. GEAR UP Logic Model

The evaluation design was developed based on a logic model that describes how GEAR UP might bring about change in student outcomes (see Figure B.1). The logic model maps out the inputs, program activities (outputs), and intended outcomes of the program.

In the model, the leftmost column indicates the situation: that many low-income students in Texas are not prepared to enter and succeed in postsecondary education. The second column indicates strategies for improving the situation (e.g., “preparing middle school students”). The next column identifies the inputs into the program (e.g., funding, technical assistance).

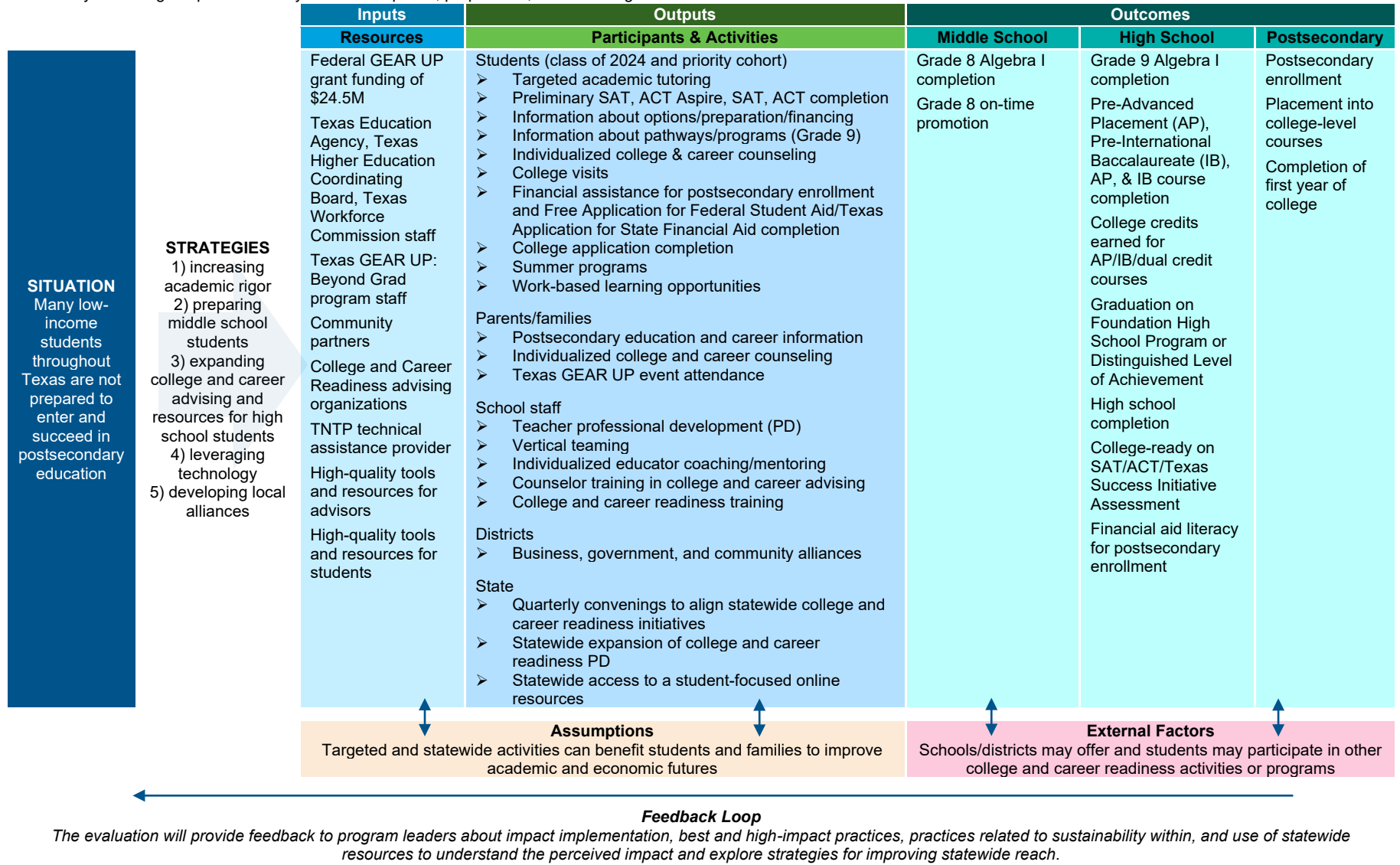
The “Outputs” column details the activities in which individual students, parents/families, school staff, districts, and the state participate during the course of the grant. A few examples of program outputs are academic tutoring for students, professional development for teachers, and college informational visits for families.

Finally, outcomes indicate the program’s effects on students. Outcomes are broken into middle school, high school, and postsecondary. In middle school, the program focuses on increasing Algebra I completion and on-time promotion. In high school, outcomes include preparation for college-level academic work, earning college credits, and on-time completion of high school. Postsecondary outcomes include enrollment in college, placing into college-level (vs. remedial level) courses, and successful completion of the first year of college.



**Figure B.1. Texas Gaining Early Access to Undergraduate Programs (GEAR UP): Beyond Grad Logic Model**

**Mission:** Texas GEAR UP: Beyond Grad seeks to accomplish the three main goals of the Federal GEAR UP program: (1) increase the academic performance and preparation for postsecondary education of participating students; (2) increase the rate of high school graduation and participation in postsecondary education; and (3) increase the educational expectations and family knowledge of postsecondary education options, preparation, and financing.



## B.2. Evaluation Questions

The evaluation questions addressed in this report are listed in Table B.1.<sup>37</sup>

**Table B.1. GEAR UP Impact Study Evaluation Questions**

Evaluation Questions
<ul style="list-style-type: none"> <li>• What outcomes are associated with participation in GEAR UP? How do these differ by district?</li> <li>• How do trends in outcomes for the class of 2024 GEAR UP cohort students differ in comparison to state averages?</li> <li>• 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)?</li> <li>• How do trends in outcomes for the class of 2024 students differ from students who attended the same schools but did not receive targeted services (i.e., the retrospective and follow-on cohorts)?</li> <li>• 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?</li> </ul>

*Note.* GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. ISD – Independent school district.

## B.3. Analysis Procedures

This report focuses on eight major outcomes for Grades 9 and 10 that are either directly related to a program objective or are key metrics on the path to a future objective:

- ▶ Objective 1.1: By the end of the second year (Grade 8), 30% of class of 2024 students will complete Algebra I. By the end of the primary cohort's third year (Grade 9), 85% of class of 2024 students will complete Algebra I. This objective was assessed for Grade 8 in the Year 1 and 2 biennial impact report. This report will focus on the percent of students completing Algebra I by Grade 9.
- ▶ Objective 2.2: By the end of the project's sixth year, the percentage of class of 2024 students graduating on the Foundation High School Program with an endorsement and/or receiving the Distinguished Level of Achievement will meet or exceed the baseline state average. Algebra II is required to receive the Distinguished Level of Achievement, so Algebra II completion by Grade 10 is used to measure progress toward this objective.
- ▶ Objective 4.1: The class of 2024 completion rate will meet or exceed the baseline state average completion rate. This objective refers to on-time graduation, which will be formally assessed in the Years 5 and 6 Biennial Report. In this report, on-time promotion will be examined as a step on the path to on-time graduation.
- ▶ Objective 5.2: By the end of the sixth year (Grade 12), 50% of class of 2024 students will meet the college readiness criterion on the SAT, ACT, or the Texas Success Initiative Assessment. Currently, scores on the SAT, ACT and Texas Success Initiative Assessment typically used as college readiness measure are not available for all students in the state of Texas, so this objective will not be measured formally. Instead, the percentage of students

<sup>37</sup> Note that there are additional evaluation questions guiding other aspects of the evaluation that are not included in Table B.1. Additional evaluation questions will be presented in other reports, as applicable.

achieving “Masters Grade Level” on the STAAR EOC exams will be used to determine progress towards college readiness.

- ▶ Objective 5.4: At least 60% of class of 2024 students who enroll in postsecondary education will place into college level courses without the need for remediation. Currently, data on the course selections of Texas students enrolled in college are not connected to their K-12 student records, so this outcome will not be directly measured. Instead, progress toward this objective will be measured by examining the percentage of students that achieve “Approaches Grade Level” and “Masters Grade Level” standards on STAAR EOC exams.

Each of these objectives is related to one evaluation question (Evaluation Objective 1): How does academic performance of class of 2024 students compare to retrospective cohort (class of 2023) students, follow-on cohort (class of 2025) students and non-participants?

**Table B.2. Outcomes Used in the Analysis**

Objective	Key Question	Variable(s) Analyzed
<b>Increase access to rigorous courses in order to reduce the need for remediation; graduating prepared for college and career</b>		
1.1	How many students (%) successfully completed Algebra I by Grade 9?	<ul style="list-style-type: none"> <li>• Algebra I Completion by Grade 9 (i.e., in Grades 6, 7, 8, 9; note that completed equals Pass [variable coded as pass/fail/incomplete])</li> </ul>
2.2	How many students (%) successfully completed Algebra II by Grade 10?	<ul style="list-style-type: none"> <li>• Algebra II Completion by Grade 10 (i.e., in Grades 9 or 10; note that completed equals Pass [variable coded as pass/fail/incomplete])</li> </ul> <p>Completion calculated as follows (students must meet all criteria below):</p> <ul style="list-style-type: none"> <li>○ COURSE_FINISH = '1'</li> <li>○ COURSE_SEQ = ('0', '2', '5', or '9')</li> <li>○ CREDIT = 'Y' and COURSE_RESULT = '1'</li> </ul>
<b>Increase high school graduation</b>		
4.1	How many students (%) are promoted on time?	<ul style="list-style-type: none"> <li>• On-time promotion from Grade 9 to 10 or higher in fall 2021 (primary and comparison cohorts), fall 2020 (retrospective cohort) or fall 2022 (follow-on cohort)</li> <li>• On-time promotion from Grade 10 to 11 or 12 in fall 2022 (primary and comparison cohorts) or fall 2021 (retrospective cohort)</li> <li>• Note: On-time promotion is defined as higher grade levels at PEIMS fall compared to one year earlier PEIMS fall snapshot; for example, in Grade 9 in PEIMS snapshot 2020–21 and in Grade 10, 11, or 12 in PEIMS fall snapshot 2021–22.</li> </ul>
<b>Support participation in postsecondary education and career preparation</b>		
5.2 5.4	How many students (%) achieve the Approaches Grade Level and Masters Grade Level standards on STAAR EOC exams?	<ul style="list-style-type: none"> <li>• “Approaches Grade Level” and “Masters Grade Level” on the following STAAR EOC exams (spring administration only) <ul style="list-style-type: none"> <li>○ Algebra I (A1_MASTERS, A1_APPROACHES_STU_STD) in Grade 9</li> <li>○ Biology (BI_MASTERS, BI_APPROACHES_STU_STD) in Grade 9</li> <li>○ English I (E1_MASTERS, E1_APPROACHES_STU_STD) in Grade 9</li> <li>○ English II (E2_MASTERS, E2_APPROACHES_STU_STD) in Grade 10</li> </ul> </li> </ul>

Note. STAAR – State of Texas Assessments of Academic Readiness. EOC – End-of-course. PEIMS – Public Education Information Management System.

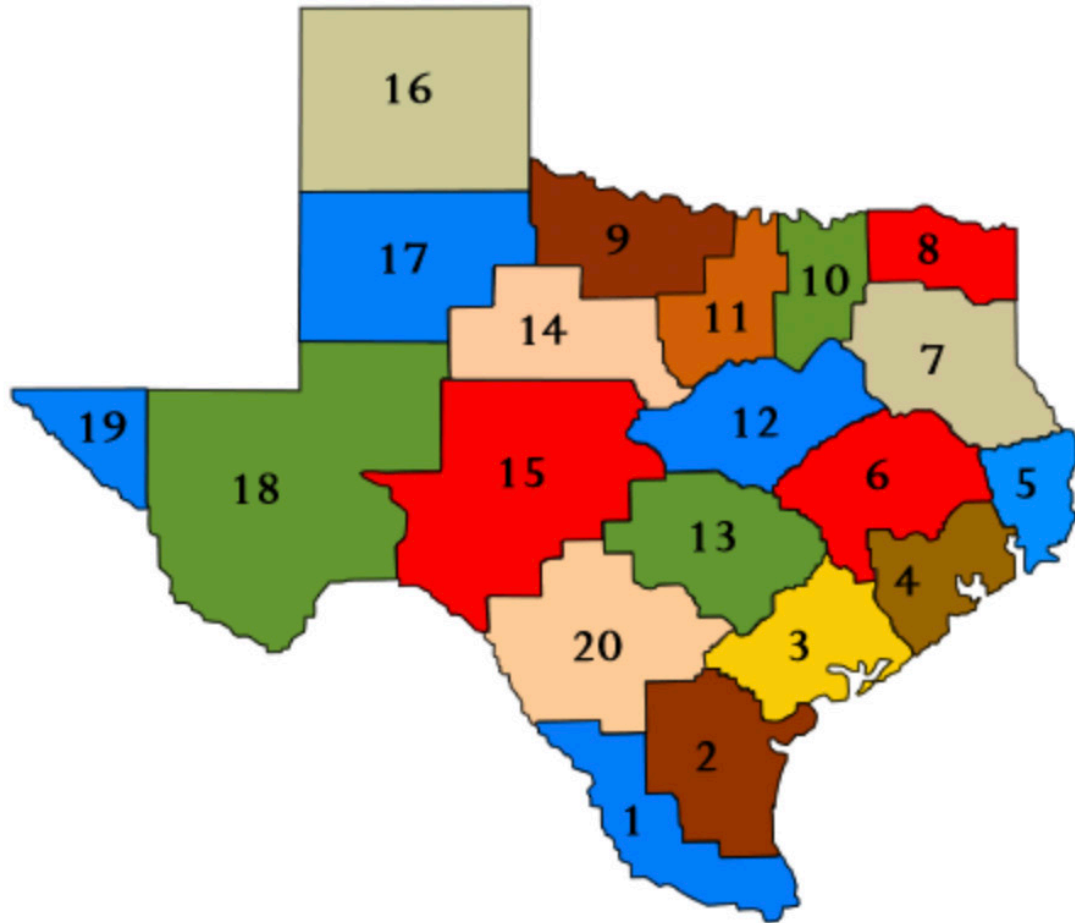
**Use of Extant Data.** To measure the program’s impact on student academic outcomes, the study uses extant data provided by TEA. Specifically, Public Education Information Management System (PEIMS), State of Texas Assessments of Academic Readiness (STAAR), and Texas Academic Performance Reports (TAPR) serve as primary data sources.

### **Student Outcomes by Cohort: Class of 2024 vs. Matched Comparison Cohorts**

The ICF team selected nonparticipating schools and students for the matched comparison cohort using propensity score matching (PSM). In the current study, PSM was used to construct the comparison group by pairing students based on a series of observable variables including student demographics and program participation (e.g., race/ethnicity, economic status, special education status, emergent bilingual student/English learner (EB/EL) status) and baseline academic achievement (e.g., STAAR Reading and STAAR Mathematics from Grade 7).

The comparison group was constructed via a two-step process. First, GEAR UP schools were matched to similar nonparticipating schools based on the regions (see Figure B.2) and demographic makeup and academic performance of the schools (e.g., % Hispanic students, % classified as economically disadvantaged; see Table B.3). Because of the small size of some of the GEAR UP schools, each GEAR UP school was matched to up to nine potential comparison schools.

**Figure B.2. Regional Education Service Centers**



Source: <https://tea.texas.gov/about-tea/other-services/education-service-centers/education-service-centers-map>

**Table B.3. Variables Used for Matching at the School Level**

<b>Item</b>	<b>Variable Name in TAPR</b>
<b>School Type</b>	GRADTYPE
<b>Grades</b>	GRADSPAN
<b>Education Service Center Region</b> <ul style="list-style-type: none"> <li>• <b>Region 2 match with Region 2, 3, 6, 13 or 20</b></li> <li>• <b>Region 4 match with Region 4, 6, 10, 11, 13 or 20</b></li> <li>• <b>Region 18 match with Region 18, 15 (schools located within 90 miles of the Texas border only), 9, 14, 15, 16 or 17</b></li> <li>• <b>Region 19 match with Region 19, 1, 2, 15, 18 or 20</b></li> </ul>	REGION
<b>AP/IB Participation</b>	CA0BTA20R CA0BTA19R
<b>Advanced/Dual Credit Participation</b>	CA9AD20R CA9AD19R
<b>School Size/Total Students (in membership)</b>	CPETALLC
<b>Race/Ethnicity % (Black, Hispanic, White)</b>	CPETBLAP, CPETHISP, CPETWHIP
<b>Economically Disadvantaged %</b>	CPETECOP
<b>Urbanicity*</b>	NCES Data
<b>4-Year Federal Graduation Rate Without Exclusions</b>	CAGC420R CAGC419R
<b>College Ready (Annual Graduates)</b>	CA1GG20R CA1GG19R
<b>Emergent Bilingual Students/English Learners %</b>	CPETLEPP
<b>At-Risk %</b>	CPETRSKP
<b>STAAR Participation Rates</b>	CDA00A00T021R CDA00A00T019R
<b>AP/IB Results (Examinees &gt;= Criterion) (Grades 11-12)</b>	CA0BKA20R CA0BKA19R

Note. AP – Advanced Placement. IB – International Baccalaureate. STAAR – State of Texas Assessments of Academic Readiness. \*Urbanicity refers to the characteristics of a given geographic region wherein densely populated areas are considered “urban.” NCES relies on the Census Bureau’s definition of urbanicity in which there are four locale types (City, Suburban, Town, and Rural). There are additional categories that can further describe regions; see the NCES [website](#).

Second, student-level matching was conducted by matching individual students within the GEAR UP schools to students from nonparticipating comparison schools identified in the previous step. Student-level matching was based on Grade 9 Fall (i.e., SY 2020–21)

demographics and prior academic achievement in PEIMS and STAAR. (See Table B.4 for a list of matching criteria.)

**Table B.4. Variables Used for Matching at the Student Level**

Item	Variable Name in PEIMS or STAAR
<b>Gender</b>	SEX
<b>Race/Ethnicity (African American, Hispanic, White)</b>	ETHNIC
<b>Economically Disadvantaged</b>	ECONOMIC
<b>Talented and Gifted Program</b>	GIFTED
<b>Special Education</b>	SPECED
<b>Emergent Bilingual Student/English Learner</b>	LEP
<b>At-Risk</b>	AT_RISK
<b>Attendance Rate</b>	TOT_DAYS_PRESENT /TOT_DAYS_MEMBER
<b>STAAR Grade 7 Reading Scale Score</b>	R_SSC
<b>STAAR Grade 7 Mathematics Scale Score</b>	M_SSC

*Note.* PEIMS – Public Education Information Management System. STAAR – State of Texas Assessments of Academic Readiness. For all students in attendance in Grade 9, the 2020–21 Fall demographic variable (Grade 9) was used. For those students only in attendance in Grade 10, the 2021–22 Fall status (Grade 10) was used. Race was coded so that for each category students could receive a 1 (member of category) or 0 (not member of category). Students who were not African American, White, or Hispanic would receive codes of “0” for each category.

The matched comparison cohort was created via three PSMs. The resulting datasets from the three PSMs were later combined to create one data set.

**PSM 1.** The first PSM matched class of 2024 students who attended GEAR UP campuses in both Grades 9 and 10. To be a part of the PSM process, students in both the primary and matched cohort pool had to meet the following criteria:

- Have demographic and pre-intervention outcome data available (i.e., have data for all of the items in Table B.4).
- Have data for at least one of outcomes in the study (i.e., completion of Algebra I or II, on-time promotion, and/or STAAR EOC scores from the relevant grade level).
- Attend a GEAR UP or matched comparison school in **both** Grade 9 and 10

This PSM matched group comprised 63% of the total sample. Five students were unable to be matched.

**PSM 2.** The second PSM matched students who only attended GEAR UP campuses in Grade 9 but not Grade 10. To be a part of the PSM process, students in both the primary and matched cohort pool had to meet the following criteria:

- Have demographic and pre-intervention outcome data available (i.e., have data for all of the items in Table B.4.).

- Have data for at least one of the outcomes in the study measured in Grade 9 (e.g., completion of Algebra I, performance on Biology EOC).
- Attend a GEAR UP or matched comparison school in Grade 9, but **not** in Grade 10. There were a handful of students in this group who had attended a matched comparison school in Grade 9 and a GEAR UP school in Grade 10. These students were retained as matched comparison students for Grade 9 analyses.

This PSM matched group comprised 20% of the total sample, all students were matched in this sample.

**PSM 3.** The third PSM matched students who only attended GEAR UP campuses in Grade 10, but not Grade 9. To be a part of the PSM process, students in both the primary and matched cohort pool had to meet the following criteria:

- Have demographic and pre-intervention outcome data available (i.e., have data for all of the items in Table B.4.).
- Have data for at least one of the outcomes in the study measured in Grade 10 (e.g., completion of Algebra II, performance on English II EOC).
- Attend a GEAR UP or matched comparison school in Grade 10, but **not** in Grade 9. There were a handful of students in this group who had attended a GEAR UP school in Grade 9 and a matched comparison school in Grade 10. These students were removed from the matched comparison cohort because they had received targeted GEAR UP services.

This PSM matched group comprised 17% of the total sample. Eighteen students were not able to be matched.

The PSM model is based on a logistic regression model where the outcome is the probability of participation in GEAR UP (i.e., GEAR UP student vs. non-GEAR UP student) and predictors are a set of covariates that describe the students (see Table B.4 for all covariates used in the analysis). The following equation expresses the basic logistic regression modeling framework:

$$\text{Log}(p_k / 1 - p_k) = \beta_{00} + \beta_{10} * \text{predictor}_k + \dots$$

where

- Postscripts k stands for student
- P is a probability that a student “k” is a GEAR UP participant
- $\beta$ 's are parameters to be estimated,
- “...” indicates that the model will include multiple predictors and corresponding parameters (see Table B.4)

Based on derived coefficients ( $\beta$ s) 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 student, a comparison student in the same grade with the closest propensity score was selected using nearest neighbor and exact matching. In deriving a propensity score, the logistic regression algorithm considered the relative weight of predictors in their covariate correlation with the outcome. The PSM used one-to-one matching: that is, each



GEAR UP student was matched to one comparison student, and that comparison student was not matched to any additional GEAR UP students.

After the comparison students were selected, data were checked for baseline equivalency for all demographic and prior achievement data for the sample as a whole (see Table B.5). Hedges'  $g$  is used to compare treatment groups and assess baseline equivalence, with the goal being that all variables will have differences of no larger than an effect size (ES) of 0.05. This target is generally considered to indicate equivalence per What Works Clearinghouse (WWC, 2017) guidance. Before creating the sample, the plan was as follows: If all equivalencies have  $ES \leq 0.05$ , then the groups are statistically the same, and no additional balancing is needed. If there is inequivalence over 0.25 for any variable, the PSM is considered invalid and would need to be repeated. Any variables with ES between 0.05 and 0.25, must be added as covariates to multilevel modeling (MLM) to adjust for the differences statistically.

### Student Outcomes by Cohort: Class of 2024 vs. Matched Comparison Cohorts

Comparisons between the class of 2024 GEAR UP cohort and the matched comparison cohort was organized by outcome.

**Analytic samples.** There were eight distinct analytic samples for the class of 2024 and matched comparison cohorts. To be included in the analytic sample, students must have had data for:

- Demographic variables and prior achievement (i.e., STAAR Grade 7 Reading and Mathematics Scale Score)
- The outcome of interest (e.g., completion of Algebra I by Grade 9)

Additionally, they must have been matched in the PSM. Baseline equivalency (BE) was formally assessed for each analytic sample, using Hedges'  $g$  to calculate the ES difference between the two groups, and determinations of equivalence were as follows:

- If the  $ES \leq 0.05$  for all demographic and prior achievement variables, the samples will be deemed equivalent.
- If the ES is  $0.05 < ES < 0.25$ , the samples will be deemed partially equivalent; any differences noted in outcomes may be due to pre-existing differences between cohorts. These differences will be corrected statistically in covariate MLMs.
- If the ES is  $\geq 0.25$ , the samples are not equivalent, and it is inappropriate to compare differences in outcomes. A new PSM will be conducted to correct for the difference and a new analytic sample will be made.

All of the ES's for the analytic samples were  $< 0.25$ . For each sample there was at least one student characteristic that was  $ES > 0.05$ , so it was included as a covariate in the MLM. Adding these student characteristic variables to the MLM did not significantly affect the relationship between cohort and outcome in any case.

**Outcome comparisons.** Next, comparisons by outcome were conducted. For example, for the question "How many students (%) successfully completed Algebra I by Grade 9?" the percentage of on-time completers for each cohort within the analytic sample (in this case class

of 2024 GEAR UP cohort vs. matched comparison cohort) was compared via a chi-squared analysis.

**Matched comparison analyses.** Finally, multilevel models (MLMs) were created as a final more stringent test of the impact of GEAR UP on outcomes. MLMs were used to control for the fact that students in the study are clustered within a relatively large number of schools (41; six GEAR UP campuses and 35 comparison campuses) and that students in the same school share key characteristics (e.g., teachers, principal, location of school) with their schoolmates and thus are not independent from each other.

This lack of independence violates classical test assumptions—these tests will underestimate the amount of imprecision in the data leading to overly optimistic and misleading statistical test results and increasing the chance of a Type I error (seeing a difference between groups statistically when a true difference does not exist). By explicitly incorporating the imprecision of between-school variance into the estimation process, the MLM model adjusts for the clustering of data within schools, providing more realistic estimates of standard errors. Each model will be created in two to three steps:

1. The **intercept model** documents the amount of variance in the outcome by school
  1. Level 1 (Student Level):  $\log(P / 1-P) = \beta_{0j}$
  2. Level 2 (School Level):  $\beta_{0j} = \gamma_{00} + \mu_{0j}$
2. The **main effects MLM model** will add cohort group to the analysis (i.e., class of 2024 GEAR UP or matched comparison cohort):
  1. Level 1 (Student Level):  $\log(P / 1-P) = \beta_{0j}$
  2. Level 2 (School Level):  $\beta_{0j} = \gamma_{00} + \gamma_{01} [Cohort] + \mu_{0j}$
3. The **covariate MLM model** will be conducted if any ES for the analytic sample is  $>0.05$ . Covariates will be added to the main MLM, as needed, for example:
  1. Level 1 (Student Level):  $\log(P / 1-P) = \beta_{0j} + \beta_1^* [Gender]_i + \beta_2^* [Ethnicity/Race: Hispanic]_i + \dots$
  2. Level 2 (School Level):  $\beta_{0j} = \gamma_{00} + \gamma_{01} [Cohort] + \mu_{0j}$

Where:

- P stands for the probability that a student successfully completes a course,
- postscripts *i* and *j* index, respectively, student and school,
- $\beta$ 's and  $\gamma$ 's are parameters to be estimated,
- $\mu$ 's are school-specific residuals (estimated as random effects),
- Cohort is a binary indicator (1 if GEAR UP school, else 0), and
- “...” indicates that the model will include multiple predictors and corresponding parameters.

The model uses a logistic function suitable for analyzing the binary outcome (i.e., logistic regression). The outcome to be examined (P in the model) is the probability of students

attaining a certain outcome (e.g., completing an Algebra I course or achieving Masters Grade Level on Biology EOC). The model explicitly drives school differences as level-2 intercepts or random effects (expressed as  $\beta_{0j}$  in the equation) and will use the level-2 intervention variable to analyze the outcome variation between GEAR UP and matched comparison schools. Because the model includes both level-1 and level-2 covariates, the impact coefficient ( $\gamma_{01}$ ) and associated odds ratio (OR) will measure the net magnitude of the GEAR UP program effectiveness on the outcome of interest. For example, if the OR is 2.1 for the class of 2024 for a particular outcome, an interpretation could be that the class of 2024 was 2.1 times more likely to meet that outcome than students in the matched comparison cohort, once school and any student characteristics with  $ES > 0.05$  were taken into account.

School-level covariates entered into the model include:

- Cohort (1 if in GEAR UP, 0 if not in GEAR UP)
- School ( $n=40$ )

### Student Outcomes by Cohort: Class of 2024 vs. Retrospective Cohorts

Next, comparisons between the class of 2024 GEAR UP cohort and students attending the same schools who were one grade level higher and not receiving targeted GEAR UP implementation (i.e., the retrospective cohort) were conducted. This set of comparisons is smaller than the set for the class of 2024 cohort versus the matched comparison cohort because of limited data for Grade 9 for the retrospective cohort. Specifically, the retrospective cohort was in Grade 9 in 2019–20, and in the spring of 2020, schools across the state were shuttered as the world was confronted with the COVID-19 pandemic. There was no STAAR testing in 2020, and data from the Biennial Impact Report from Years 1 and 2 (Hutson, et al, 2021) indicated that almost all class of 2024 students and students in the matched comparison condition (>99.9%) were passed to the next grade level.

A portion of the retrospective cohort students ( $n=179$ ) were not promoted on time from Grade 10 to 11 in 2021–22 and thus repeated Grade 10 as part of the class of 2024. For analytic purposes, they were added to the class of 2024 cohort for all outcomes except for on-time promotion from Grade 10 to 11 (where they were kept with their initial cohort).

**Analytic samples.** There were three distinct analytic samples for the class of 2024 and retrospective cohorts—one for each measure (i.e., Algebra II completion by Grade 10, on-time promotion from Grade 10 to 11 and English II EOC). To be included in the analytic sample, students must have data for demographic variables and prior achievement (i.e., STAAR Grade 7 Reading and Mathematics Scale Score), the outcome of interest (e.g., completion of Algebra II by Grade 10), and must have attended a GEAR UP school in the year the outcome was collected.

Even though students are from the same set of schools, the compositions of schools can change by year, so BE was formally assessed for each analytic sample, using Hedges'  $g$  to calculate the ES difference between the two groups, and determinations of equivalence were as follows:

- If the ES  $\leq 0.05$  for all demographic and prior achievement variables, the samples will be deemed equivalent.
- If the ES is  $0.05 < ES < 0.25$ , the samples will be deemed partially equivalent; any differences noted in outcomes may be due to pre-existing differences between cohorts. These differences will be corrected statistically in the covariate MLMs below.
- If the ES is  $\geq 0.25$ , the samples are not equivalent, and it is inappropriate to compare differences in outcomes. A PSM will be conducted to correct for the difference and a new analytic sample will be made.

There were several student characteristics that had  $0.05 < ES < 0.25$  and they were controlled as covariates in the MLMs.

**Outcome comparisons.** Next, comparisons by outcome were conducted. For example, for the question “How many students (%) successfully completed Algebra II by Grade 10?” the percentage of on-time completers for each cohort within the analytic sample (in this case class of 2024 GEAR UP cohort vs. retrospective cohort) was compared via a chi-squared analysis.

**Logistic regression analyses.** Binary logistic regressions are used for the remainder of the analyses. The logistic regression model examines the probability that students will achieve a particular outcome, for example, of successfully completing Algebra I by Grade 9 (represented as P in the model).

A binary logistic regression is used for these analyses instead of a MLM because of the relatively small number of schools in the analyses (6). The small number of Level 2 units will increase the chance that a MLM model will be underpowered, and the likelihood of making a Type II Error (not seeing a difference between groups statistically when a true difference exists) increases.

The model is expressed as follows:

$$\log(P / 1-P) = \beta_0 + \beta_1 * [GEAR\ UP]_i + \beta_2 * [School\_A]_j + \beta_3 * [Gender\_Male]_j \dots$$

Where:

- P represents probability of the outcome occurring,
- postscript *i* indicates student *i*,
- $\beta$ s are parameters to be estimated;  $\beta_0$  is the intercept and all other parameters are tied to a predictor variable,
- *GEAR UP* is a binary variable (1= class of 2024 GEAR UP cohort; 0= retrospective cohort),
- *School\_A* is an example of a school membership variable (1 if School A, 0 if other schools),
- *Gender\_Male* is an example of a student level covariate (1 if male, 0 if female). These covariates will only be added for variables with ES  $> 0.05$ .
- “...” indicates that the model will include multiple predictors and corresponding parameters.

Being part of the intervention (expressed as “*GEAR UP*” in the model) serves as a predictor variable for the model, along with school attended and other covariates (such as demographics and prior academic performance). If the GEAR UP intervention was successful, the program

impact will be reflected in the size of the parameter  $\beta_1$  and the associated OR as it captures the average performance difference of class of 2024 students and retrospective cohort students after school and student characteristics are taken into account. For example, if the OR is 2.1 for the class of 2024 for a particular outcome, an interpretation could be that the class of 2024 was 2.1 times more likely to meet that outcome than the retrospective cohort.

### Student Outcomes by Cohort: Class of 2024 vs. Follow-On Cohorts

Next, comparisons between the class of 2024 cohort and students attending the same schools in the year after targeted GEAR UP services were implemented (i.e., the follow-on cohort) are presented. The follow-on cohort completed Grade 9 in 2021–22, the last year data were available for this report; this section only focuses on outcomes for Grade 9.

A portion of the class of 2024 students ( $n=257$ ) were not promoted on time from Grade 9 to 10 in 2020–21 or from Grade 10 to 11 in 2021–22 and thus repeated Grade 9 or 10 as part of the follow-on cohort. These students were in the data set as both class of 2024 students and follow-on cohort students. However, because the students had been served at one time by GEAR UP, they are considered GEAR UP participants even though they are no longer in the cohort served by the program, and thus they were added to the class of 2024 and removed from the follow-on cohort.

**Analytic samples.** There were five distinct analytic samples for the class of 2024 GEAR UP and follow-on cohorts – one for each outcome measure (i.e., Algebra I completion by Grade 9, on-time promotion from Grade 9 to 10, and Algebra I, English I and Biology EOC exams). To be included in the analytic sample, students must have data for demographic variables and prior achievement on STAAR. The other cohorts use Grade 7 STAAR scores for prior achievement, but because the follow-on cohort completed Grade 7 in 2019–20 and STAAR was not administered in spring 2020 due to the COVID-19 pandemic, Grade 6 STAAR scores (from 2017–18 for the class of 2024 and 2018–19 for the follow-on cohort) were used instead.

To be included in the analytic sample for a particular outcome, students must have had data for the outcome of interest (e.g., completion of Algebra I by Grade 9) and must have attended a GEAR UP school in the year the outcome was collected in addition to data for demographic variables and prior achievement on STAAR mentioned above.

Even though students are from the same set of schools, the compositions of schools can change by year, so BE was formally assessed for each analytic sample, using Hedges'  $g$  to calculate the ES difference between the two groups, and determinations of equivalence were as follows:

- If the  $ES \leq 0.05$  for all demographic and prior achievement variables, the samples are deemed equivalent.
- If the  $ES$  is  $0.05 < ES < 0.25$ , the samples are deemed partially equivalent; any differences noted in outcomes may be due to pre-existing differences between cohorts. These differences will be corrected for statistically in the covariate MLMs below.

- If the ES is  $\geq 0.25$ , the samples are not equivalent, and it is inappropriate to compare differences in outcomes. A PSM would need to be conducted to correct for the difference and a new analytic sample would be made.

**Logistic regression analyses.** Binary logistic regressions were used in the analyses. The logistic regression model examines the probability that students will achieve a particular outcome, for example, of successfully completing Algebra I by Grade 9 (represented as P in the model).

A binary logistic regression was used for these analyses instead of a MLM because of the relatively small number of schools in the analyses (6). The small number of Level 2 units increases the chance that a MLM model will be underpowered, and the likelihood of making a Type II Error (not seeing a difference between groups statistically when a true difference exists) increases.

The model is expressed as follows:

$$\log(P / 1-P) = \beta_0 + \beta_1 * [GEAR\ UP]_i + \beta_2 * [School\_A]_j + \beta_3 * [Gender\_Male]_j \dots$$

Where:

- P represents probability of the outcome occurring,
- postscript *i* indicates student *i*,
- $\beta$ s are parameters to be estimated;  $\beta_0$  is the intercept and all other parameters are tied to a predictor variable,
- *GEAR UP* is a binary variable (1= class of 2024; 0= follow-on cohort),
- *School\_A* is an example of a school membership variable (1 if School A, 0 if other schools),
- *Gender\_Male* is an example of a student level covariate (1 if male, 0 if female). These covariates will only be added for variables with ES > 0.05.
- “...” indicates that the model will include multiple predictors and corresponding parameters.

Being part of the intervention (expressed as “*GEAR UP*” in the model) serves as a predictor variable for the model, along with school attended and other covariates (such as demographics and prior academic performance). If the *GEAR UP* intervention was successful, the program impact will be reflected in the size of parameter  $\beta_1$ , and the associated OR as it captures the average performance difference of class of 2024 students and follow-on cohort students after school and student characteristics are taken into account. For example, if the OR is 2.1 for the class of 2024 for a particular outcome, an interpretation could be that the class of 2024 was 2.1 times more likely to meet that outcome than the follow-on cohort.

### Length of Time in Cohort Analyses

Finally, length of time in cohort analyses were conducted. The *GEAR UP: Beyond Grad* program has been in place since 2018–19, when students entered Grade 7. (Only a few services were offered at that time, including college and career readiness curricula, college advising, and college visits. The majority of services began in Grade 8.) The length of time in

cohort variable, therefore, ranges from 1 to 4 (i.e., 2018–19 to 2021–22). The purpose of these analyses is to see if students who have participated for a longer time in the program have better outcomes than those newer to the program.

**Analytic samples.** There were eight analytic samples for the length of time in cohort analyses—one for each outcome measure (i.e., Algebra I completion by Grade 9, Algebra II completion by Grade 10, on-time promotion from Grade 9 to 10 and 10 to 11, Grade 9 Algebra I, English I, and Biology EOC exams, and Grade 10 English II EOC exam). To be included in the analytic sample, students must be in the class of 2024 GEAR UP cohort and have data for demographic variables and prior achievement on STAAR and for the outcome of interest. Because there are four categories for length of time in cohort (and not two), it was not practical to conduct BE tests for every variable. Instead, a BE test was conducted comparing the students who had participated for three or four years to those who had only attended GEAR UP schools for one or two years (i.e., beginning in high school – students who participated only in middle school have no data for any of the outcomes of interest and are not included in the sample). We found widespread differences between the groups on virtually all demographic variables and STAAR scores. See Table B.5.

**Table B.5. Key Demographics for the Analytic Sample  
Comparing Students in GEAR UP Cohort for 1 or 2  
Years to Those in Cohort for 3 or 4 Years**

Student Characteristic	In GEAR UP District 1 or 2 Years (n=735)	In GEAR UP District 3 or 4 Years (n=1,556)	sig	ES
<b>Gender (%)</b>				
Male	57%	50%	**	0.14
<b>Race/Ethnicity (%)</b>				
African American	15%	12%	ns	0.09
Hispanic	78%	81%	*	0.08
White	6%	5%	ns	0.04
<b>Economic Status (%)</b>				
Economically Disadvantaged	92%	85%	***	0.21
<b>Instructional Program or Special Population</b>				
At-Risk	65%	64%	ns	0.02
EB/EL	35%	25%	***	0.22
Special Education	10%	8%	ns	0.07
Gifted and Talented	1%	6%	***	0.24
<b>Grade 7 STAAR Scale Score (Mean)</b>				
Mathematics	1595	1622	***	0.24
Reading	1572	1612	***	0.32

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' g. GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 or 10 student in the fall of 2020 or 2021 and have data for all student characteristics in the table above. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of

Grade 10 (fall of the 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Analysis of outcome comparisons.** A logistic regression analysis served as the main way of describing the effect that number of years of participation in GEAR UP had on outcomes. The logistic regression model describes the probability that students will achieve a particular outcome, for example, of successfully completing Algebra I by Grade 9 (represented as P in the model).

A logistic regression is proposed for these analyses instead of a MLM because of the relatively small number of schools in the analyses (6). The small number of Level 2 units increases the chance that a MLM model will be underpowered, and the likelihood of making a Type II Error (not seeing a difference between groups statistically when a true difference exists) increases. Length of time in cohort will be added to the model as a categorical value with four possible values representing years (1, 2, 3, or 4). Students will be considered part of the cohort for a year if they were present on fall snapshot date of that year.

The model is expressed as follows:

$$\log(P / 1-P) = \beta_0 + \beta_1 * [Length\ of\ Time\ in\ Cohort]_i + \beta_2 * [School\_A]_j + \beta_3 * [Gender\_Male]_k$$

...

Where:

- P represents probability of the outcome occurring,
- postscript *i* indicates student *i*,
- $\beta$ s are parameters to be estimated;  $\beta_{0j}$  is the intercept and all other parameters are tied to a predictor variable,
- *Length of Time in Cohort* is a categorical variable (from 1 to 4 years in cohort),
- *School\_A* is an example of a school membership variable (1 if School A, 0 if other schools),
- *Gender\_Male* is an example of a student level covariate (1 if male, 0 if female). All of the covariates in Table B.5 with ES > 0.05 will be added to the model.
- “...” indicates that the model will include multiple predictors and corresponding parameters.

The number of years in the 2024 GEAR UP primary cohort (expressed as “*Length of Time in Cohort*” in the model) serves as a predictor variable for the model, along with school attended and other covariates (demographics and prior academic performance). If the number of years of participation in GEAR UP is related to outcomes, while controlling for all other variables, the impact of the number of years of participation will be reflected in the size of parameter  $\beta_1$ .



## APPENDIX C: Additional Technical Detail

### C.1. Outcomes by School for Class of 2024

Table C.1.1. Key Demographics by School for Class of 2024 Students with All Student Characteristic Variables

Student Characteristic	CE King N = 937	Cleveland N = 774	Mathis N = 130	San Elizario N = 289	Sinton N = 131	Van Horn N = 30	All N = 2,291
<b>Gender (%)</b>							
Male	52%	52%	58%	52%	53%	50%	52%
<b>Race/Ethnicity (%)</b>							
African American	29%	4%	<4%	0%	<4%	<17%	13%
Hispanic	67%	84%	93%	100%	91%	90%	80%
White	3%	9%	6%	0%	8%	<17%	5%
<b>Economic Status (%)</b>							
Economically Disadvantaged	81%	96%	82%	92%	79%	80%	87%
<b>Instructional Program or Special Population (%)</b>							
At-Risk	72%	50%	75%	72%	66%	80%	64%
EB/EL	22%	39%	<4%	47%	<4%	<17%	28%
Gifted and Talented	5%	4%	6%	8%	<4%	<17%	5%
Special Education	7%	7%	12%	13%	14%	<17%	8%
<b>STAAR Grade 7 Scale Score (Mean)</b>							
Mathematics	1610	1615	1635	1619	1597	1569	1613
Reading	1603	1593	1636	1605	1561	1594	1599

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019. Note. EB/EL – Emergent bilingual students/English learners. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 demographic variables, values from fall of Grade 10 were used (fall of the 2021–22 school year). To be included in this table, students must have had at least one outcome for Grade 9 or 10 and have had data for all demographic variables and STAAR Grade 7 Math and Reading scale scores. Cell counts of  $n < 5$  are masked.

**Table C.1.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =2,148)							
Percent	66%	68%	73%	78%	77%	89%	75%
Students with demographic and prior STAAR data ( <i>n</i> =1,894)							
Percent	63%	70%	72%	80%	77%	85%	75%

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21, and have data for at least one outcome variable in Grade 9.

**Table C.1.3. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =2,121)							
Percent	25%	26%	53%	15%	87%	29%	37%
Students with demographic and prior STAAR data ( <i>n</i> =1,809)							
Percent	26%	25%	53%	14%	87%	3%	36%

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* Algebra II completers were defined as students who successfully completed Algebra II by Grade 10 (spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and have had data for at least one outcome variable in Grade 10.

**Table C.1.4. On-Time Promotion from Grade 9 (2020–21) to 10 (2021–22) for Class of 2024 by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =2,044)							
Percent	97%	73%	90%	84%	90%	91%	86%
Students with demographic and prior STAAR data ( <i>n</i> =1,825)							
Percent	96%	75%	90%	84%	90%	86%	86%

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* Promotion was determined by examining the grade in which class of 2024 GEAR UP cohort students were enrolled in fall 2021, when they should have been enrolled in Grade 10. Students who were still enrolled in Grade 9 were classified as being retained, while students enrolled in Grade 10 or above were classified as promoted on time. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have promotion data available from the fall of the 2021–22 school year.

**Table C.1.5. On-Time Promotion from Grade 10 (2021–22) to 11 (2022–23)  
for Class of 2024 by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =2,003)							
Percent	88%	99%	91%	85%	97%	98%	91%
Students with demographic and prior STAAR data ( <i>n</i> =1,747)							
Percent	88%	99%	91%	85%	97%	96%	91%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2021–22 to 2022–23; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. Promotion was determined by examining the grade in which class of 2024 GEAR UP cohort students were enrolled in fall 2022 when they should have been enrolled in Grade 11. Students who were still enrolled in Grade 10 were classified as being retained, while students enrolled in Grade 11 or above were classified as promoted on time. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and must have promotion data available from the fall of the 2022–23 school year.

**Table C.1.6. Algebra I EOC Performance for Class of 2024 Grade 9 (2020–2021)  
by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =1,433)							
Approaches (%)	NA	61%	51%	69%	80%	56%	61%
Masters (%)	NA	5%	6%	12%	4%	3%	8%
Students with demographic and prior STAAR data ( <i>n</i> =1,330)							
Approaches (%)	NA	63%	51%	70%	83%	54%	61%
Masters (%)	NA	5%	5%	12%	4%	2%	7%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–2021; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. EOC – End-of-course exam. NA – Not applicable. School A had no students who took the EOC exam in spring 2021. Data from the spring administration of the exam in 2021 were used. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored Algebra I STAAR EOC exam from spring 2021.

**Table C.1.7. Biology EOC Performance for Class of 2024 Grade 9 (2020–2021) by School**

Group	School A	School B	School C	School D	School E	School F	All
All students ( <i>n</i> =1,705)							
Approaches (%)	56%	69%	79%	77%	86%	85%	78%
Masters (%)	0%	2%	9%	16%	9%	17%	11%
Students with demographic and prior STAAR data ( <i>n</i> =1,534)							
Approaches (%)	56%	73%	79%	79%	89%	75%	78%
Masters (%)	0%	3%	9%	15%	9%	2%	10%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. EOC – End-of-course exam. Data from the spring administration of the exam in 2021 were used. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored Biology STAAR EOC exam from spring 2021.

**Table C.1.8. English I EOC Performance for Class of 2024 Grade 9 (2020–21) by School**

Group	School A	School B	School C	School D	School E	School F	All
<b>All students (n=1,800)</b>							
Approaches (%)	62%	59%	56%	61%	76%	65%	60%
Masters (%)	0%	5%	3%	7%	9%	4%	5%
<b>Students with demographic and prior STAAR data (n=1,621)</b>							
Approaches (%)	63%	64%	56%	63%	77%	50%	60%
Masters (%)	0%	5%	3%	7%	10%	1%	5%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. EOC – End-of-course exam. Data from the spring administration of the exam in 2021 were used. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in 2020–21 and have a scored English I STAAR EOC exam from spring 2021.

**Table C.1.9. English II EOC Performance for Class of 2024 Grade 10 (2021–22) by School**

Group	School A	School B	School C	School D	School E	School F	All
<b>All students (n=1,844)</b>							
Approaches (%)	70%	66%	67%	63%	78%	69%	66%
Masters (%)	0%	4%	3%	5%	8%	3%	4%
<b>Students with demographic and prior STAAR data (n=1,617)</b>							
Approaches (%)	69%	71%	67%	67%	80%	58%	68%
Masters (%)	0%	4%	3%	5%	8%	1%	4%

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2022.

Note. EOC – End-of-course exam. Students included in the sample were all class of 2024 students who attended GEAR UP campuses and took the English II STAAR EOC exam in Grade 10. Data from the spring administration of the exam in 2022 were used. To be included in the “All students” sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in 2021–22 and have a scored English II STAAR EOC exam from spring 2022.

## C.2. Outcomes by Cohort: Matched Comparison Cohort

**Table C.2.1. Completion of Algebra I by Grade 9  
(2020–21): Key Demographics for the Analytic Sample  
Comparing the Class of 2024 and Matched  
Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,871)</b>	<b>Matched Comparison (n=1,881)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	52%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	13%	15%	ns	0.06
Hispanic	81%	79%	ns	0.05
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	86%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	64%	66%	ns	0.04
EB/EL	27%	25%	ns	0.05
Gifted and Talented	5%	4%	ns	0.05
Special Education	9%	8%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1619	1616	ns	0.03
Reading	1606	1603	ns	0.02

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in the fall of 2021 and have been matched in the propensity score matching. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohort**

Initial Group Differences in Algebra I Completion by Grade 9								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Completed Algebra I by Grade 9 (2020–21)</b>	1,871	1,881	75%	71%	7.5	**	0.09	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	1.00	0.13	***	NA	0.99	0.13	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.14	0.29	ns	NA	0.14	0.29	ns	NA
Covariates with BE > 0.05								
Race/Ethnicity					B	SE	sig	OR
African American					0.18	0.12	ns	NA
Model Statistics								
Number of students/schools							3,752 / 41	
School-level variance	Intercept only			Main model		Covariate model		
	0.38			0.36		0.36		
AIC	4274			4276		4275		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2020–21.

Note. AIC – Akaike information criterion. B – Beta weight. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in the fall of 2020 and have been matched in the PSM. Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. The reference categories in the model are: matched comparison cohort, not African American. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.2.3. Completion of Algebra II by Grade 10  
(2021–22): Key Demographics for the Analytic Sample  
Comparing the Class of 2024 and Matched Comparison  
Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,770)</b>	<b>Matched Comparison (n=1,783)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	51%	50%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	14%	15%	ns	0.03
Hispanic	80%	79%	ns	0.02
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	86%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	64%	64%	ns	0.00
EB/EL	28%	25%	ns	0.07
Gifted and Talented	5%	4%	ns	0.05
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1623	1621	ns	0.02
Reading	1609	1607	ns	0.02

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus as a Grade 10 student in 2021–22 and have been matched in the PSM. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). Algebra II completers were defined as students who successfully completed Algebra II by the end of Grade 10 (spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.4. Completion of Algebra II by Grade 10 (2021–22) for Class of 2024 Cohort and Matched Comparison Cohort**

Initial Group Differences in Algebra II Completion by Grade 10								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Completed Algebra II by Grade 10 (2021–22)</b>	1,770	1,783	36%	28%	26.5	***	0.17	
<b>MLM Regression Models</b>								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	-1.30	0.27	***	NA	-1.16	0.27	***	NA
<b>Cohort: Class of 2024 (vs. matched comparison)</b>								
Class of 2024	0.41	0.65	ns	NA	0.40	0.63	ns	NA
<b>Covariates with ES &gt; 0.05</b>								
Instructional Program or Special Population					B	SE	sig	OR <sup>a</sup>
EB/EL					-0.72	0.11	***	0.49 (2.05)
<b>Model Statistics</b>								
<b>Number of students/schools</b>						3,553 / 41		
School-level variance	Intercept only			Main model		Covariate model		
	2.00			1.98		1.91		
<b>AIC</b>	3528			3530		3486		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in the fall of the 2021–22 school year as a Grade 10 student and have been matched in the PSM. Algebra II completers were defined as students who successfully completed Algebra II by the end of Grade 10 (spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. The reference categories in the model are: matched comparison cohort, not EB/EL. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



**Table C.2.5. On-Time Promotion from Grade 9 (2020–21) to 10 or above (2021–22): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts**

Student Characteristic	Class of 2024 (n=1,802)	Matched Comparison (n=1,782)	sig	ES
<b>Gender (%)</b>				
Male	51%	51%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	13%	15%	ns	0.06
Hispanic	81%	79%	ns	0.05
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	86%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	64%	65%	ns	0.02
EB/EL	27%	24%	*	0.07
Gifted and Talented	6%	5%	ns	0.05
Special Education	9%	8%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1620	1619	ns	0.01
Reading	1607	1606	ns	0.00

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. PSM – Propensity score matching. To be included in the analytic sample, students must have been matched in the PSM, have enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of the 2020–21 school year and have promotion data available from the fall of the 2021–22 school year. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.6. On-Time Promotion from Grade 9 (2020–21) to 10 or above (2021–22) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in On-Time Promotion from Grade 9 to 10								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Promoted on Time from Grade 9 (2020–21) to 10 (2021–22)</b>	1,802	1,782	86%	90%	13.9	***	0.12	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	2.36	0.15	***	NA	2.56	0.16	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	-0.46	0.29	ns	NA	-0.48	0.29	ns	NA
Covariates with ES > 0.05								
Race/Ethnicity					B	SE	sig	OR <sup>a</sup>
African American					0.05	0.19	ns	NA
Instructional Program or Special Population					B	SE	sig	OR <sup>a</sup>
EB/EL					-0.75	0.12	***	0.47 (2.13)
Model Statistics								
Number of students/schools					3,584 / 41			
School-level variance	Intercept only				Main model	Covariate model		
	0.36				0.31	0.30		
AIC	2548				2548	2510		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been matched in the propensity score matching, have enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of the 2020–21 school year, and have promotion data available from the fall of the 2021–22 school year. The reference categories in the model are: matched comparison cohort, not African American, not EB/EL. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.7. On-Time Promotion from Grade 10 (2021–22) to 11 or above (2022–23) Outcome: Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,711)</b>	<b>Matched Comparison (n=1,718)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	51%	49%	ns	0.04
<b>Race/Ethnicity (%)</b>				
African American	14%	15%	ns	0.03
Hispanic	80%	79%	ns	0.02
White	4%	5%	ns	0.05
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	86%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	63%	64%	ns	0.02
EB/EL	28%	25%	ns	0.07
Gifted and Talented	5%	5%	ns	0.00
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1624	1623	ns	0.01
Reading	1610	1609	ns	0.01

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2021–22 to 2022–23; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

*Note.* EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. PSM – Propensity score matching. To be included in the analytic sample, students must have been matched in the PSM, have enrolled in a GEAR UP or matched comparison campus in Grade 10 in the fall of the 2021–22 school year and have promotion data from the fall of the 2022–23 school year. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.8. On-Time Promotion from Grade 10 (2021–22) to 11 or above (2022–23) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in On-Time Promotion from Grade 10 to 11								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Promoted on Time from Grade 10 (2021–22) to 11 (2022–23)</b>	1,711	1,718	91%	93%	5.2	*	0.07	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	3.06	0.24	***	NA	3.20	0.24	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	-0.17	0.47	ns	NA	-0.19	0.46	ns	NA
Covariates with ES > 0.05								
Instructional Program or Special Population					B	SE	sig	OR <sup>a</sup>
EB/EL					-0.57	0.14	***	0.57 (1.77)
Model Statistics								
<b>Number of students/schools</b>	3,429 / 41							
School-level variance	Intercept only		Main model		Covariate model			
	0.82		0.83		0.76			
<b>AIC</b>	1880		1882		1868			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been matched in the propensity score matching, have enrolled in a GEAR UP or matched comparison campus in Grade 10 in the fall of the 2021–22 school year and have promotion data available from the fall of the 2022–23 school year. The reference categories in the model are: matched comparison cohort, and not EB/EL. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.9. Algebra I EOC Exam, Grade 9 (2020–2021): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,311)</b>	<b>Matched Comparison (n=1,286)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	52%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	14%	16%	ns	0.06
Hispanic	81%	78%	ns	0.07
White	4%	4%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	87%	86%	ns	0.03
<b>Instructional Program or Special Population (%)</b>				
At-Risk	69%	70%	ns	0.02
EB/EL	30%	26%	*	0.09
Gifted and Talented	2%	2%	ns	0.00
Special Education	10%	8%	*	0.07
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1597	1601	ns	0.05
Reading	1586	1593	ns	0.06

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Algebra I EOC from spring 2021. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups and are noted in the table.

**Table C.2.10. Approaches Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Approaches Grade Level on Algebra I EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Algebra I EOC Exam, Grade 9 (2020–21): Approaches Grade Level</b>	1,311	1,286	61%	57%	4.3	*	0.08	
MLM Regression Model								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	0.32	0.17	ns	NA	0.57	0.26	*	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.31	0.41	ns	NA	0.36	0.44	ns	NA
Covariates with ES > 0.05								
Grade 7 STAAR					B	SE	sig	OR <sup>a</sup>
Reading					0.86	0.06	***	NA
Race/Ethnicity								
African American					-0.09	0.23	ns	NA
Hispanic					-0.01	0.21	ns	NA
Instructional Program or Special Population								
EB/EL					-0.01	0.12	ns	NA
Special Education					-0.75	0.17	***	0.47 (2.11)
Model Statistics								
Number of students/schools								2,597 / 40
School-level variance	Intercept only		Main model		Covariate model			
	0.67		0.66		0.76			
AIC	3342		3342		3010			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Algebra I EOC from spring 2021. The reference categories in the model are: matched comparison cohort, not African American, not Hispanic, and not EB/EL, not special education. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.11. Masters Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Masters Grade Level on Algebra I EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Algebra I EOC Exam, Grade 9 (2020–21): Masters Grade Level</b>	1,311	1,286	7%	9%	2.6	ns	0.07	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	-2.78	0.25	***	NA	-2.80	0.39	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	-0.21	0.54	ns	NA	-0.23	0.55	ns	NA
Covariates with ES > 0.05								
Grade 7 STAAR					B	SE	sig	OR
Reading					1.01	0.10	***	NA
Race/Ethnicity								
African American					-0.75	0.40	ns	NA
Hispanic					-0.07	0.30	ns	NA
Instructional Program or Special Population								
EB/EL					-0.30	0.24	ns	NA
Special Education					-1.20	0.72	ns	NA
Model Statistics								
<b>Number of students/schools</b>								2,597 / 40
School-level variance	Intercept only		Main model		Covariate model			
	1.05		1.01		1.03			
<b>AIC</b>	1380		1382		1222			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges'  $g$ . MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Algebra I EOC from spring 2021. The reference categories in the model are: matched comparison cohort, not African American, not Hispanic, not EB/EL, and not special education. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.2.12. Biology EOC Exam Grade 9 (2020–21):  
Key Demographics for the Analytic Sample  
Comparing the Class of 2024 and Matched  
Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,514)</b>	<b>Matched Comparison (n=1,516)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	50%	50%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	13%	15%	ns	0.06
Hispanic	81%	78%	ns	0.07
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	85%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	60%	63%	*	0.06
EB/EL	25%	24%	ns	0.02
Gifted and Talented	6%	5%	ns	0.04
Special Education	6%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1631	1625	ns	0.05
Reading	1619	1614	ns	0.04

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Biology EOC from spring 2021. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.



**Table C.2.13. Approaches Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Approaches Grade Level on Biology EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Biology EOC Exam, Grade 9 (2020–21): Approaches Grade Level</b>	1,514	1,516	79%	74%	9.8	**	0.12	
MLM Regression Model								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	1.06	0.09	***	NA	2.62	0.25	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.19	0.18	ns	NA	0.18	0.22	ns	NA
Covariates with ES > 0.05								
Race/Ethnicity					B	SE	sig	OR <sup>a</sup>
African American					-0.45	0.24	ns	NA
Hispanic					-0.13	0.21	ns	NA
Instructional Program or Special Population								
At-Risk					-1.92	0.12	***	0.15 (6.89)
Model Statistics								
Number of students/schools								3,030 / 40
School-level variance	Intercept only		Main model		Covariate model			
	0.11		0.09		0.17			
<b>AIC</b>	3313		3314		2994			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Biology EOC from spring 2021. The reference categories in the model are: matched comparison cohort, not African American, not Hispanic, and not at-risk. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.14. Masters Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Masters Grade Level on Biology EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>Biology EOC Exam, Grade 9 (2020–21): Masters Grade Level</b>	1,514	1,516	10%	8%	7.6	**	0.07	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	-2.63	0.18	***	NA	-1.49	0.28	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	-0.06	0.36	ns	NA	-0.08	0.37	ns	NA
Covariates with ES > 0.05								
Race/Ethnicity					B	SE	sig	OR <sup>a</sup>
African American					-0.65	0.30	*	0.52 (1.91)
Hispanic					-0.18	0.24	ns	NA
Instructional Program or Special Population								
At-Risk					-2.25	0.17	***	0.10 (9.52)
Model Statistics								
<b>Number of students/schools</b>								3,030 / 40
School-level variance				Intercept only	Main model	Covariate model		
				0.41	0.41	0.43		
<b>AIC</b>				1788	1790	1561		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored Biology EOC from spring 2021. The reference categories in the model are: matched comparison cohort, not African American, not Hispanic, and not at-risk. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.15. English I EOC Exam, Grade 9 (2020–21): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,601)</b>	<b>Matched Comparison (n=1,546)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	50%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	13%	15%	ns	0.06
Hispanic	80%	79%	ns	0.02
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	86%	ns	0.03
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	64%	ns	0.04
EB/EL	26%	24%	ns	0.05
Gifted and Talented	6%	5%	ns	0.05
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1625	1622	ns	0.02
Reading	1611	1610	ns	0.01

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored English I EOC from spring 2021. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.16. Approaches Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Approaches Grade Level on English I EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>English I EOC Exam, Grade 9 (2020–21): Approaches Grade Level</b>	1,601	1,546	60%	58%	1.9	ns	0.04	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	0.30	0.08	***	NA	0.31	0.08	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.19	0.16	ns	NA	0.18	0.16	ns	NA
Covariates with ES > 0.05								
Race/Ethnicity					B	SE	sig	OR
African American					-0.13	0.11	ns	NA
Model Statistics								
Number of students/schools							3,147 / 41	
School-level variance	Intercept only		Main model		Covariate model			
	0.08		0.08		0.08			
<b>AIC</b>	4246		4247		4247			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored English I EOC from spring 2021. The reference categories in the model are: matched comparison cohort, and not African American. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.2.17. Masters Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Masters Grade Level on English I EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>English I EOC Exam, Grade 9 (2020–21): Masters Grade Level</b>	1,601	1,546	5%	3%	3.4	ns	0.10	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	-3.27	0.25	***	NA	-3.23	0.25	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.09	0.52	ns	NA	0.08	0.52	ns	NA
Covariates with ES > 0.05								
Race/Ethnicity					B	SE	sig	OR
African American					-0.53	0.35	ns	NA
Model Statistics								
<b>Number of students/schools</b>					3,147 / 41			
School-level variance	Intercept only		Main model		Covariate model			
	0.39		1.0		1.0			
<b>AIC</b>	1078		1083		1083			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021.

Note. AIC – Akaike information criterion. B – Beta weight. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 9 in the fall of 2020, matched in the propensity score matching, and have a scored English I EOC from spring 2021. The reference categories in the model are: matched comparison cohort, and not African American. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.2.18. English II EOC Exam, Grade 10 (2021–22): Key Demographics for the Analytic Sample Comparing the Class of 2024 and Matched Comparison Cohorts**

<b>Student Characteristic</b>	<b>Class of 2024 (n=1,590)</b>	<b>Matched Comparison (n=1,521)</b>	<b>sig</b>	<b>ES</b>
<b>Gender (%)</b>				
Male	50%	48%	ns	0.04
<b>Race/Ethnicity (%)</b>				
African American	14%	15%	ns	0.03
Hispanic	80%	79%	ns	0.02
White	5%	4%	ns	0.05
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	85%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	61%	ns	0.02
EB/EL	26%	23%	*	0.07
Gifted and Talented	6%	5%	ns	0.05
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1629	1630	ns	0.01
Reading	1615	1615	ns	0.01

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2022.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 10 in the fall of 2021, matched in the propensity score matching, and have a scored English II EOC from spring 2022. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.2.19. Approaches Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Approaches Grade Level on English II EOC								
	Number in Cohort		Outcome Percentages		Test Results			
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>English II EOC Exam, Grade 10 (2021–22): Approaches Grade Level</b>	1,590	1,521	68%	71%	4.4	*	0.07	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR <sup>a</sup>
Intercept	0.96	0.09	***	NA	1.34	0.10	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	-0.18	0.16	ns	NA	-0.22	0.19	ns	NA
Covariates with ES > 0.05								
Instructional Program or Special Population					B	SE	sig	OR <sup>a</sup>
EB/EL					-1.41	0.09	***	0.24 (4.10)
Model Statistics								
Number of students/schools					3,111 / 41			
School-level variance	Intercept only			Main model	Covariate model			
	0.08			0.08	0.12			
<b>AIC</b>	3833			3833	3597			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2022.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course exam. ES – Effect size of the difference using Hedges'  $g$ . MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 10 in the fall of 2021, matched in the propensity score matching, and have a scored English II EOC from spring 2022. The reference categories in the model are: matched comparison cohort, and not EB/EL. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.2.20. Masters Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 and Matched Comparison Cohorts**

Initial Group Differences in Masters Grade Level on English II EOC								
	Number in Cohort		Outcome Percentages			Test Results		
	Class of 2024	Matched Comparison	Class of 2024	Matched Comparison	$\chi^2$	sig	ES	
<b>English II EOC Exam, Grade 10 (2021–22): Masters Grade Level</b>	1,590	1,521	4%	3%	0.8	ns	0.05	
MLM Regression Models								
	Main Model				Covariate Model			
	B	SE	sig	OR	B	SE	sig	OR
Intercept	-3.32	0.25	***	NA	-3.12	0.25	***	NA
Cohort: Class of 2024 (vs. matched comparison)								
Class of 2024	0.00	0.53	ns	NA	-0.01	0.52	ns	NA
Covariates with ES > 0.05								
Instructional Program or Special Population					B	SE	sig	OR <sup>a</sup>
EB/EL					-1.34	0.32	***	0.26 (3.82)
Model Statistics								
Number of students/schools							3,111/ 41	
School-level variance	Intercept only		Main model		Covariate model			
	1.0		1.0		1.0			
<b>AIC</b>	992		994		974			

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2022.

Note. AIC – Akaike information criterion. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. MLM – Multilevel modeling. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP or matched comparison campus in Grade 10 in the fall of 2021, matched in the propensity score matching, and have a scored English II EOC from spring 2022. The reference categories in the model are: matched comparison cohort, and not EB/EL. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



### C.3. Comparisons by Cohort: Retrospective Cohort

**Table C.3.1. Completion of Algebra II by Grade 10: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Student Characteristic	Class of 2024 (n=1,809)	Retrospective Cohort (n=1,545)	sig	ES
<b>Gender (%)</b>				
Male	51%	51%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	14%	12%	ns	0.06
Hispanic	80%	80%	ns	0.00
White	5%	7%	**	0.09
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	82%	***	0.11
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	64%	ns	0.04
EB/EL	27%	24%	*	0.07
Gifted and Talented	5%	7%	ns	0.09
Special Education	8%	8%	ns	0.00
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1622	1634	**	0.10
Reading	1609	1612	ns	0.02

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2019–20 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. Demographic variables are primarily from the fall of Grade 9 (fall of the 2019–20 or 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2020–21 or 2021–22 school year). To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of 2021–22 (class of 2024) or the fall of 2020–21 (retrospective cohort), have data for all student characteristic variables above, and have data for at least one outcome in Grade 10. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.3.2. Algebra II Completion by Grade 10: Comparison by School for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
Class of 2024 ( <i>n</i> =1,809)	26%	25%	53%	14%	87%	3%	36%
Retrospective ( <i>n</i> =1,545)	0%	21%	77%	16%	87%	4%	46%
ES (sig)	0.75 *	0.09 (ns)	0.52 ***	0.03 (ns)	0.00 (ns)	0.05 (ns)	0.20 ***

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2019–20 to 2021–22.

Note. ES – Effect size of the difference using Hedges' *g*. Algebra II completers were defined as students who successfully completed Algebra II by the end of Grade 10 (spring 2021 or 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. Students included in the sample were all class of 2023 (retrospective cohort) and 2024 students who attended GEAR UP campuses in Grade 10 and had data for all student characteristic variables in Table C.3.1. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.3.3. Completion of Algebra II by Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Initial Group Differences in Algebra II Completion by Grade 10						
Number			Outcome Percentages		Test Results	
Class of 2024	Retrospective	Class of 2024	Retrospective	$\chi^2$	sig	ES
1,809	1,545	36%	46%	34.4	***	0.20
Logistic Regression Model						
Variable	B	SE	z	Sig	OR <sup>a</sup>	
Intercept	-3.95	0.40	-9.86	***	NA	
Cohort: Class of 2024 vs. Retrospective						
Class of 2024	-0.59	0.09	-6.37	***	0.55 (1.80)	
Covariates with ES > 0.05						
Grade 7 STAAR						
Mathematics Scale Score (z-score)	0.88	0.06	15.32	***	NA	
Race/Ethnicity						
African American	0.13	0.14	0.93	ns	NA	
White	0.08	0.22	0.36	ns	NA	
Economic Status						
Economically Disadvantaged	-0.25	0.13	-2.02	*	.78 (1.28)	
Instructional Program or Special Population						
EB/EL	-0.07	0.12	-0.56	ns	NA	
Gifted and Talented	1.03	0.22	4.67	***	2.80	
School						
School A	2.32	0.59	3.96	***	10.18	
School B	2.39	0.41	5.90	***	10.91	
School C	4.45	0.39	11.38	***	85.63	
School D	1.65	0.39	4.22	***	5.21	
School E	5.78	0.44	13.03	***	323.76	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
2972	4520	0.37	3,354	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2019–20 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of the 2020–21 school year (retrospective cohort) or the fall of the 2021–22 school year (class of 2024) and have data for all student characteristic variables in Table C.3.1. Algebra II completers were defined as students who successfully completed Algebra II by the end of Grade 10 (spring 2021 or spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. Reference groups for the analysis were: retrospective cohort, not African American, not White, not economically disadvantaged, not EB/EL, not gifted and talented, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.3.4. On-Time Promotion from Grade 10 to 11 or above: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts**

Student Characteristic	Class of 2024 ( <i>n</i> =1,619)	Retrospective Cohort ( <i>n</i> =1,653)	sig	ES
<b>Gender (%)</b>				
Male	50%	52%	ns	0.04
<b>Race/Ethnicity (%)</b>				
African American	14%	12%	ns	0.06
Hispanic	80%	80%	ns	0.00
White	5%	6%	*	0.04
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	82%	**	0.08
<b>Instructional Program or Special Population (%)</b>				
At-Risk	60%	65%	**	0.10
EB/EL	26%	25%	ns	0.02
Gifted and Talented	6%	6%	ns	0.00
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1629	1628	ns	0.00
Reading	1616	1608	*	0.07

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in fall of the 2021–22 school year (class of 2024) or fall of the 2020–21 school year (retrospective cohort), have promotion data from the subsequent year, and have data for all student characteristics in the table above. Demographic variables are primarily from the fall of Grade 9 (fall of the 2019–20 or 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2020–21 or 2021–22 school year). There were 179 students included in both the class of 2024 and the retrospective cohort groups. These students, originally in the retrospective cohort, were not promoted to Grade 11 on time and thus became part of the class of 2024 cohort. However, for the promotion analyses, they are included with their original cohort (the retrospective cohort). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.3.5. On-Time Promotion from Grade 10 to 11 or above: Comparison by School for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
Class of 2024 (n=1,619)	88%	99%	92%	85%	97%	96%	91%
Retrospective (n=1,653)	100%	80%	88%	91%	96%	89%	88%
ES (sig)	0.47 (ns)	0.62 ***	0.14 *	0.19 **	0.05 (ns)	0.25 (ns)	0.10 (*)

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23.

*Note.* ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in fall of the 2021–22 school year (class of 2024) or fall of the 2020–21 school year (retrospective cohort), have promotion data from the subsequent year, and have data for all student characteristics in Table C.3.4. There were 179 students included in both the class of 2024 and the retrospective cohort groups. These students, originally in the retrospective cohort, were not promoted to Grade 11 on time and thus became part of the class of 2024 cohort. However, for the promotion analyses, they are included with their original cohort (the retrospective cohort). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.3.6. On-Time Promotion from Grade 10 to 11 or above for Class of 2024 (2021–22 to 2022–23) and Retrospective (2020–21 to 2021–22) Cohorts**

Initial Group Differences in On-Time Promotion from Grade 10 to 11						
Number			Outcome Percentages		Test Results	
Class of 2024	Retrospective	Class of 2024	Retrospective	$\chi^2$	sig	ES
1,619	1,653	91%	88%	5.1	*	0.10
Logistic Regression Model						
Variable	B	SE	z	Sig	OR	
Intercept	3.11	0.32	9.75	***	NA	
Cohort: Class of 2024 vs. Retrospective						
Class of 2024	0.25	0.12	2.05	*	1.28	
Covariates with ES > 0.05						
Grade 7 STAAR						
Reading Scale Score (z-score)	0.72	0.08	9.02	***	NA	
Race / Ethnicity						
African American	0.12	0.19	0.61	ns	NA	
Economic Status						
Economically Disadvantaged	-0.30	0.19	-1.57	ns	NA	
Instructional Program or Special Population						
At-Risk	-0.19	0.16	-1.91	ns	NA	
School						
School A	-0.02	0.66	-0.04	ns	NA	
School B	-0.47	0.30	-1.56	ns	NA	
School C	-0.37	0.27	-1.36	ns	NA	
School D	-0.50	0.27	-1.84	ns	NA	
School E	0.62	0.46	1.34	ns	NA	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
2014	2179	0.05	3,272	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. B – Beta weight. ES – Effect size of the difference using Hedges'  $g$ . NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error.  $z$  – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of the 2021–22 school year (class of 2024) or the fall of the 2020–21 school year (retrospective cohort), have promotion data from the subsequent year, and have data for all student characteristics in Table C.3.4. Reference groups for the analysis were: retrospective cohort, not African American, not economically disadvantaged, not at-risk, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.3.7. English II EOC: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Student Characteristic	Class of 2024 (n=1,617)	Retrospective Cohort (n=1,389)	sig	ES
<b>Gender (%)</b>				
Male	50%	50%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	14%	13%	ns	0.03
Hispanic	80%	80%	ns	0.00
White	5%	7%	**	0.09
<b>Economic Status (%)</b>				
Economically Disadvantaged	86%	81%	***	0.14
<b>Instructional Program or Special Population (%)</b>				
At-Risk	61%	62%	ns	0.02
EB/EL	26%	23%	*	0.07
Gifted and Talented	6%	7%	ns	0.04
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 7 Scale Score (Mean)</b>				
Mathematics	1628	1640	**	0.10
Reading	1615	1617	ns	0.01

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of the 2021–22 school year (class of 2024) or fall of the 2020–21 school year (retrospective cohort), have data for all student characteristics in the table above, and have a scored English II EOC from spring 2021 or 2022. Demographic variables are primarily from the fall of Grade 9 (fall of the 2019–20 or 2020–21 school year). In cases where the student was missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2020–21 or 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.3.8. English II EOC Exam, Grade 10: Comparison by School for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
<b>Percentage Approaches Grade Level Standard</b>							
Class of 2024 ( <i>n</i> = 1,617)	69%	71%	67%	67%	80%	58%	68%
Retrospective ( <i>n</i> = 1,389)	95%	65%	63%	63%	74%	68%	65%
ES (sig)	0.67 *	0.13 (ns)	0.08 (ns)	0.08 (ns)	0.14 (ns)	0.21 (ns)	0.06 (ns)
<b>Percentage Masters Grade Level Standard</b>							
Class of 2024 ( <i>n</i> = 1,617)	0%	4%	3%	5%	8%	1%	4%
Retrospective ( <i>n</i> = 1,389)	0%	5%	3%	3%	8%	3%	4%
ES (sig)	0.00 (ns)	0.05 (ns)	0.00 (ns)	0.10 (ns)	0.00 (ns)	0.14 (ns)	0.00 (ns)

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2021, spring 2022.

Note. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. Students included in the sample were all class of 2023 and 2024 students who attended GEAR UP campuses in Grade 10, had data for all student characteristics in Table C.3.7, and had a scored English II EOC from spring 2021 or 2022. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.



**Table C.3.9. Approaches Grade Level Standard for English II EOC Exam, Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Initial Group Differences in Approaches Grade Level Standard on English II EOC						
Number			Outcome Percentages		Test Results	
Class of 2024	Retrospective	Class of 2024	Retrospective	$\chi^2$	sig	ES
1,617	1,389	68%	65%	2.3	ns	0.06
Logistic Regression Model						
Variable	B	SE	z	Sig	OR <sup>a</sup>	
Intercept	1.12	0.20	5.52	***	NA	
Cohort: Class of 2024 vs. Retrospective						
Class of 2024	0.37	0.09	3.97	***	1.45	
Covariates with ES > 0.05						
Grade 7 STAAR						
Mathematics Scale Score (z-score)	1.51	0.07	21.16	***	NA	
Race/Ethnicity						
White	-0.21	0.20	-1.02	ns	NA	
Economic Status						
Economically Disadvantaged	-0.23	0.13	-1.74	ns	NA	
Instructional Program or Special Population						
EB/EL	-1.19	0.11	-10.95	***	0.30 (3.29)	
School						
School A	1.67	0.43	3.84	***	5.31	
School B	0.65	0.23	2.87	**	1.92	
School C	0.24	0.18	1.31	ns	NA	
School D	0.50	0.19	2.60	**	1.65	
School E	0.56	0.25	2.20	*	1.75	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
3840	2852	0.28	3,006	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of the 2021–22 school year (class of 2024) or the fall of the 2020–21 school year (retrospective cohort), have data for all student characteristics in Table C.3.7, and have a scored English II EOC from spring 2021 or 2022. Reference groups for the analysis were: retrospective cohort, not White, not economically disadvantaged, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.3.10. Masters Grade Level Standard for English II EOC Exam, Grade 10 for Class of 2024 (2021–22) and Retrospective (2020–21) Cohorts**

Initial Group Differences in Masters Grade Level Standard on English II EOC						
Number		Outcome Percentages		Test Results		
Class of 2024	Retrospective	Class of 2024	Retrospective	$\chi^2$	sig	ES
1,617	1,389	4%	4%	0.3	ns	0
Logistic Regression Model						
Variable		B	SE	z	Sig	OR
Intercept		-4.22	0.60	-6.98	***	NA
Cohort: Class of 2024 vs. Retrospective						
Class of 2024		0.24	0.22	-1.10	ns	NA
Covariates with ES > 0.05						
Grade 7 STAAR						
Mathematics Scale Score (z-score)		1.27	0.10	12.67	***	NA
Race/Ethnicity						
White		0.19	0.43	0.45	ns	NA
Economic Status						
Economically Disadvantaged		-0.40	0.27	-1.50	ns	NA
Instructional Program or Special Population						
EB/EL		-0.65	0.41	-1.60	ns	NA
School						
School A		-12.89	543.66	-0.02	ns	NA
School B		0.71	0.64	1.11	ns	NA
School C		0.30	0.58	0.52	ns	NA
School D		0.58	0.58	1.00	ns	NA
School E		0.92	0.63	1.46	ns	NA
Residual Deviance	Null Deviance	R squared		Number of Students	Number of Schools	
957	707	0.08		3,006	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 10 student in the fall of the 2021–22 school year (class of 2024) or the fall of the 2020–21 school year (retrospective cohort), have data for all student characteristics in Table C.3.7, and have a scored English II EOC from spring 2021 or 2022. Reference groups for the analysis were: retrospective cohort, not White, not economically disadvantaged, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

## C.4. Comparisons by Cohort: Follow-On Cohort

**Table C.4.1. Completion of Algebra I by Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Student Characteristic	Class of 2024 (n=1,946)	Follow-On (n=2,106)	sig	ES
<b>Gender (%)</b>				
Male	52%	52%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	13%	13%	ns	0.00
Hispanic	80%	79%	ns	0.03
White	6%	6%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	85%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	62%	60%	ns	0.04
EB/EL	25%	32%	***	0.16
Gifted and Talented	6%	6%	ns	0.00
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1599	1597	ns	0.02
Reading	1533	1531	ns	0.02

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019. Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. Demographic variables are primarily from the fall of Grade 9 (fall of the 2020–21 or 2021–22 school year). In cases where class of 2024 students were missing Grade 9 data, values from fall of Grade 10 were used (fall of the 2021–22 school year). To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in the fall of 2020 (class of 2024) or the fall of 2021 (follow-on cohort) and have data for all student characteristic variables. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.4.2. Algebra I Completion by Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
Class of 2024 ( $n=1,850$ )	63%	69%	73%	80%	77%	90%	76%
Follow-On ( $n=2,106$ )	67%	79%	78%	79%	94%	89%	80%
ES (sig)	0.08 (ns)	0.23 **	0.12 **	0.02 (ns)	0.50 ***	0.03 (ns)	0.10 ***

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2021–22.

Note. ES – Effect size of the difference using Hedges'  $g$ . To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021 and have data for all student characteristics in Table C.4.1. Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021 or 2022). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.4.3. Completion of Algebra I by Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Algebra I Completion by Grade 9						
Number		Outcome Percentages		Test Results		
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,946	2,106	76%	80%	11.7	***	0.10
Logistic Regression Model						
Variable	B	SE	z	Sig	OR <sup>a</sup>	
Intercept	2.28	0.19	12.00	***	NA	
Cohort: Class of 2024 vs. Follow-On						
Class of 2024	-0.29	0.08	-3.77	***	0.75 (1.33)	
Instructional Program or Special Population						
EB/EL	-0.51	0.09	-6.01	***	0.60 (1.67)	
School						
School A	-1.45	0.35	-4.18	***	0.23 (4.27)	
School B	-0.82	0.22	-3.78	***	0.44 (2.27)	
School C	-0.87	0.19	-4.46	***	0.42 (2.39)	
School D	-0.57	0.20	-2.83	**	0.57 (1.77)	
School E	-0.34	0.26	-1.30	ns	NA	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
4156	4254	0.02	4,052	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as a Grade 9 student in the fall of 2020 (class of 2024) or the fall of 2021 (follow-on cohort) and have data for all student characteristic variables in Table 1.6. Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021 or spring 2022). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. Reference groups for the analysis were: follow-on cohort, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.4.4. On-Time Promotion from Grade 9 to 10 or above: Key Demographics for Class of 2024 (2020–21 to 2021–22) and Follow-On (2021–22 to 2022–23) Cohorts**

Student Characteristic	Class of 2024 (n=1,875)	Follow-On (n=2,033)	sig	ES
<b>Gender (%)</b>				
Male	51%	51%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	13%	13%	ns	0.00
Hispanic	80%	80%	ns	0.00
White	6%	6%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	85%	85%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	61%	60%	ns	0.02
EB/EL	25%	31%	***	0.13
Gifted and Talented	6%	6%	ns	0.00
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1600	1599	ns	0.04
Reading	1535	1533	ns	0.01

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23; State of Texas Assessments of Academic Readiness (STAAR), spring 2018; spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have promotion data available from the subsequent school year, and have data for all student characteristics in the table above. Demographic variables are from the fall of Grade 9 (fall 2020 or 2021). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1% ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.4.5. On-Time Promotion from Grade 9 to 10 or above Comparison by School for Class of 2024 (2020–21 to 2021–22) and Follow-On (2021–22 to 2022–23) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
Class of 2024 ( <i>n</i> =1,875)	96%	74%	90%	84%	90%	90%	86%
Follow-On ( <i>n</i> =2,033)	95%	99%	96%	87%	94%	97%	93%
ES (sig)	0.05 (ns)	0.78 ***	0.23 ***	0.08 (ns)	0.15 (ns)	0.28 **	0.23 ***

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23.

Note. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have promotion data available from the subsequent school year, and have data for all student characteristics in Table C.4.4. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.4.6. On-Time Promotion from Grade 9 to 10 or above for Class of 2024 (2020–21 to 2021–22) and Follow-on (2021–22 to 2022–23) Cohorts**

Initial Group Differences in On-Time Promotion from Grade 9 to 10						
Number			Outcome Percentages		Test Results	
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,875	2,033	86%	93%	48.9	***	0.23
Logistic Regression Model						
Variable	B	SE	z	sig	OR <sup>a</sup>	
Intercept	3.18	0.25	12.73	***	NA	
Cohort: Class of 2024 vs. Follow-On						
Class of 2024	-0.83	0.11	-7.46	***	0.44 (2.29)	
Instructional Program or Special Population						
EB/EL	-0.54	0.12	-4.64	***	0.58 (1.72)	
School						
School A	0.56	0.76	0.73	ns	NA	
School B	-0.60	0.28	-2.12	*	0.54 (1.82)	
School C	-0.02	0.26	-0.08	ns	NA	
School D	-0.75	0.26	-2.91	***	0.47 (2.12)	
School E	-0.20	0.35	-0.56	ns	NA	
Residual Deviance	Null Deviance	R squared		Number of Students	Number of Schools	
2474	2603	0.03		3,908	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2022–23; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018; spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have promotion data available from the subsequent school year, and have data for all student characteristics in Table C.4.4. Reference groups for the analysis were: follow-on cohort, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



**Table C.4.7. Algebra I EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Student Characteristic	Class of 2024 (n=1,328)	Follow-On (n=1,433)	sig	ES
<b>Gender (%)</b>				
Male	52%	54%	ns	0.04
<b>Race/Ethnicity (%)</b>				
African American	14%	14%	ns	0.00
Hispanic	80%	79%	ns	0.03
White	5%	5%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	87%	87%	ns	0.00
<b>Instructional Program or Special Population (%)</b>				
At-Risk	67%	67%	ns	0.00
EB/EL	29%	36%	***	0.15
Gifted and Talented	2%	2%	ns	0.00
Special Education	10%	9%	ns	0.03
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1574	1565	*	0.09
Reading	1509	1503	ns	0.05

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored Algebra I EOC from spring 2021 or 2022, and have data for all student characteristics in the table above. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 or 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.4.8. Algebra I EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
<b>Approaches Grade Level</b>							
Class of 2024 ( <i>n</i> =1,328)	NA	61%	51%	70%	82%	55%	61%
Follow-On ( <i>n</i> =1,433)	NA	57%	76%	60%	83%	77%	69%
ES (sig)	NA	0.08 (ns)	0.54 ***	0.21 ***	0.03 (ns)	0.48 ***	0.17 ***
<b>Masters Grade Level</b>							
Class of 2024 ( <i>n</i> =1,328)	NA	5%	5%	11%	4%	3%	7%
Follow-On ( <i>n</i> =1,433)	NA	6%	20%	7%	32%	11%	14%
ES (sig)	NA	0.04 (ns)	0.43 ***	0.14 **	0.76 ***	0.32 *	0.23 ***

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored Algebra I EOC from spring 2021 or 2022, and have data for all student characteristics in Table C.4.7. No students from School A took Algebra I EOC in Grade 9 (2021 or 2022). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.4.9. Approaches Grade Level on Algebra I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Approaches Grade Level on Algebra I EOC						
Number			Outcome Percentages		Test Results	
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,328	1,433	61%	69%	18.5	***	0.17
Logistic Regression Model						
Variable		B	SE	z	Sig	OR <sup>a</sup>
Intercept		1.30	0.17	7.77	***	NA
Cohort: Class of 2024 vs. Follow-On						
Class of 2024		-0.54	0.09	-6.04	***	0.59 (1.70)
Grade 6 STAAR						
Mathematics Scale Score (z-score)		1.16	0.07	17.14	***	NA
Instructional Program or Special Population						
EB/EL		-0.24	0.10	-2.46	*	0.79 (1.27)
School						
School A		NA	NA	NA	NA	NA
School B		-0.65	0.21	-3.10	**	0.52 (1.92)
School C		0.21	0.17	1.23	ns	NA
School D		0.03	0.18	0.15	ns	NA
School E		1.01	0.26	3.81	***	2.75
Residual Deviance		Null Deviance		R squared	Number of Students	Number of Schools
3116		3581		0.15	2,761	5

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.7, and have a scored Algebra I EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.4.10. Masters Grade Level on Algebra I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Masters Grade Level on Algebra I EOC						
Number		Outcome Percentages		Test Results		
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,328	1,433	7%	14%	30.5	***	0.23
Logistic Regression Model						
Variable		B	SE	z	Sig	OR <sup>a</sup>
Intercept		-2.29	0.30	-7.69	***	NA
Cohort: Class of 2024 vs. Follow-On						
Class of 2024		-0.95	0.15	-6.52	***	0.39 (2.59)
Grade 6 STAAR						
Mathematics Scale Score (z-score)		1.43	0.09	15.30	***	NA
Instructional Program or Special Population						
EB/EL		-0.38	0.18	-2.14	*	0.68 (1.46)
School						
School A		NA	NA	NA	NA	NA
School B		-1.07	0.40	-2.65	**	0.34 (2.91)
School C		1.08	0.31	3.48	***	2.04
School D		0.23	0.32	0.72	ns	NA
School E		1.17	0.36	3.21	**	3.22
Residual Deviance	Null Deviance	R squared		Number of Students	Number of Schools	
1466	1855	0.13		2,761	5	

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

*Note.* B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.7, and have a scored Algebra I EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not EB/EL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.4.11. Biology EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Student Characteristic	Class of 2024 (n=1,588)	Follow-On (n=1,591)	sig	ES
<b>Gender (%)</b>				
Male	50%	50%	ns	0.00
<b>Race/Ethnicity (%)</b>				
African American	13%	15%	ns	0.06
Hispanic	79%	78%	ns	0.02
White	6%	6%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	84%	82%	*	0.07
<b>Instructional Program or Special Population (%)</b>				
At-Risk	57%	56%	ns	0.04
EB/EL	23%	26%	ns	0.04
Gifted and Talented	6%	7%	ns	0.04
Special Education	6%	5%	ns	0.04
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1610	1614	ns	0.04
Reading	1545	1553	ns	0.07

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored Biology EOC from spring 2021 or 2022, and have data for all student characteristics in the table above. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 or 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.4.12. Biology EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
<b>Approaches Grade Level</b>							
Class of 2024 ( <i>n</i> =1,588)	56%	72%	80%	79%	89%	84%	79%
Follow-On ( <i>n</i> =1,591)	80%	76%	75%	94%	90%	93%	82%
ES (sig)	0.51 (ns)	0.09 (ns)	0.12 *	0.42 ***	0.03 (ns)	0.29 ***	0.07 (ns)
<b>Masters Grade Level</b>							
Class of 2024 ( <i>n</i> =1,588)	0%	3%	9%	16%	10%	16%	11%
Follow-On ( <i>n</i> =1,591)	10%	7%	8%	17%	11%	20%	11%
ES (sig)	0.49 (ns)	0.18 (ns)	0.04 (ns)	0.03 (ns)	0.03 (ns)	0.11 (ns)	0.00 (ns)

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.  
*Note.* EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored Biology EOC from spring 2021 or 2022, and have data for all student characteristics in Table C.4.11. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.4.13. Approaches Grade Level on Biology EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Approaches Grade Level on Biology EOC						
Number			Outcome Percentages		Test Results	
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,588	1,591	79%	82%	3.3	ns	0.07
Logistic Regression Model						
Variable	B	SE	z	Sig	OR <sup>a</sup>	
Intercept	2.90	0.27	10.84	***	NA	
Cohort: Class of 2024 vs. Follow-On						
Class of 2024	-0.18	0.11	-1.61	ns	NA	
Grade 6 STAAR						
Reading Scale Score (z-score)	1.80	0.08	22.29	***	NA	
Race/Ethnicity						
African American	-0.31	0.16	-1.98	*	0.73 (1.36)	
Economic Status						
Economically Disadvantaged	-0.41	0.17	-2.46	*	0.66 (1.51)	
School						
School A	-1.64	0.45	-3.68	***	0.19 (5.16)	
School B	-1.23	0.27	-4.61	***	0.29 (3.42)	
School C	-0.70	0.24	-2.88	**	0.50 (2.01)	
School D	-0.13	0.25	-0.53	ns	NA	
School E	0.49	0.34	1.44	ns	NA	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
2249	3137	0.24	3,179	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.11, and have a scored Biology EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not African American, not economically disadvantaged, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.4.14. Masters Grade Level on Biology EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Masters Grade Level on Biology EOC						
Number		Outcome Percentages		Test Results		
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,588	1,591	11%	11%	0	ns	0.00
Logistic Regression Model						
Variable	B	SE	z	Sig	OR <sup>a</sup>	
Intercept	-2.34	0.24	-9.96	***	NA	
Cohort: Class of 2024 vs. Follow-On						
Class of 2024	-0.03	0.13	-0.26	ns	NA	
Grade 6 STAAR						
Reading Scale Score (z-score)	1.49	0.08	18.18	***	NA	
Race/Ethnicity						
African American	-0.49	0.24	-2.00	*	0.61 (1.63)	
Economic Status						
Economically Disadvantaged	-0.25	0.16	-1.54	ns	NA	
School						
School A	-1.46	0.78	-1.86	***	0.21 (4.76)	
School B	-1.56	0.32	-4.83	**	0.52 (1.92)	
School C	-0.65	0.23	-2.84	ns	NA	
School D	0.28	0.23	1.24	ns	NA	
School E	-0.66	0.32	-2.03	*	0.52 (1.93)	
Residual Deviance	Null Deviance	R squared		Number of Students	Number of Schools	
1640	2221	0.17		3,179	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable.

OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.11, and have a scored Biology EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not African American, not economically disadvantaged, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



**Table C.4.15. English I EOC Exam, Grade 9: Key Demographics for the Analytic Sample Comparing the Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Student Characteristic	Class of 2024 (n=1,671)	Follow-On (n=1,991)	sig	ES
<b>Gender (%)</b>				
Male	50%	51%	ns	0.02
<b>Race/Ethnicity (%)</b>				
African American	13%	13%	ns	0.00
Hispanic	79%	80%	ns	0.02
White	6%	6%	ns	0.00
<b>Economic Status (%)</b>				
Economically Disadvantaged	84%	85%	ns	0.03
<b>Instructional Program or Special Population (%)</b>				
At-Risk	59%	59%	ns	0.00
EB/EL	24%	31%	***	0.16
Gifted and Talented	6%	6%	ns	0.00
Special Education	8%	7%	ns	0.04
<b>STAAR Grade 6 Scale Score</b>				
Mathematics	1604	1599	ns	0.04
Reading	1538	1533	ns	0.04

*Source.* Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

*Note.* EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored English I EOC from spring 2021 or 2022, and have data for all student characteristics in the table above. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 or 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.4.16. English I EOC Exam, Grade 9: Comparison by School for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Cohort	School A	School B	School C	School D	School E	School F	All
<b>Approaches Grade Level</b>							
Class of 2024 ( <i>n</i> =1,671)	62%	64%	56%	63%	78%	64%	61%
Follow-On ( <i>n</i> =1,991)	80%	60%	59%	57%	68%	67%	60%
ES (sig)	0.40 (ns)	0.08 (ns)	0.06 (ns)	0.12 *	0.23 (ns)	0.06 (ns)	0.02 (ns)
<b>Masters Grade Level</b>							
Class of 2024 ( <i>n</i> =1,671)	0%	5%	3%	7%	10%	4%	5%
Follow-On ( <i>n</i> =1,991)	10%	6%	5%	6%	6%	11%	6%
ES (sig)	0.48 (ns)	0.04 (ns)	0.10 (ns)	0.04 (ns)	0.15 (ns)	0.27 *	0.04 (ns)

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. Students included in the sample were all class of 2024 and 2025 students who attended GEAR UP campuses in Grade 9. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have a scored English I EOC from spring 2021 or 2022, and have data for all student characteristics in Table C.4.15. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.4.17. Approaches Grade Level on English I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Approaches Grade Level on English I EOC						
Number			Outcome Percentages		Test Results	
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,671	1,991	61%	60%	0.9	ns	0.02
Logistic Regression Model						
Variable		B	SE	z	Sig	OR <sup>a</sup>
Intercept		0.67	0.13	5.21	***	NA
Cohort: Class of 2024 vs. Follow-On						
Class of 2024		-0.04	0.07	-0.60	ns	NA
Instructional Program or Special Population						
EB/EL		-1.77	0.09	-20.55	***	0.17 (5.87)
School						
School A		0.36	0.36	1.00	ns	NA
School B		0.75	0.18	4.27	***	2.12
School C		0.08	0.14	0.55	ns	NA
School D		0.47	0.14	3.29	**	1.60
School E		0.40	0.20	1.98	**	1.49
Residual Deviance		Null Deviance		R squared	Number of Students	Number of Schools
4422		4918		0.13	3,662	6

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.15, and have a scored English I EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not EB/BL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.4.18. Masters Grade Level on English I EOC Exam, Grade 9 for Class of 2024 (2020–21) and Follow-On (2021–22) Cohorts**

Initial Group Differences in Masters Grade Level on English I EOC						
Number			Outcome Percentages		Test Results	
Class of 2024	Follow-On	Class of 2024	Follow-On	$\chi^2$	sig	ES
1,671	1,991	5%	6%	1.3	ns	0.04
Logistic Regression Model						
Variable	B	SE	z	sig	OR <sup>a</sup>	
Intercept	-2.43	0.24	-10.27	***	NA	
Cohort: Class of 2024 vs. Follow-On						
Class of 2024	-0.25	0.15	-1.68	ns	NA	
Instructional Program or Special Population						
EB/EL	-2.99	0.46	-6.54	**	0.05 (19.89)	
School						
School A	-0.42	0.76	-0.55	ns	NA	
School B	0.32	0.32	1.00	ns	NA	
School C	-0.32	0.26	-1.24	ns	NA	
School D	0.41	0.26	1.60	ns	NA	
School E	0.08	0.35	0.22	ns	NA	
Residual Deviance	Null Deviance	R squared	Number of Students	Number of Schools		
1461	1586	0.03	3,662	6		

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2020–21 to 2021–22; Texas Education Agency (TEA), State of Texas Assessments of Academic Readiness (STAAR), spring 2018, spring 2019, spring 2021, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. ES – Effect size of the difference using Hedges' *g*. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. *z* – z-score.  $\chi^2$  – chi-squared statistic. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus in Grade 9 in the fall of 2020 or 2021, have data for all student characteristics in Table C.4.15, and have a scored English I EOC from spring 2021 or spring 2022. Reference groups for the analysis were: follow-on cohort, not EB/BL, School F. Asterisks indicate the level of statistical significance ("sig"): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

## C.5. Length of Time in Cohort

**Table C.5.1. Key Demographics for the Analytic Sample  
Comparing Students in GEAR UP Cohort for 1 or 2  
Years to Those in Cohort for 3 or 4 Years**

Student Characteristic	In GEAR UP District 1 or 2 Years (n=735)	In GEAR UP District 3 or 4 Years (n=1,556)	sig	ES
<b>Gender (%)</b>				
Male	57%	50%	**	0.14
<b>Race/Ethnicity (%)</b>				
African American	15%	12%	ns	0.09
Hispanic	78%	81%	*	0.08
White	6%	5%	ns	0.04
<b>Economic Status (%)</b>				
Economically Disadvantaged	92%	85%	***	0.21
<b>Instructional Program or Special Population</b>				
At-Risk	65%	64%	ns	0.02
EB/EL	35%	25%	***	0.22
Special Education	10%	8%	ns	0.07
Gifted and Talented	1%	6%	***	0.24
<b>Grade 7 STAAR Scale Score (Mean)</b>				
Mathematics	1595	1622	***	0.24
Reading	1572	1612	***	0.32

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. EB/EL – Emergent bilingual students/English learners. ES – Effect size of the difference using Hedges' *g*. GEAR UP – Gaining Early Awareness and Readiness for Undergraduate Programs. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 or 10 student in the fall of 2020 or 2021 and have data for all student characteristics in the table above. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding. Characteristics with ES > 0.05 indicate baseline inequivalence between groups.

**Table C.5.2. Algebra I Completion by Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	0.23	0.45	0.51	ns	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.68	0.06	11.25	***	1.98
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.15	0.09	1.71	ns	NA
Reading Scale Score (z-score)	0.43	0.09	4.90	***	NA
<b>Gender</b>					
Male	-0.03	0.12	-0.28	ns	NA
<b>Race/Ethnicity</b>					
African American	0.07	0.30	0.22	ns	NA
Hispanic	-0.24	0.26	-0.92	ns	0.64 (1.57)
<b>Economic Status</b>					
Economically Disadvantaged	-0.45	0.19	-2.39	*	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.03	0.15	0.21	ns	2.1
Gifted and Talented	-0.25	0.33	-0.78	ns	NA
Special Education	0.74	0.22	3.35	***	0.23 (4.41)
<b>School</b>					
School A	-1.48	0.49	-3.02	**	0.34 (2.92)
School B	-1.09	0.33	-3.24	**	0.64 (1.57)
School C	-1.07	0.31	-3.47	***	NA
School D	-0.16	0.32	-0.51	ns	NA
School E	-0.55	0.38	-1.46	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
1865	2120	0.13	1,894	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2017–18 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020 and have data for all student characteristics in Table C.5.1. Demographic variables are from the fall of Grade 9 (fall of the 2020–21 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Algebra I completers were defined as students who successfully completed Algebra I by the end of Grade 9 (spring 2021). The set of non-completers includes both students who did not take Algebra I and those who took Algebra I but did not complete the course. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.3. Algebra II Completion by Grade 10 (2021–22) for Class of 2024 Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	-3.57	0.68	-5.28	***	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.11	0.05	2.05	*	1.11
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.23	0.09	2.62	**	NA
Reading Scale Score (z-score)	0.77	0.09	8.51	***	NA
<b>Gender</b>					
Male	-0.37	0.12	-2.97	**	0.69 (1.45)
<b>Race/Ethnicity</b>					
African American	-0.09	0.31	-0.30	ns	NA
Hispanic	-0.20	0.28	-0.73	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.16	0.18	-0.89	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.13	0.17	0.75	ns	NA
Gifted and Talented	1.04	0.31	3.37	***	2.82
Special Education	0.08	0.26	0.28	ns	NA
<b>School</b>					
School A	2.73	0.76	3.57	***	15.28
School B	2.17	0.63	3.46	***	8.73
School C	3.78	0.60	6.27	***	43.9
School D	1.36	0.61	2.22	*	3.89
School E	5.62	0.67	8.34	***	276.76
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
1647	2371	0.32	1,826	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 10 student in the fall of 2021 and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Algebra II completers were defined as students who successfully completed Algebra II by the end of Grade 10 (spring 2022). The set of non-completers includes both students who did not take Algebra II and those who took Algebra II but did not complete the course. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.4. On-Time Promotion from Grade 9 to 10 or above (2020–21 to 2021–22) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	-0.52	0.56	-0.93	ns	NA
<b>Length of Time in Cohort</b>					
<b>Length of Time in Cohort (1-4 years)</b>	1.08	0.08	13.35	***	2.94
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.26	0.11	2.24	*	NA
Reading Scale Score (z-score)	0.68	0.12	5.60	***	NA
<b>Gender</b>					
Male	-0.47	0.16	-2.96	**	0.62 (1.6)
<b>Race/Ethnicity</b>					
African American	0.58	0.41	1.40	ns	NA
Hispanic	0.04	0.34	0.12	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.90	0.30	-2.97	**	0.41 (2.46)
<b>Instructional Program or Special Population</b>					
EB/EL	0.07	0.20	0.34	ns	NA
Gifted and Talented	-0.78	0.47	-1.64	ns	NA
Special Education	0.80	0.27	2.92	**	2.23
<b>School</b>					
School A	1.53	1.16	1.32	ns	NA
School B	-0.90	0.38	-2.38	*	0.41 (2.46)
School C	0.17	0.36	0.49	ns	NA
School D	0.44	0.36	1.21	ns	NA
School E	0.37	0.49	0.76	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>		<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>
1121	1491		0.18	1,825	6

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have promotion data from the fall of 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



**Table C.5.5. On-Time Promotion from Grade 10 to 11 or above (2021–22 to 2022–23) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	2.70	0.68	3.98	***	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.18	0.07	2.71	**	1.20
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.36	0.14	2.69	**	NA
Reading Scale Score (z-score)	0.63	0.14	4.43	***	NA
<b>Gender</b>					
Male	-0.31	0.18	-1.72	ns	NA
<b>Race/Ethnicity</b>					
African American	0.74	0.40	1.82	ns	NA
Hispanic	0.41	0.34	1.20	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	0.00	0.29	-0.01	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.31	0.23	1.36	ns	NA
Gifted and Talented	13.78	377.07	0.04	ns	NA
Special Education	0.56	0.34	1.68	.	NA
<b>School</b>					
School A	-1.32	0.83	-1.60	ns	NA
School B	1.11	0.89	1.24	ns	NA
School C	-1.17	0.55	-2.14	*	0.31 (3.22)
School D	-1.63	0.55	-2.98	**	0.20 (5.13)
School E	-0.18	0.79	-0.23	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
930	1084	0.08	1,747	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 10 student in the fall of 2021, have promotion data from the fall of 2022, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.6. Approaches Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR
Intercept	-0.60	0.47	-1.27	ns	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.40	0.08	5.18	***	1.49
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.40	0.10	3.95	***	NA
Reading Scale Score (z-score)	1.07	0.12	9.31	***	NA
<b>Gender</b>					
Male	-0.19	0.13	-1.41	ns	NA
<b>Race/Ethnicity</b>					
African American	0.42	0.33	1.27	ns	NA
Hispanic	0.11	0.29	0.37	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.27	0.20	-1.32	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.33	0.17	1.89	.	NA
Gifted and Talented	-0.43	0.56	-0.78	ns	NA
Special Education	-0.33	0.23	-1.40	ns	NA
<b>School</b>					
School B	0.07	0.32	0.22	ns	NA
School C	-0.34	0.27	-1.27	ns	NA
School D	0.82	0.28	2.99	**	2.28
School E	1.62	0.41	3.95	***	5.04
<b>Residual Deviance</b>	<b>Null Deviance</b>		<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>
1424	1778		0.23	1,330	5

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored Algebra I EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/EL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.5.7. Masters Grade Level on Algebra I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	-4.70	1.06	-4.42	***	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.30	0.16	1.92	ns	NA
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.92	0.19	4.56	***	NA
Reading Scale Score (z-score)	1.16	0.18	6.41	***	NA
<b>Gender</b>					
Male	-0.59	0.25	-2.36	*	0.55 (1.8)
<b>Race/Ethnicity</b>					
African American	-0.43	0.59	-0.73	ns	NA
Hispanic	-0.36	0.45	-0.80	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.22	0.38	-0.58	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.27	0.34	0.80	ns	NA
Gifted and Talented	-1.00	0.69	-1.46	ns	NA
Special Education	-1.19	1.15	-1.04	ns	NA
<b>School</b>					
School B	0.46	0.86	0.54	ns	NA
School C	1.20	0.78	1.55	ns	NA
School D	1.90	0.77	2.48	*	6.71
School E	0.22	0.97	0.23	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
492	679	0.13	1,330	5	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored Algebra I EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.8. Approaches Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	0.64	0.58	1.10	ns	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.51	0.09	5.83	***	1.67
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	0.86	0.13	8.97	***	NA
Reading Scale Score (z-score)	1.01	0.13	7.52	***	NA
<b>Gender</b>					
Male	-0.14	0.16	-0.88	ns	NA
<b>Race/Ethnicity</b>					
African American	-0.17	0.40	-0.42	ns	NA
Hispanic	-0.14	0.35	-0.39	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.32	0.26	-1.24	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	-0.06	0.20	-0.29	ns	NA
Gifted and Talented	13.24	355.99	0.04	ns	NA
Special Education	-0.29	0.27	-1.05	ns	NA
<b>School</b>					
School A	-1.43	0.58	-2.48	*	0.24 (4.19)
School B	-0.78	0.42	-1.86	ns	NA
School C	-0.29	0.36	-0.79	ns	NA
School D	0.43	0.37	1.16	ns	NA
School E	0.98	0.50	1.96	*	2.67
<b>Residual Deviance</b>	<b>Null Deviance</b>		<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>
1059	1597		0.30	1,534	6

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored Biology EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/EL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.9. Masters Grade Level on Biology EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	-6.66	1.09	-6.09	***	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.54	0.17	3.20	**	1.71
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	1.17	0.18	6.35	***	NA
Reading Scale Score (z-score)	1.35	0.15	8.93	***	NA
<b>Gender</b>					
Male	-0.07	0.23	-0.30	ns	NA
<b>Race/Ethnicity</b>					
African American	0.38	0.51	0.75	ns	NA
Hispanic	0.10	0.40	0.24	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.15	0.31	-0.49	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	-0.12	0.44	-0.28	ns	NA
Gifted and Talented	0.36	0.34	1.05	ns	NA
Special Education	0.44	0.88	0.50	ns	NA
<b>School</b>					
School A	-14.09	669.41	-0.02	ns	NA
School B	-2.65	1.06	-2.49	*	0.07 (14.11)
School C	0.62	0.77	0.81	ns	NA
School D	1.77	0.77	2.30	*	5.88
School E	-0.51	0.89	-0.58	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
552	1013	0.26	1,534	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored Biology EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/EL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.10. Approaches Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	0.24	0.55	0.44	ns	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.26	0.09	2.82	**	1.30
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	1.88	0.15	12.80	***	NA
Reading Scale Score (z-score)	1.13	0.13	8.90	***	NA
<b>Gender</b>					
Male	-0.76	0.15	-4.94	***	0.47 (2.13)
<b>Race/Ethnicity</b>					
African American	-0.18	0.36	-0.50	ns	NA
Hispanic	0.14	0.32	0.44	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	0.07	0.23	0.29	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	-1.04	0.19	-5.38	***	0.35 (2.83)
Gifted and Talented	-0.54	0.61	-0.88	ns	NA
Special Education	-0.27	0.32	-0.84	ns	NA
<b>School</b>					
School A	0.23	0.60	0.39	ns	NA
School B	0.14	0.40	0.35	ns	NA
School C	-0.34	0.32	-1.07	ns	NA
School D	0.77	0.33	2.33	*	2.16
School E	0.86	0.44	1.95	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
1119	2184	0.49	1,621	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021. *Note.* B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored English I EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/EL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.

**Table C.5.11. Masters Grade Level on English I EOC Exam, Grade 9 (2020–21) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR
Intercept	-3.40	1.29	-2.63	**	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	-0.15	0.19	-0.78	ns	NA
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	1.12	0.23	4.86	***	NA
Reading Scale Score (z-score)	0.96	0.17	5.83	***	NA
<b>Gender</b>					
Male	-0.54	0.30	-1.78	ns	NA
<b>Race/Ethnicity</b>					
African American	-1.08	0.70	-1.53	ns	NA
Hispanic	-0.65	0.45	-1.45	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.57	0.37	-1.54	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	-1.27	0.93	-1.37	ns	NA
Gifted and Talented	0.43	0.37	1.18	ns	NA
Special Education	-13.81	798.65	-0.02	ns	NA
<b>School</b>					
School A	-15.14	1931.96	-0.01	ns	NA
School B	-0.08	1.16	-0.07	ns	NA
School C	0.23	1.07	0.22	ns	NA
School D	1.13	1.06	1.07	ns	NA
School E	0.74	1.12	0.66	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
352	620	0.15	1,621	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2021.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 9 student in the fall of 2020, have a scored English I EOC from spring 2021, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/EL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

**Table C.5.12. Approaches Grade Level on English II EOC Exam, Grade 10 (2021–22)  
for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	0.74	0.47	1.58	ns	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	0.28	0.06	4.36	***	1.32
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	1.43	0.12	11.52	***	NA
Reading Scale Score (z-score)	0.70	0.12	6.05	***	NA
<b>Gender</b>					
Male	-1.00	0.15	-6.82	***	0.37 (2.71)
<b>Race/Ethnicity</b>					
African American	0.06	0.35	0.16	ns	NA
Hispanic	0.20	0.31	0.62	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.29	0.23	-1.24	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	-0.55	0.18	-3.06	**	0.58 (1.73)
Gifted and Talented	0.67	0.86	0.78	ns	NA
Special Education	-0.96	0.28	-3.44	***	0.38 (2.61)
<b>School</b>					
School A	0.26	0.59	0.45	ns	NA
School B	0.50	0.38	1.31	ns	NA
School C	0.05	0.31	0.15	ns	NA
School D	0.43	0.32	1.35	ns	NA
School E	0.60	0.43	1.39	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
1246	2039	0.39	1,617	6	

Source: Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2022.

Note: B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 10 student in the fall of 2021, have a scored English II EOC from spring 2022, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.



**Table C.5.13. Masters Grade Level on English II EOC Exam, Grade 10 (2021–22) for Class of 2024 by Length of Time in Cohort**

Logistic Regression Model					
Variable	B	SE	z	sig	OR <sup>a</sup>
Intercept	-3.56	1.26	-2.83	**	NA
<b>Length of Time in Cohort</b>					
Length of Time in Cohort (1-4 years)	-0.35	0.13	-2.64	**	0.70 (1.42)
<b>Grade 7 STAAR</b>					
Mathematics Scale Score (z-score)	1.24	0.21	5.87	***	NA
Reading Scale Score (z-score)	0.52	0.15	3.40	***	NA
<b>Gender</b>					
Male	-0.28	0.30	-0.91	ns	NA
<b>Race/Ethnicity</b>					
African American	-0.02	0.67	-0.03	ns	NA
Hispanic	-0.57	0.52	-1.10	ns	NA
<b>Economic Status</b>					
Economically Disadvantaged	-0.06	0.40	-0.15	ns	NA
<b>Instructional Program or Special Population</b>					
EB/EL	0.46	0.50	0.91	ns	NA
Gifted and Talented	0.58	0.40	1.46	ns	NA
Special Education	-0.18	1.08	-0.16	ns	NA
<b>School</b>					
School A	-12.44	704.39	-0.02	ns	NA
School B	0.77	1.19	0.65	ns	NA
School C	0.49	1.11	0.44	ns	NA
School D	0.80	1.12	0.71	ns	NA
School E	1.27	1.17	1.08	ns	NA
<b>Residual Deviance</b>	<b>Null Deviance</b>	<b>R squared</b>	<b>Number of Students</b>	<b>Number of Schools</b>	
371	572	0.09	1,617	6	

Source. Texas Education Agency (TEA), Public Education Information Management System (PEIMS), 2018–19 to 2021–22; State of Texas Assessments of Academic Readiness (STAAR), spring 2019, spring 2022.

Note. B – Beta weight. EB/EL – Emergent bilingual students/English learners. EOC – End-of-course. NA – Not applicable. OR – Odds Ratio (only presented for significant binary variables). SE – Standard error. z – z-score. To be included in the analytic sample, students must have been enrolled in a GEAR UP campus as part of the class of 2024 cohort as a Grade 10 student in the fall of 2021, have a scored English II EOC from spring 2022, and have data for all student characteristics in Table C.5.1. Demographic variables are generally from the fall of Grade 9 (fall of the 2020–21 school year). In cases where demographic variables were missing, they were taken from the fall of Grade 10 (fall of the 2021–22 school year). Reference groups for the analysis were female, not African American, not Hispanic, not economically disadvantaged, not EB/BL, not gifted and talented, not special education, School F. Asterisks indicate the level of statistical significance (sig): \* < 5%, \*\* < 1%, \*\*\* < 0.1%; ns indicates non-significant finding.

<sup>a</sup> For ease of interpretation, ORs of less than one have been transformed to reflect the odds of the non-reference group, calculated as 1/OR of the reference group. This reversed OR is presented in parentheses.