



House Bill 5 Evaluation: Final Report

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What We Studied

Updates to Graduation Requirements in Texas: The Texas Legislature continues to provide support and flexibility in how students meet state graduation requirements.

With the passage of HB 5 in 2013, the Foundation High School Program became the graduation program for all Texas public high school students beginning with the entering Grade 9 students in 2014–15. The new graduation requirements introduced greater flexibility for students in earning a high school diploma. Updates to curriculum and graduation requirements from the last two legislative sessions continue to add support and flexibility in how students meet state graduation requirements.

The last two Texas legislative sessions also have brought significant changes to the state accountability system. In 2015, the 84th Texas Legislature passed HB 2804, which changed the state accountability system to an A–F rating in each of five domains and overall. Provisions of the bill required the commissioner of education to release a provisional A–F ratings report showing the ratings that each district and campus would have received for Domains I–IV for the 2015–16 school year if the A–F rating system had been in place. However, in 2017, the 85th Texas Legislature passed HB 22, which changes the state A–F accountability system in several ways, including reducing the number of domains, introducing locally developed accountability domains, changing the calculation of the summative accountability grade, realigning the unacceptable cut-point at the F rating, and changing the timeline for implementation to August 2018 for districts and August 2019 for campuses.

How We Analyzed the Data

Progress of Students Graduating Under the Minimum, Recommended, and Distinguished Achievement Graduation Programs

Baseline outcome measures for students who graduated under the Minimum High School Program (MHSP), Recommended High School Program (RHSP), and Distinguished Achievement Program (DAP) were compiled to explore historical trends on key student outcomes, including college readiness, high school graduation, two-year and four-year college enrollment, two-year and four-year college completion, obtainment of workforce certificates, employment, and earnings.

Student-level data were aggregated to the cohort level, and findings are presented according to entering cohorts of Grade 9 students from 1997–98 through 2013–14 (see Chapter 3 for details regarding the creation of the cohorts used in the analyses).¹

What We Discovered

High School Graduation

Gaps in on-time high school graduation rates between students from different racial/ethnic groups narrowed considerably for the cohorts required to take the 4X4 curriculum (2007–08 through 2012–13).

Student-level data from Public Education Information Management System graduation data files were used to examine trends in the percentage of students in each cohort who graduated from a Texas public high school within four years. The percentage of students in each entering Grade 9 cohort that graduated from a Texas public high school increased from approximately 62% for the 1997–98 cohort to 78% for the 2012–13 cohort. The largest gain in the percentage of students graduating from a Texas public high school occurred between the 2005–06 cohort and the 2006–07 cohort—an increase of approximately 5 percentage points (68% to 73%). In terms of graduation rates between racial/ethnic groups, although gaps were quite large for the 1997–98 through 2006–07 cohorts, the gaps narrowed considerably for the 2007–08 through 2012–13 cohorts. For example, though only 57% of African-American students, 49% of American Indian students, and 54% of Hispanic students in the 1997–98 cohort graduated from high school within four years, 73% of Asian/Pacific Islander students and 70% of White students did so. However, by 2012–13, the differences in high school graduation rates between students of different racial/ethnic backgrounds decreased for most groups. Seventy-five percent of African-American students, 73% of American Indian students, 76% of Hispanic students, and 68% of Pacific Islander students graduated from high school within four years, compared to 88% of Asian students, 78% of multiracial students, and 81% of White students.

Two-Year and Four-Year College Enrollment

The percentages of students who enrolled in a Texas two-year college or four-year public or independent college or university continued to remain relatively stable across the additional two cohorts—hovering between 22% and 24% for two-year college enrollment and 17% to 20% for four-year college enrollment over the last seven years.

Texas Success Initiative (TSI)

For entering Grade 9 cohorts from 2002–03 to 2010–11, the percentage of students meeting the TSI readiness standards increased for all subject areas.

The percentage of students in each entering Grade 9 cohort who enrolled in a two-year or four-year college or university who met the Texas Success Initiative (TSI) readiness standards in reading, mathematics, and writing increased for all subject areas for students in the 2002–03 through 2010–11 cohorts—from 52% to 65% in reading, from 41% to 62% in mathematics, and from 56% to 65% in writing.

Because of the significant changes in testing requirements for the 2011–12 cohort, their measured TSI readiness rates cannot be directly compared to rates of earlier cohorts for the purpose of describing trends in true college readiness. The 2011–12 incoming Grade 9 cohort was the first cohort where the option to meet TSI readiness standards by achieving at or above the HERC score on an exit-level TAKS was eliminated when the STAAR replaced TAKS as the state’s standardized student assessment. Approximately 60% of students in the 2011–12 cohort met TSI readiness standards in both reading and writing. A smaller percentage (50%) met readiness standards in mathematics.

Two-Year and Four-Year College Completion and Persistence

The percentage of students graduating from or persisting for a fifth year at a four-year college increased by 4 percentage points between the 2001–02 and 2007–08 cohorts.

Trends in completion of two-year college degrees and certificates, as well as completion of four-year college degrees,

were relatively consistent across entering Grade 9 cohorts. However, the percentage of students who earned a bachelor's degree within four years or were still enrolled in a four-year college or university within five years of enrolling in a Texas public four-year college or university increased from 71% for the 2001–02 cohort to 75% for the 2007–08 cohort.

Employment and Earnings

The percentages of students entering Grade 9 in each cohort who were employed one, three, and five years after their actual or expected high school graduation date remained relatively stable across cohorts, and the median quarterly wages of students entering Grade 9 in each cohort who were employed during Quarter 4 in Texas changed relatively little across cohorts. However, the median quarterly wages of students in each cohort who were employed during Quarter 4 in Texas increased from one to three years after actual or expected high school graduation and three to five years after actual or expected high school graduation.

District Implementation of the Curriculum and Graduation Requirements Under the Foundation High School Program Since 2014–15

A goal of the HB 5 evaluation is to examine the implementation of HB 5 on curriculum and testing requirements for high school graduation. To do so, an electronic survey was sent to district administrative staff in all public school districts in Texas with at least one high school. The survey focused on the following areas:

- The endorsements that districts are offering in their high schools, and any changes made since 2014–15;
- The options that districts are offering students to complete an endorsement and any new courses that districts created to meet advanced ELA, mathematics, or science credits;
- Any barriers that districts faced in offering certain endorsements; and
- How districts have been communicating with students about high school graduation requirements, including how they deal with students who transfer into their district unable to complete the endorsement they previously were pursuing.

About 72% of districts responded to the survey. These districts were largely representative of all districts in the state relative to district size, type of community in which the district resides, accountability ratings received, and demographics of their student population (see Table F1 in Appendix F for more information).

Endorsement Offerings

Districts were asked to respond to several items about the factors that were considered when making decisions about HB 5 implementation and the endorsements that would be offered to students in their high schools. Nearly all districts (97%) reported considering current course offerings provided in their districts, as well as current staff capacity to instruct the courses necessary to offer endorsements, prior to the implementation of HB 5.

Slightly more than half of the responding districts (51%) reported increasing their endorsement offerings since 2015.

Districts were most likely to report offering the multidisciplinary studies endorsement (96%), followed by business and industry (89%), STEM (87%), arts and humanities (83%), and public services (65%). More than half of all responding districts (56%) reported offering all five endorsements, and 51% of districts reported increasing their endorsement offerings since 2015.

More than half of responding districts (60%) reported staffing concerns around teacher qualifications and staff capacity as a continued barrier to offering certain endorsements, whereas slightly less than half of respondents (49%) reported a

lack of resources (funding, curriculum, facilities, equipment, etc.) as a continued barrier. Respondents also were asked whether they had students transfer into their district who were unable to complete the endorsements they previously were pursuing. Less than a quarter (23%) of responding districts indicated they had students transfer into their districts who were unable to complete the endorsement they were pursuing; 41% of responding districts reported that transfer students did not complete their endorsement in their district because the district's current course offerings did not include the courses they needed, or because the district did not offer a particular endorsement.

Local Criteria in Addition to State Graduation Requirements

Speech/professional communications, health, four social studies credits, and Algebra II were the top local criteria required by districts in addition to the state graduation requirements.

District respondents were asked to indicate any local criteria that students in their district must complete in addition to the state graduation requirements. About 75% of districts indicated that students in their district must complete local criteria in addition to the state graduation requirements. Speech/professional communications, health, four social studies credits, and Algebra II were the top local criteria required by districts in addition to the state graduation requirements.

Student Outcomes for Foundation High School Program Cohorts

The goal of these analyses is to examine the preliminary impact of HB 5 on student outcomes. Since the first cohort of students required to graduate under the Foundation High School Program (the entering Grade 9 cohort of 2014–15) will not graduate until 2017–18, the preliminary impact is presented for students in the 2011–12 and 2012–13 cohorts who opted to graduate under the program. Baseline outcomes for students in the 2014–15 and 2015–16 cohorts also are summarized.

Preliminary Impact of House Bill 5

To investigate the preliminary impact of HB 5 on student outcomes, propensity score matching and multilevel modeling were used to estimate the effect of HB 5 on students' two-year and four-year college enrollment.² Because data on most of the key outcomes of interest are not yet available for students entering Grade 9 in 2014–15, the first cohort of students required to graduate under the Foundation High School Program, the impact analyses were conducted using students from an earlier cohort. Propensity score matching was used to match Grade 9 students from the 2011–12 cohort who opted to graduate under the Foundation High School Program with similar students from the entering cohort of 2009–10, who did not have the opportunity to graduate under the Foundation High School Program and therefore graduated under the MHSP, RHSP, and DAP graduation plans. It is important to note that students in the 2011–12 and 2012–13 cohorts who opted to graduate under the Foundation High School Program chose to do so in the last two years of high school. These students may not be comparable to later cohorts who began the Foundation High School Program in Grade 9 or those students in the 2011–12 and 2012–13 cohorts who graduated under the Distinguished Achievement Program, or the Recommended or Minimum High School Programs. Results of these analyses should be treated as preliminary and interpreted with caution.

The results of the preliminary impact of HB 5 on college enrollment rates reveal the following:

- The probability of enrolling in a two-year college within one year of graduation from high school for students who graduated under the MHSP, RHSP, or DAP is 0.24 compared to 0.27 for students who opted to graduate under the Foundation High School Program.
- The probability of enrolling in a four-year college within one year of graduation from high school for students who graduated under the MHSP, RHSP, or DAP was 0.12 compared to 0.09 for students who opted to graduate under the Foundation High School Program.

Baseline Outcomes for the 2014–15 and 2015–16 Cohorts

The percentage of students selecting the Foundation High School Program plus endorsement and distinguished level of achievement increased from the 2014–15 cohort to the 2015–16 cohort.

Baseline outcomes for students required to graduate under the Foundation High School Program show an increase in the percentage of students selecting Foundation High School Program plus endorsement and distinguished level of achievement from the 2014–15 to the 2015–16 cohort.³

- Almost 43% of the 2014–15 cohort selected the Foundation High School Program plus endorsement and distinguished level of achievement during Grade 9 versus 62% of the 2015–16 cohort in Grade 9.
- Results showed that students were pursuing each endorsement with the highest percentage pursuing the multidisciplinary endorsement.
- Forty-three percent of students in the 2014–15 cohort reached Level II at the final standard in Algebra I, 50% of students reached Level II at the final standard in English I, and 48% of students reached Level II at the final standard in U.S. History.
- A higher percentage of students in the 2015–16 cohort who completed the assessment met Level II at the final standard on the Algebra I (49%) and Biology (62%) EOC assessments than students in the 2014–15 cohorts (43% and 56%, respectively).

Policy Recommendations/Implications

The most significant limitation of the evaluation of HB 5 is the length of time that students have progressed since the Foundation High School Program was implemented. The first cohort of Grade 9 students required to complete the requirements under the Foundation High School Program will not graduate until spring 2018. Although an estimate of the effect of HB 5 on student outcomes was conducted using a cohort of graduates who had the option of graduating under the Foundation High School Program, these estimates are limited and preliminary given that this option was made retroactively and students were able to plan their coursework under the Foundation High School Program only during their senior year.

Another limitation concerns the comparisons conducted between students who graduated under the Minimum, Recommended, and Distinguished high school diplomas and the students who opted to graduate under the Foundation High School Program. Students in the 2011–12 and 2012–13 cohorts who opted to graduate under the Foundation High School Program chose to do so in the last two years of high school. These students may not be comparable to later cohorts who began the Foundation High School Program in Grade 9 or those students in the 2011–12 and 2012–13 cohorts who graduated under the Distinguished Achievement Program, or the Recommended or Minimum High School Programs.

An additional evaluation report completed in August 2020, after these students have graduated from high school (spring 2018), would be beneficial to the Texas Legislature because impacts to high school graduation and college enrollment will be measurable. In addition, more cohorts will be entering high school under the Foundation High School Program, giving the Texas Legislature more opportunities to see trends in these outcomes.

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End Notes

1. All analyses conducted to examine baseline student outcomes were based on cohorts made up of the incoming Grade 9 students for the specific academic year. For example, students who entered Grade 9 for the first time in fall 1997 were considered to be part of the 1997–98 cohort. Per Texas Education Code § 39.053(c)(2)-(3), TEA calculates dropout and graduation rates in accordance with standards and definitions adopted by the National Center for Education Statistics of the United States Department of Education and in compliance with the No Child Left Behind Act of 2001 (20 U.S.C. Section 6301 et seq.). These requirements specify the calculation of an on-time high school graduation rate based on a cohort that takes into account students' progression from grade to grade, data on graduation status, and data on students who transfer in and out of a school, district, or state during the high school years. TEA defines a cohort as the group of students who begin Grade 9 in Texas public schools for the first time at any time in the same school year, plus students who, in the next three school years, enter the Texas public school system in the grade level expected for the cohort. Students in the cohort are tracked to their expected graduation date, and all students remain in their original cohort. For the purposes of calculating the longitudinal graduation rate, students who left the cohort for reasons other than graduating, acquiring a general education diploma, earning certificates, or dropping out were excluded based on statutory requirements and were not included in the calculation. Please see http://tea.texas.gov/acctres/DropComp_2015-16.pdf for more information. TEA's methodology was not employed in this analysis to keep the number of students in a cohort consistent across time; this allows for more consistent comparisons across time and analyses. As with all research, there may be limitations to this approach.
2. High school graduation is not included as an outcome because students were identified as having opted to graduate under the Foundation High School Program through the Public Education Information Management System graduation files. Data for other student outcomes, including Quarter 4 employment and wage data for 2015–16, were not available at the time of this report. Student outcomes with regard to two-year and four-year college completion or certificate completion were not available for students in the 2011–12 cohort, because not enough time has passed for students to reach these milestones. College readiness, as defined by meeting TSI readiness standards, was also not included as an outcome due to the transition in testing requirements that was implemented for the 2011–12 cohort. Please see Sections 3.1 and 3.5 of this report for further details regarding why TSI readiness rates are not comparable across these cohorts.
3. While districts have had years of experience reporting data on the specific programs under which students graduate, data regarding students' pursuit of specific graduation programs were newly required upon the implementation of the Foundation High School Program. Data collections that are new to PEIMS are generally prone to instances of reporting error, so the reader should note that percentages based on this new pursuit indicator may not reflect the true number of students pursuing the Foundation High School Program in the 2014–15 and 2015–16 cohorts.

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