

The High School Readiness Report

A Study of the Landscape of Middle
School Advising in Texas

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Acknowledgments

This study would not have been possible without the support and assistance of a countless number of partners. First and foremost, we would like to thank the Texas Legislature for the charge to create Texas OnCourse, the financial resources to do so, and the mandate that school districts expand and improve instruction for middle school students in preparing for their futures. We believe strongly in the vision of college and career preparation set forth in HB 5 and HB 18, and we do not take lightly the incredible trust the Legislature has invested in us to support this vision.

This study would not have been possible without the thousands of educators who responded to our Counselor and Adviser Survey, allowed us to visit their campuses and observe how they advise their students, and administered the High School Readiness Survey to students in their districts. We hope that this report, as well as the training and instructional resources provided by Texas OnCourse, supports and strengthens the quality of advising you are able to provide to your students.

And most importantly, we are indebted to the thousands of middle school students who responded to the High School Readiness Survey and have provided constructive feedback in the development of our instructional resources. Perhaps the only thing more difficult than deciding what you want to be when you grow up is figuring out how to accomplish your dreams. We sincerely hope that the resources Texas OnCourse has created, and will continue to create, allow you to develop a clearer roadmap of your future.

Executive Summary

In 2013, the Texas Legislature passed House Bill 5 (HB 5), which initiated a number of significant changes in the educational pathways available to students and how they choose them. HB 5 mandated that all students transitioning from eighth to ninth grade must create a high school personal graduation plan that outlines the educational pathway they will complete, including their chosen endorsement. In the legislative session after HB 5 was passed, concerns had grown that students, parents and guardians, and educators were not fully aware of the requirements of HB 5, and that the reduced rigor of the default curriculum could result in widening racial and socioeconomic disparities in the pathways students were pursuing.

The Texas Legislature responded to these concerns in 2015 through the passage of House Bill 18, which mandated that all school districts provide instruction to students in grades seven or eight to help them prepare for high school, college, and career. HB 18 also charged the University of Texas at Austin with supporting college and career advising in the state. This endeavor is now part of Texas OnCourse, a collaborative initiative of the University of Texas at Austin with the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Workforce Commission to provide students, families, and educators with the tools and resources they need to make informed decisions about their educational and career pathways.

Part of Texas OnCourse's charge is to create resources designed to support middle school students in creating a graduation plan as they transition into high school. To support this effort, the current study sought to examine Texas students' high school readiness, or the extent to which they are prepared to create a high school personal graduation plan aligned with their educational and career goals. Our research team surveyed hundreds of middle school educators across the state, conducted site visits and interviews with educators in nine different regions, and surveyed thousands of middle school students to address this topic. Here's what we learned.

Students have high postsecondary aspirations, but many have lower expectations even before they enter high school.

While students indicated high hopes for degree attainment, their educational expectations often fell short of their stated aspirations. This aspiration-expectation gap was evident despite the fact that the majority of students expressed a high degree of confidence in their abilities to take steps needed to effectively plan for their future.

Students and educators are not as familiar with the requirements of HB 5 as they need to be.

Less than half of educators agree or strongly agree that students understand the implications of HB 5, and even fewer are confident that parents and guardians understand the implications. Students themselves expressed only moderate familiarity with topics such as endorsements, the distinguished level of achievement, and ways to earn college credit in high school. Educators also expressed confusion over the default graduation plan under HB 5, with many indicating that the foundation plan with no endorsement was their school's default plan despite HB 5 requiring entering ninth graders to select an endorsement.

There is a high degree of variation in how schools and districts prepare middle school students for the transition to high school, which leads to questions about equal access to quality and comprehensive HB 5 instruction.

Over 90% of educators we surveyed reported that their school provides instruction to students in preparing for high school, college, and career. However, this instruction does not always cover the topics required by HB 18, and the provision of this instruction is at times inconsistent and prioritized far lower than academic content. Additionally, only half of counselors and advisers indicated a high level of confidence in their knowledge and skills related to HB 5, suggesting that even if this advising is provided it may not be accurate or effective. Counselors and advisers continue to express the need for training and online technological tools to increase their knowledge and to streamline the transition processes between middle and high school. This lack of adequate training among counselors is compounded by the fact that many other educators, often with less access to training related to college and career preparation, are

the primary providers of this instruction to middle school students.

Students' endorsement preferences appear misaligned with the endorsements they are actually pursuing.

STEM was the most popular endorsement among students who responded to our survey, with 35.4% indicating an intent to complete this endorsement. However, only 15.9% of all Texas ninth graders in 2016 were pursuing this endorsement. In contrast, only 5.7% of surveyed students intended to complete the multi-disciplinary studies endorsement, but 33.0% of Texas ninth graders were pursuing this endorsement. Possible causes of this discrepancy include the availability of endorsements across the state, lack of students' familiarity with the endorsements, and districts enrolling all ninth graders in the multidisciplinary track and only allowing them to choose an endorsement later in high school.

District leadership plays a critical role in preparing middle school students for high school.

In many regions we visited, district leaders prioritized college and career advising for middle school students, supported vertical curricular planning and/or curricular guides to align middle and high school advising, funded technology and resources to support advising efforts, and established partnerships with colleges and local businesses to expose students to postsecondary education and employment opportunities. However, other districts lacked both this level of coordination and the emphasis placed on college and career advising. Our results underscore the key role played by districts in ensuring that college and career readiness begins long before students create their high school personal graduation plans as they enter the ninth grade.

The High School Readiness Report

A Study of the Landscape of Middle School Advising in Texas

Background and Purpose

In 2013, the Texas Legislature passed House Bill 5 (HB 5), which initiated a number of significant changes in the educational pathways available to students and how they choose them. First, HB 5 created *endorsement* pathways consisting of four credits in a related subject that allow students to specialize their pathway based on their educational and career interests. The five endorsements available to students are arts and humanities, business and industry, public services, STEM (science, technology, engineering, and mathematics), and a multidisciplinary option that allows students to choose courses from different endorsements.

Second, HB 5 altered the curricular requirements of the default high school graduation plan and the optional *distinguished* plan. Prior to HB 5, the default *recommended* graduation plan in Texas was known as the *four by four*, as it required to students to complete four credits in each of the four core academic subjects of English language arts, math, science, and social studies. This curriculum also included Algebra II for all students. Under HB 5, the new default plan is known as the *foundation high school program*, which consists of 22 credits in core academic subjects as well as foreign language, physical education, and arts. In addition, students must select at least one endorsement on top of the foundation plan,

although students can opt out of this requirement after the tenth grade. The new distinguished plan includes Algebra II and an additional science credit, but students must opt into this plan. Critically, HB 5 specified that students must complete the distinguished plan in order to be potentially eligible for automatic admission to Texas public colleges and universities, whereas students who completed the default recommended plan were potentially eligible for automatic admission prior to HB 5.*

Third, HB 5 mandated that all students transitioning from eighth to ninth grade must create a high school personal graduation plan that includes their chosen endorsement(s), whether they will pursue the distinguished level of achievement, and the elective courses they will take in high school. Either the school counselor or an administrator must assist each student in creating a personal graduation plan, in consultation with the student's parents or guardians. Although HB 5 specifies that students may alter their plan as they progress through high school, it is designed to provide a roadmap for students to achieve their educational and career aspirations through their high school courses.

In the legislative session after HB 5 was passed, concerns had grown that students, parents and guardians, and educators were not fully aware of the require-

*Students who graduate from high school in the top 10% of their class are granted automatic admission to any public college or university in Texas, apart from the University of Texas at Austin. UT Austin was granted the ability to cap automatic admissions at 75% of the incoming class. This means UT Austin only admits students in the top 6–7% of their graduating class through automatic admission.

ments of HB 5, and that the reduced rigor of the default curriculum could result in widening racial and socioeconomic disparities in the pathways students were pursuing. In 2015, the Texas Legislature responded to these concerns through the passage of House Bill 18, which accomplished two goals. First, HB 18 mandated that school districts must provide instruction to students in seventh and eighth grade to prepare for high school, college, and career. Specifically, this instruction must cover topics related to HB 5 such as the endorsement options, the benefits of the distinguished level of achievement, and the need to create a personal graduation plan, as well as information about college and career preparation not specific to HB 5 such as college readiness standards in Texas and the education needed to enter different careers.

HB 18 also charged the University of Texas at Austin with supporting college and career advising in the state. Specifically, HB 18 provided UT Austin with a three-part charge:

1. Develop an online professional development resource for professional school counselors, college advisers, and other educators providing advising to students.
2. Create online instructional resources designed to assist middle school students in preparing for high school, college, and career.
3. Promote data-informed decision-making through research, evaluation, and tools that can support advising efforts.

This endeavor is now part of Texas OnCourse, a collaborative initiative led by UT Austin in partnership with the Texas Education Agency, the Texas Higher Education Coordinating Board, and the Texas Workforce Commission to provide students, families, and educators with the tools and resources they need to make informed decisions about their educational and career pathways.

We know that the curriculum students pursue in high school has profound implications for their postsecondary pursuits, including whether they will go to college, the selectivity of colleges they gain access to, and their likelihood of completing a college degree.¹ We know that socioeconomically disadvantaged students and underrepresented minority students are less likely to complete a college-preparatory curriculum compared to

their peers.² And we know that changing course can be difficult for students as they move through high school, in particular moving into a more rigorous pathway.³ However, we know less about the mechanisms and dynamics whereby students and schools choose curricular pathways, particularly in the context of the new pathways made available through HB 5. Given Texas' goal of dramatically increasing the percentage of young adults who have completed some form of postsecondary education by 2030, specifically the Texas Higher Education Coordinating Board's 60 × 30TX plan, it is critical to ensure that HB 5 is being used as a mechanism to increase college readiness and to close racial and socioeconomic gaps in college access and completion.

The purpose of this study is to examine student, educator, and administrator perceptions of the mechanisms that schools and districts in Texas are employing to prepare middle school students for the transition to high school. We wanted insights from stakeholders across the state in order to more fully understand the ways HB 5 is being implemented, how familiar middle school students are with the implications of choosing a high school graduation plan and endorsement, and the most critical barriers to and facilitators of effective practices for middle school advising. In addition to informing the development of Texas OnCourse's online training modules for counselors and advisers and instructional resources for middle school students, the results of this study shed light on this critical transition point in the lives of early adolescents. The study addresses the following research questions:

1. What are middle school students' aspirations and beliefs about their future educational and career paths?
2. How familiar are Texas educators and students with HB 5 pathways?
3. What type of organizational approaches do districts use to address policy requirements of HB 18 at the middle school level?
4. What type of instructional approaches do middle schools use for career exploration and to familiarize students with career pathways? Who delivers this type of instruction in middle schools?

Overview of Study

The study consists of three methods. First, we distributed the Texas OnCourse Counselor and Adviser Survey to over 1,500 counselors and administrators. Second, we went out into the field and talked directly to a geographically representative group of middle school educators and administrators. Finally, we distributed a Texas OnCourse High School Readiness Survey to middle school students. A description of the purpose and basic methodology of each method follows.

Method #1: Texas OnCourse Survey of Counselors, Advisers, and Administrators

In the spring of 2016, Texas OnCourse distributed a survey to over 1,500 counselors and district-level professionals to more fully understand the current state of school counseling in Texas as it relates to postsecondary and career advising.⁴ The survey was designed to query advising professionals on the professional development available to them, gauge their use of existing tools and resources related to postsecondary and career advising, and grasp the instructional approaches used by districts and schools to address HB 5 mandates.

Among the campus-level professionals who responded to the survey, 268 indicated that they currently work in a middle school. For the purposes of this report, responses to the survey by these 268 middle school profession-

als were analyzed in order to better understand their perspectives on the state of middle school advising practice. Nearly all these respondents (> 95%) held at least a master's degree and were certified professional school counselors, although a small percentage (< 5%) were employed as middle school principals. Roughly 22% of these respondents said that they were the only counselor in their school, 44% indicated that there was one other counselor, and 31% reported that their school employed three counselors. Less than 3% of respondents worked in middle schools with four or more counselors. While 25% of the counselors reported a caseload of 400–499 students, 36% indicated that they advise 500 or more students.

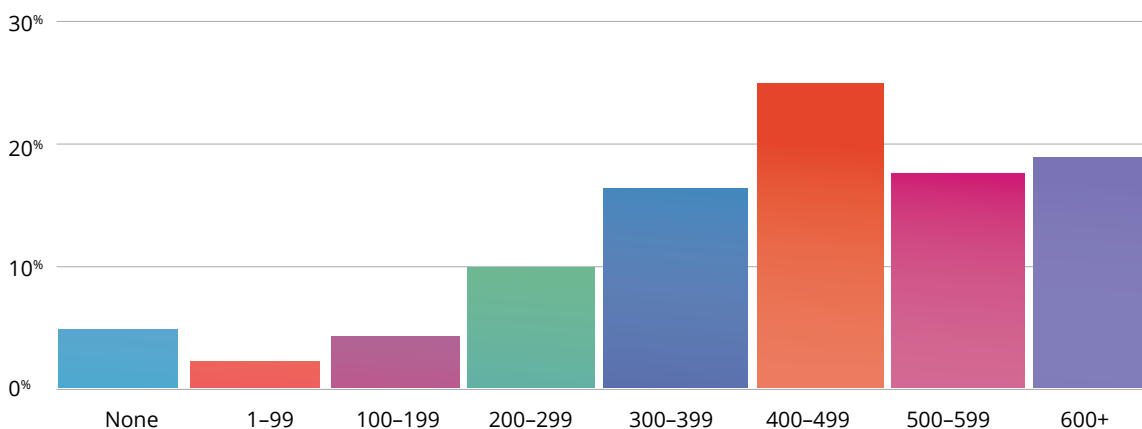


Figure 1. Number of students served for middle school advising professionals who responded to Texas OnCourse survey.

Method #2: Middle School Field Exploration

Given our charge to develop instructional resources that help middle school students prepare for high school, college, and career – as well as survey results indicating that current instruction may not cover topics required by HB 18 – Texas OnCourse sought to better understand how college and career guidance is provided to middle school students. This led us to pursue our second research method, a qualitative field exploration of middle schools across the state using interviews as the primary method of data collection. The primary aim of the Middle School Field Exploration project was to speak with a representative group of middle school educators who provide advising to students. We hoped this would help us understand the landscape of instructional practices, tools, and resources related to postsecondary education and career being provided to Texas middle school students. Conversations with relevant district-level leaders and personnel are also included in this analysis.

The ultimate goals of the Middle School Field Exploration project were to identify the most significant gaps in the advising tools available to middle school educators in order to determine the information, tools, and resources that would make the biggest impact on their advising.

The specific objectives of the interviews were to learn about instructional delivery practices in middle schools relating to postsecondary preparedness. We asked about

- The general approach used for instructional delivery (through existing courses, guidance lessons, school-wide assemblies, etc.)
- Tools and resources used for content delivery
- Methods used to measure student learning
- Understanding of the topics covered by HB 5

In short, this part of the research sought to identify some of the current district-wide approaches to postsecondary college and career readiness and the instructional resources and assessments being used by middle school educators. An additional purpose was to identify any gaps in the instruction being provided and the resources and tools to support this instruction.

The Middle School Field Exploration project included interviews with school and district-level personnel across nine school districts in Texas. The original participation pool consisted of middle school counselors and advisers who shared personal information with Texas OnCourse through the spring 2016 survey. From the list of respondents who indicated willingness to participate in our project, we used a purposive sampling technique⁵ and selected potential participants based on district representation factors of urbanicity and geography. Urbanicity refers to community types using factors such as student enrollment, growth in enrollment, economic status, and proximity to urban areas.[†] The final sample of districts included one major urban, one major suburban, four central cities, one central city suburban, one non-metro fast growing, and one rural. Each of the nine districts is located in a different Educational Service Center region of the state in order to ensure a degree of geographic representativeness of the findings. A more complete description of our methodology for the Middle School Field Exploration project is located in Appendix A.

[†] Texas Education Agency categorizes school districts according to nine district types. For more information, visit <http://tea.texas.gov/acctres/analyze/1516/level.html>.

Method #3: Middle School Student Survey

The third method was a survey administered to middle school students to gauge their understanding of the pathways made available to them through HB 5 and their preferences regarding endorsements and the distinguished level of achievement.⁶ The survey covered four main topic areas: knowledge of HB 5 requirements, educational aspirations and expectations, career decision-making self-efficacy,⁷ and mindsets⁸ and motivations. Career decision-making self-efficacy is measured using a scale based on Albert Bandura's theory of self-efficacy applied to the study of decision-making about education and careers. The instrument was developed to measure whether adolescents and adults feel capable of making decisions that support their career aspirations.[‡] Students were asked how much they agree with statements such as whether they could plan for college and career goals after high school, select a career that fits their interests, and choose courses in high school to prepare them for their post-high school pursuits. Questions about mindsets reflect the literature on growth vs. fixed mindsets about intelligence – namely, the extent to which students think intelligence is malleable or intractable.

Texas OnCourse recruited partner districts for the purpose of implementing our instructional resources for middle school students. Texas OnCourse entered

into memoranda of understanding with these districts, which outlined each partner's responsibilities. Partnering districts agreed to provide Texas OnCourse with student-level data for the purpose of our research and evaluation and administer the Texas OnCourse High School Readiness Survey to middle school students. In exchange, partnering districts were the first to gain access to Texas OnCourse's instructional resources for middle school students.

This survey was piloted with a select group of the partnering school districts in spring 2017, and roughly 850 students responded to the survey. A refined version of the survey, which was administered again in fall 2017 to students enrolled in one of 40 partner districts, yielded nearly 3,700 responses. The findings in this report combine responses from the spring 2017 and fall 2017 surveys. Although the survey did not collect data related to students' demographic or academic backgrounds, partnering districts agreed to provide this data to allow for an examination of how students' backgrounds influence their knowledge of HB 5 requirements as well as their curricular intentions. Additionally, an aggregate comparison of surveyed districts' characteristics and all other Texas districts' characteristics can be referenced in Appendix B.

[‡] The instrument includes subscales in five areas: accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem-solving. A short form of the instrument was later developed and used in this study.

Findings

Findings are presented according to general research questions as they relate to Texas OnCourse’s role in developing middle school resources to promote postsecondary literacy. Results are triangulated across the three research methods when relevant. After the findings are presented according to research questions, the most salient findings are considered alongside policy implications and recommendations.

What are middle school students’ aspirations and beliefs about their future educational and career paths?

Postsecondary Aspirations and Expectations

The vast majority of middle school students want to go to college. Nearly 90% of respondents indicated that they hoped to attain some type of postsecondary credential, with more than 70% hoping to attain at least a bachelor’s degree. Yet middle school students’ expectations fell short of their aspirations. The share of students expecting to earn a bachelor’s or graduate degree was 13 percentage points less than the proportion of students aspiring to get that far in college, driven largely by the decline in students expecting to earn a graduate degree. Conversely, the shares of students expecting to have some college or less, a certificate or certification, or an associate degree were all greater than the percentage of students aspiring to those levels of attainment. Even before high school, many students feel conflict between their educational aspirations and what they actually expect they can achieve, which is often called the “aspiration-expectation gap.”⁹

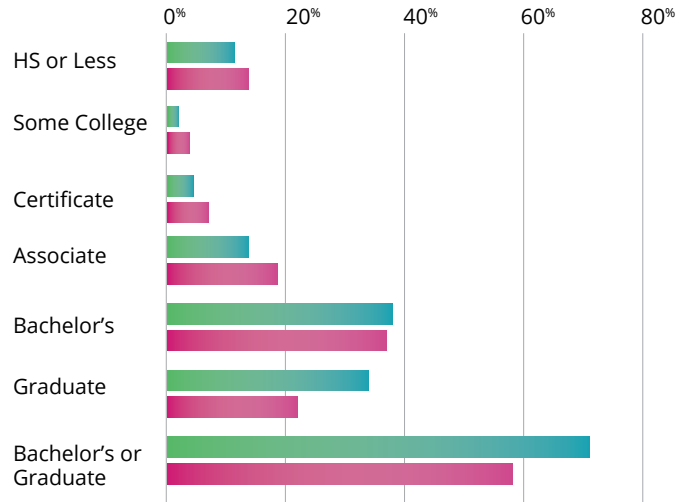


Figure 2. Educational aspirations and expectations among middle school student survey respondents.

Another way to understand this gap is by examining the share of students who have lower educational expectations by their level of aspiration. As shown in figure 3, 42.5% of students who aspire to complete a graduate degree do not expect to get that far, and more than a quarter of students who aspire to bachelor’s and associate degrees expect to attain less education than that. This gap is present at every level of educational aspiration apart from students at the lowest aspirational level, those who aspire to earn a high school diploma or less.

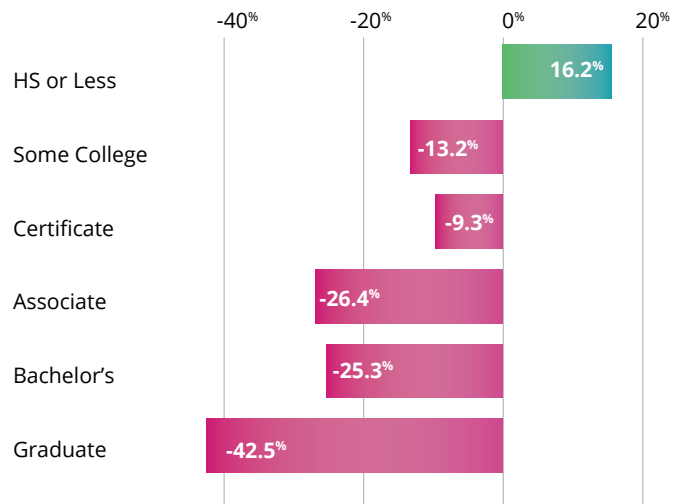


Figure 3. Difference between middle school students’ postsecondary expectations and aspirations, by level of aspiration.

Given the persistence of racial/ethnic and socioeconomic disparities in postsecondary attainment, to what extent are these disparities driven by differences in students' aspirations and expectations? Figure 4 highlights how students' postsecondary expectations vary by their racial/ethnic and economic background (the results were similar for postsecondary aspirations). There are similarities but also key differences between student groups. On one hand, roughly 85% or more of students from all backgrounds expect to go to college. However, Hispanic students are the only group where less than 50% expect to earn a bachelor's degree or higher, compared to 60–70% for Black and Asian students. Interestingly, race appears a far stronger influence on students' postsecondary expectations compared to economic status, as low-income and non-low-income students had roughly equivalent rates of expecting to earn a bachelor's or graduate degree. Low-income students were slightly more likely to expect to stop their education at high school compared to their peers (12.9% vs. 9.0%).

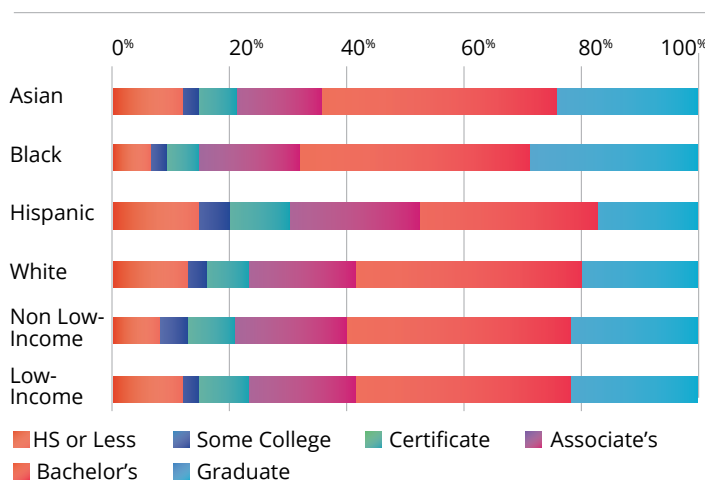


Figure 4. Postsecondary expectations by student demographic characteristics.

Why might middle school students expect to attain less education than they aspire to, particularly given that they have not even begun high school? What barriers or obstacles do they perceive in their way? And what can schools and educators do to foster greater coherence between students' aspirations and expectations? The literature suggests a number of factors may contribute to this phenomenon, such as students' beliefs about the nature of intelligence, their confidence in their abilities, and the availability of information needed to effectively navigate educational pathways. The following sections highlight additional findings from the student survey that may explain this aspiration-expectation gap.

Career Decision-Making Self-Efficacy

One reason that students may expect to attain less education than they aspire to is because they lack confidence in their abilities to accomplish their educational and career goals. This idea has been called career decision-making self-efficacy, an application of Albert Bandura's pioneering work on self-efficacy to the study of how people make career decisions. Taylor and Betz (1983) developed this construct and created an instrument designed to measure how efficacious adolescents feel in attaining their educational and career goals. The High School Readiness Survey included a series of items related to career decision-making self-efficacy that asked students to rate their confidence in accomplishing tasks related to preparing for college and career. Questions were categorized according to student self-confidence in the following general themes:

- Assessing one's educational and career interests and abilities
- Identifying jobs and careers aligned with one's interests and abilities
- Researching jobs to learn more about their pay and benefits
- Determining which educational pathways, majors, and high school courses would best prepare one to enter a career

Figure 5 presents students' responses to questions about career decision-making self-efficacy, ordered by the percentage of students who rated themselves as "extremely confident" in their abilities to accomplish each task. A number of findings from this analysis stand out. First, students do have varying levels of confidence in accomplishing different tasks. Nearly twice the proportion of students rated themselves as extremely confident in choosing a major or career that will fit their interests, the item with the greatest reported confidence, compared to accurately assessing their abilities to succeed in different majors, the item with the lowest reported confidence (41% vs. 21%). However, overall the variation in confidence was relatively modest, with 52–72% of students rating themselves as extremely confident or very confident across all items.

Second, students' ratings of their abilities were at times inconsistent across similar items. For example, students were the most confident in their abilities to choose a major that will fit their interests, but the item with the second-lowest confidence rating was selecting a college major from a list of majors they are considering. Although not identical questions, it is surprising that students rated their confidence in accomplishing these tasks so differently, given that the two questions are part of the same subscale related to identifying jobs and careers aligned with interests and abilities.

But perhaps most importantly, these results make clear

that middle school students, at least those who completed our survey, do not lack for confidence. No more than 7% of students rated themselves as not at all confident in their abilities to accomplish any of these tasks, and more than 80% of students were at least moderately confident in their abilities to accomplish all of these tasks. Although many students are unsure of their abilities to fulfill their educational aspirations, it does not appear that a lack of career decision-making self-efficacy is a primary reason for this aspiration-expectation gap. The following sections explore other factors that may contribute to this gap.

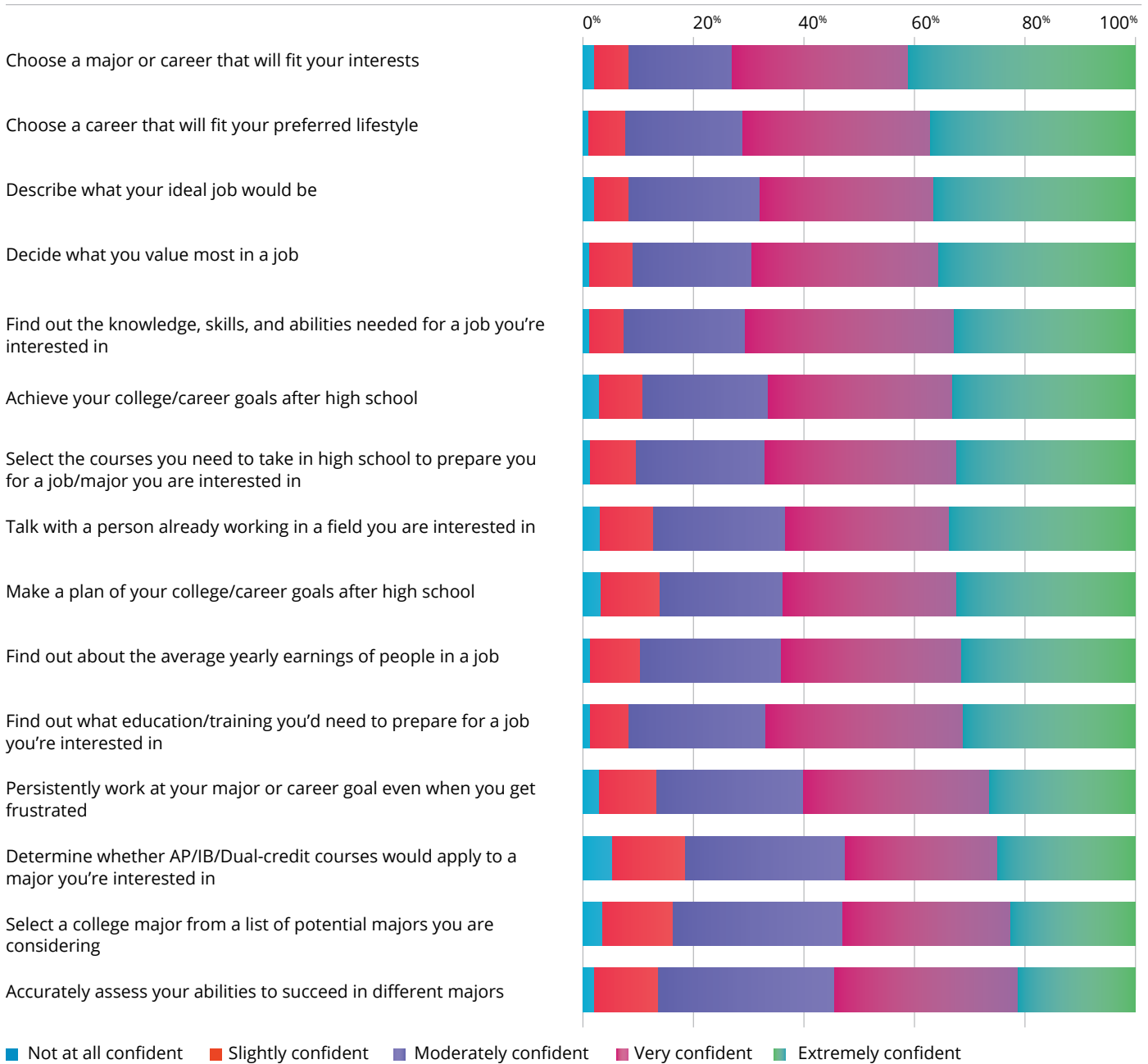


Figure 5: Student responses regarding career decision-making self-efficacy in the High School Readiness Survey, ordered by the percentage of students rating themselves “extremely confident” in their abilities to accomplish each task.

Mindsets about Intelligence and Motivations for Course Decisions

Another reason students may have lower educational expectations than aspirations is because they believe they are not smart enough to realize their aspirations. While education is all about developing one’s knowledge and skills, students who hold a *fixed mindset* view of intelligence are prone to believing that their intelligence is relatively static. Thus, students who feel unprepared to succeed in a future endeavor may lower their expectations of accomplishing it if they believe there is little they can do to increase their abilities. In contrast, students who hold a *growth mindset* view intelligence as malleable – even if they do not understand something today, they recognize that effort and effective strategies can help to develop their capacities for understanding it in the future. We asked students a series of questions about their intelligence mindsets through the High School Readiness Survey. On a positive note, the vast majority (84%) of students agreed or strongly agreed with the statement that they can get better at a subject if they put in more effort, with over 60% of respondents strongly agreeing with this statement. This reflects a belief that students can improve over time in different subjects, which provides the potential for their achievement to match their interests in the future even if they don’t align currently.

However, students were ambivalent when it came to their views on the nature of intelligence. More than 40% of students agreed or strongly agreed with two statements about intelligence being relatively fixed, and another quarter of students were unsure whether they could change their intelligence. Indeed, more students agreed than disagreed with these fixed-mindset statements. Similarly, when students were asked if they thought “being a math person” is something they can’t really change, a larger percentage somewhat or strongly agreed (37.8%) than the percentage who somewhat or strongly disagreed (32.9%).

Perhaps most concerning, more than half of students (60.9%) agreed or strongly agreed with the statement that one of their main motivations for the rest of the school year is to avoid looking stupid in class, compared to only 18% who disagreed or strongly disagreed with this statement. This attitude, known in the literature as the *performance avoidance goal*,¹⁰ is known to correlate with students’ fixed mindsets about intelligence. Students who hold these beliefs are more likely to choose activities in which they excel but learn little over tasks that may be more challenging but for which they learn more.¹¹

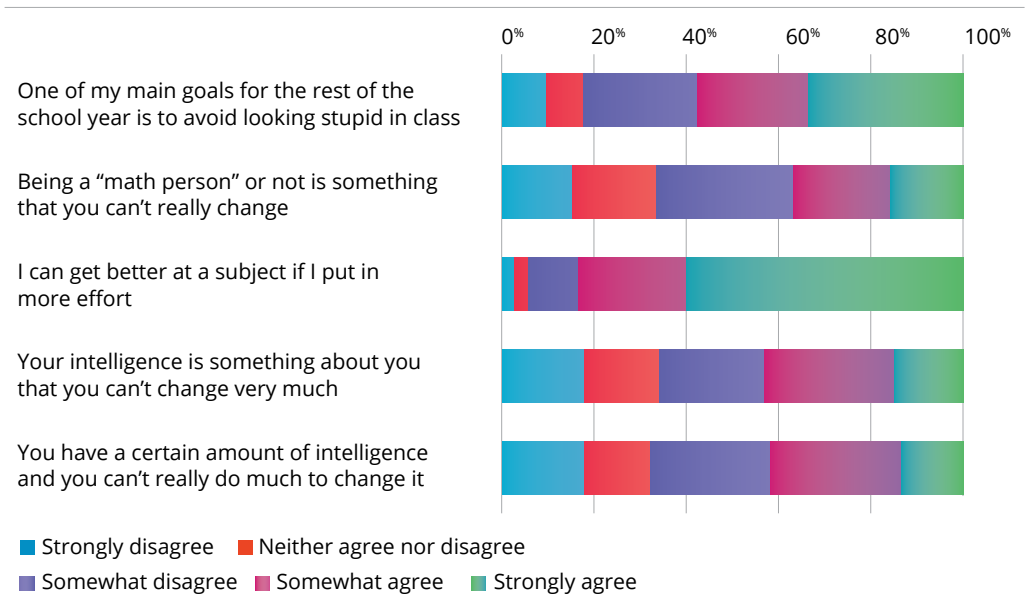


Figure 6: Middle school students’ mindsets and motivations.

Thus, although students expressed high levels of confidence in their ability to accomplish tasks preparing them to achieve their educational and career goals, they were less sure of whether they could grow their intelligence. Students’ mindset beliefs may become increasingly salient as they progress through high school and the curriculum becomes more rigorous, as students who hold fixed-mindset beliefs are less likely to persist in the face of challenges given their propensity to view difficulties in a course as evidence of their innate inability to succeed in that subject. This could in turn result in students’ choosing educational pathways that are easier for them, rather than those in which they learn the most and that best prepare them for their future. Later sections of this report return to the importance of students’ mindsets and their implications for educators aiming

to effectively support students in their educational and career pursuits.

How familiar are Texas educators and students with HB 5 pathways?

The preceding section explored students' postsecondary aspirations, self-efficacy beliefs, and mindsets about intelligence to provide context for understanding how and why students make decisions about their educational and career pursuits. This section investigates the extent to which students, parents, and educators understand the educational pathways made available through HB 5. We draw upon educators' responses to the Counselor and Adviser Survey as well as students' responses to the High School Readiness Survey.

We begin by analyzing educators' ratings of their confidence in their own understanding of HB 5. More than two-thirds of educator survey respondents indicated that they are at least moderately confident in their knowledge and skills related to HB 5 pathways, with roughly 46% reporting that they are confident or very confident. Less than 10% indicated that they are not at all confident in their knowledge of HB 5.

Educators gave similarly mixed responses about the extent to which students and their parents or guardians understand the implications of the graduation plans and endorsements. Just under half (48.5%) agreed or strongly agreed that students understand these topics, and less than 40% agreed or strongly agreed that parents

understand these curricular options. Approximately one-third of counselors disagreed or strongly disagreed that students and parents understand the implications of the graduation plans and endorsements.

Students themselves were asked to describe their level of familiarity with the graduation plans and endorsements. In many instances, students were even less familiar with these opportunities than counselors expected. Less than 30% of students reported being very or extremely familiar with the arts and humanities and business and industry endorsements, and roughly one-third were very or extremely familiar with public service. STEM was the endorsement students were most aware of, with nearly half of students reporting being very or extremely familiar with it. In contrast, multidisciplinary studies was the endorsement students were least familiar with, despite this endorsement being the only one districts are required to offer and the most commonly chosen endorsement in the state. Nearly 40% of students said they were not familiar at all with the multidisciplinary studies endorsement. Finally, less than half of students reported being very or extremely familiar with the benefits of the distinguished level of achievement, and more than one-fifth reported being only somewhat or not at all familiar with the distinguished plan. Thus, while students express great confidence in their abilities to plan for their futures, and in particular to choose educational pathways aligned with their future aspirations, they are less confident in their knowledge of the paths created through HB 5.

Given the persistent racial/ethnic and socioeconomic disparities in the curricular pathways that high school students complete, an important concern was the extent to which students from different demographic backgrounds were familiar with HB 5 pathways. Figure 9 examines students' average familiarity with the endorsements by race/ethnicity and income status. We calculated average familiarity by summing students' familiarity with the five separate endorsements. Familiarity was reported on a scale of one through five, with one being not at all familiar and five being extremely familiar, then divided that summed total by five. A value of three therefore represents that students are moderately familiar on average with the five endorsements. As shown in this figure, the differences in endorsement familiarity between demographic groups is relatively minor. Although an ANOVA test revealed that the differences in familiarity between racial/ethnic groups

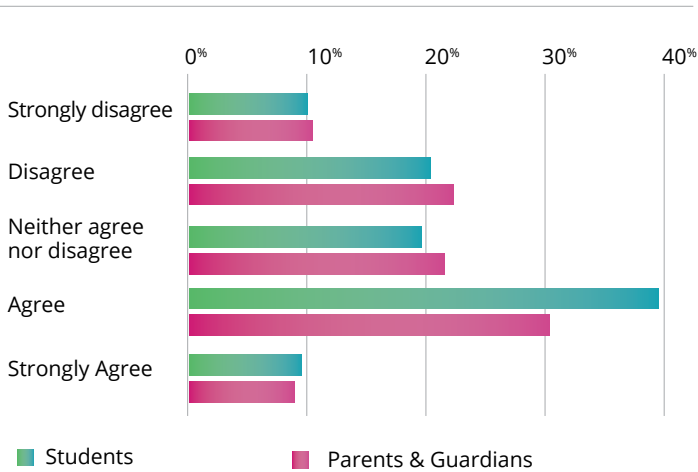


Figure 7. Middle school counselors' perceptions of students' and their families' understanding of the graduation plans and endorsements made available through HB 5.

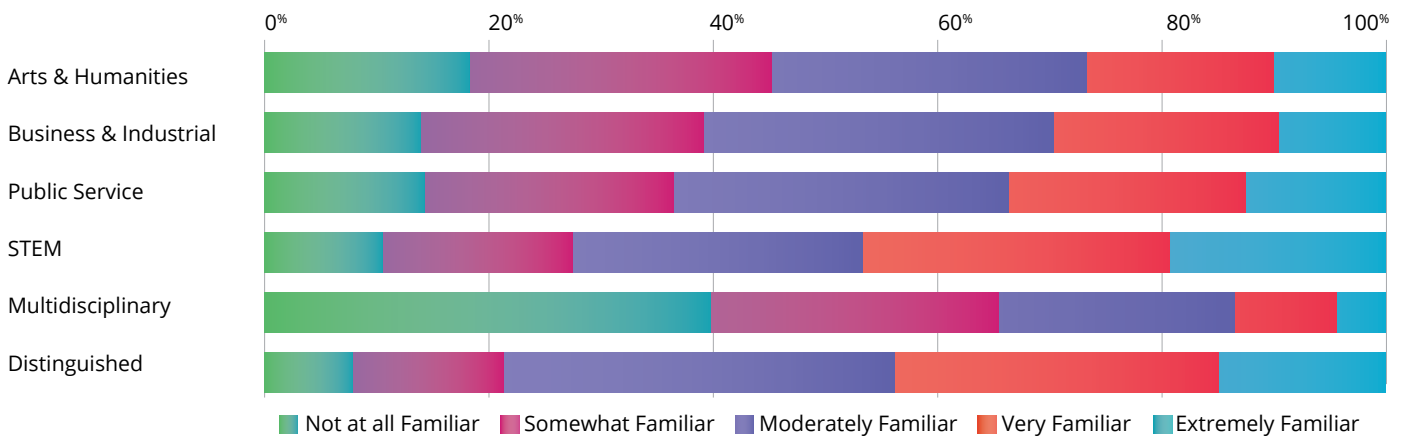


Figure 8. Students' familiarity with high school endorsements.

were statistically significant ($F = 10.33, p < .001$), they do not appear practically significant. The differences between economic groups were not statistically significant ($F = 0.59, p = .441$).

Despite low levels of familiarity with the endorsements and the distinguished plan, roughly 86% of students intended to complete the distinguished plan and 84% of students indicated they knew which endorsement(s) they would pursue in high school. Figure 10 shows the endorsement(s) that students who responded to the survey expected to complete compared to the rates that endorsements were being pursued by all ninth graders in Texas in 2016, as well as the percentage of respondents intending to complete the distinguished plan compared to the percentage of ninth graders pursuing it. A number of findings are noteworthy. First, apart from the multidisciplinary option, arts and humanities was

the endorsement with the fewest students intending to pursue it in both samples. Second, STEM was the most popular endorsement among survey respondents (35%), but it had the second-lowest rate of students across the state actually pursuing it (16%). Third, multidisciplinary studies was by far the least popular endorsement among respondents (5.7%) yet also by far the most pursued endorsement statewide. Finally, less than two-thirds of Texas ninth graders were pursuing the distinguished plan, compared to more than five-sixths of our sample who indicated an intent to pursue it. Overall, there appears to be considerable misalignment between students' stated intentions and the curricular pathways they are actually pursuing.

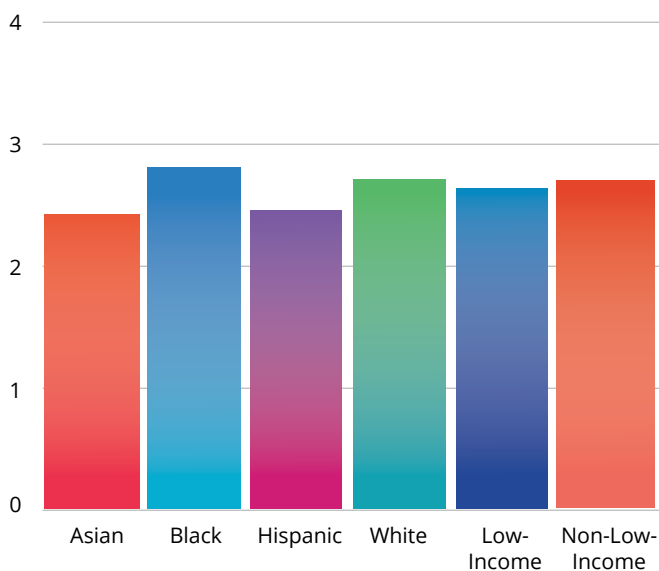


Figure 9. Students' average reported familiarity with the five endorsements, by race/ethnicity and income status.

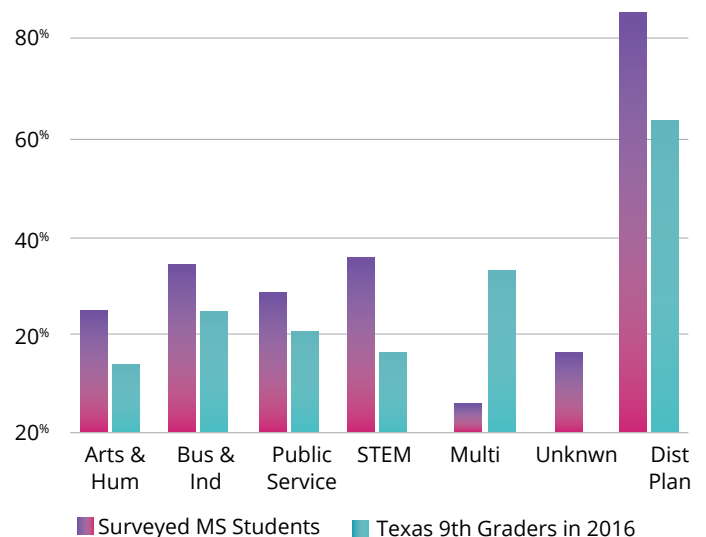


Figure 10. Endorsement choices of students responding to the survey vs. state averages for ninth graders in 2016. The figures do not sum to 100%, as students may indicate an intent to pursue multiple endorsements.

We asked middle school students about their primary reasons for pursuing their planned endorsements. The two most important reasons reported for selecting an endorsement were their interest (42.8%) and skills and abilities (33.4%) in that subject. Despite not being very familiar with the endorsements, students expressed a high level of confidence that a chosen endorsement will prepare them for the pursuit of future educational and career goals – over 75% selected “very confident” or “extremely confident” to describe their level of confidence. Almost 20% described their confidence as “moderately confident,” and fewer than 5% of respondents reported slight or no confidence.

Although ways to earn college credit during high school were created long before HB 5, we also asked students about their familiarity with such credit, given that under HB 5 students may earn performance acknowledgments on their diploma for completing a dual-credit course or taking an Advanced Placement or International Baccalaureate exam. Only slightly more than one-third (37.1%) of students stated that they were very familiar or extremely familiar with ways to earn college credit in high school, with close to one-third (31.4%) indicating moderate familiarity. Approximately one in eight students (11.6%) indicated that they were not familiar at all with this topic. This tends to associate with their stated intentions regarding completing courses that earn college credit. For example, only 7.0% of students who were slightly familiar or not familiar at all with ways to earn college credit in high school stated that they were extremely likely to complete these types of courses in high school, while more than half of students (52.2%) who were extremely familiar with these courses felt they were extremely likely to complete them. Increasing students’ familiarity with ways to earn college credit in high school is likely an important step in promoting students’ enrollment in and completion of these courses.

What type of organizational approaches do districts use to address policy requirements of HB 18 at the middle school level?

As discussed in the introduction, HB 18 mandated that districts provide instruction to students in grades seven or eight in preparing for high school, college, and career. Thus far we have reviewed our findings related to middle school students’ postsecondary aspirations and expectations, their beliefs and attitudes that may influence their educational and career goals, and their familiarity with the curricular opportunities made available through HB 5. We now turn to an investigation of how districts and schools are implementing the requirements of HB 18 and providing this advising to middle school students, drawing upon our interviews with educators across the state who provide or oversee college and career advising at the middle school level. The purpose of this section is to describe in broad terms the scope of responses schools and districts have taken to address HB 18 requirements and to identify what appear to be promising strategies for effectively preparing students for the transition to high school and beyond, rather than to evaluate school- and district-level implementation of HB 18 per se.

We begin by reporting our findings on district approaches before turning to school-level strategies for addressing HB 18 requirements. Two themes emerged most prominently in interviews with district-level stakeholders. The first is the degree of structure and support provided by the district in coordinating school-level delivery of instructional content related to middle school advising. The second concerns the processes used by districts to facilitate students’ transitions from middle school to high school. These themes are discussed in more detail below.

District Coordination of Instructional Delivery

Districts tend to fall along a spectrum in terms of coordinating their instructional approaches to postsecondary and career exploration topics. In some cases, districts have no coordinated plan across schools about postsecondary and career planning. Schools in these districts determine how and when to deliver that content. For example, one counselor said that her district has overall postsecondary initiatives, but implementation is site-based. This is true for several districts represented in this study.

Other districts try to better coordinate elementary, middle, and high schools' implementation of HB 5. In one district, two middle school counselors shared that the approach to preparing students for the transition to high school is somewhat coordinated. These two counselors said that the emphasis on postsecondary preparedness is articulated through a mandatory class for eighth graders where the syllabus reflects careers, pathways, and skills related to the Texas Success Initiative (TSI)⁵. An interesting comparison is the related conversation with the district's career and technical education (CTE) director, who lamented the fact that the class lacks focus on postsecondary issues and often becomes "TSI prep," or "a pullout class for academic tutoring." According to the CTE director in this district, the instructional technology director wants to put something together to fuse a technology applications class with the CTE course in eighth grade.

Finally, some districts have highly coordinated efforts toward postsecondary and career readiness. Exemplary district-wide approaches have one or more of the following: vertical curricular planning and/or curricular guides, standardized approaches, strategic partnerships with community businesses and regional colleges, and technological resources congruent with the overall approach.

One rural superintendent described a district-wide effort that includes an early focus on career and college exploration in the elementary years. This is followed by purposeful and "concentrated efforts to assist students in [learning about] career and college pathways." The district builds on partnerships with regional colleges and universities to help educate middle school students about postsecondary pathways. This district exemplifies multiple stakeholders playing a role in developing students' postsecondary awareness through a coordinated, district-wide advising approach. Unsurprisingly, this district defined student success in part by the outcomes students experienced after graduation from high school.

A second exemplary approach to postsecondary and career readiness is the standardized approach, taken

by a district that created a position focusing on coordinating career and college readiness from elementary through high school. In this district, a 300-page scope and sequence has been developed that incorporates learning about self and career exploration. Although educators in this district retain autonomy in implementing this scope and sequence, it nevertheless serves as an effective means of ensuring consistency and coherence in the college and career advising provided to middle school students across the district.

While districts may have been providing college and career advising to middle school students prior to HB 5 and HB 18, a number of respondents reported that HB 5 played a crucial role in expanding the focus on career and college readiness in their districts. According to one district official:

"HB 5 gave us the mandate and more credibility."

Similar sentiments regarding the increase in coordination at the district level were shared by a counselor in a large central city:

"HB 5 started really focusing on partnerships between high school counselors and middle school counselors."

Finally, a third instance of exemplary district-wide integration involves a coordinated, vertical approach to career exploration that begins in late elementary and is sustained through high school. This large, suburban district has articulated a vision of postsecondary awareness bolstered by proprietary technological resources. As

⁵TSI is the statewide system for determining students' college readiness, in particular their readiness to enroll in credit-bearing courses once they enter postsecondary education. Students may demonstrate college readiness through satisfactory performance on the Texas Success Initiative Assessments or through one of a number of exemptions. See Texas Education Code ⁵51.331-51.338.

early as fifth grade, students interact with a website that allows them to explore the linkage between interests and the selection of a future high school endorsement and graduation plan. Students continue to use this tool as they progress through school, moving from the exploration and decision phase in elementary and middle school to the implementation phase of scheduling high school courses aligned with their preferred pathways. Students continue using this resource as they move through high school, particularly in instances when they have reconsidered the pathway they chose previously.

Overall, while the role of districts in coordinating and standardizing the college and career advising being provided to middle school students varied across the state, districts have developed a number of promising strategies to ensure that middle school students are prepared for the transition to high school. The following section highlights the strategies used by school-level educators to implement district-wide approaches, as well as the strategies that schools themselves have developed in absence of district-level coordination.

High School Transition Processes

Transition processes refer to systematic methods at the district level for preparing eighth-grade students for the selection of a high school personal graduation plan and endorsement and the subsequent planning for high school classes. Almost all respondents reported that there is a systematic, district-wide approach to the high school transition process. Students and parents are given information, in a variety of ways, about HB 5 and its implications for selecting a high school graduation plan and endorsement. Most often, parents receive information through parent-information sessions. However, multiple respondents expressed that parents and guardians may have difficulty understanding endorsements. One counselor shared that, in her estimation, 85–90% of students “get it,” but that the wording is confusing for parents and guardians. This finding parallels our survey results in which less than half of survey respondents felt that parents sufficiently understood the implications of the graduation plans and endorsements.

Participants reported a variety of approaches to the ways students select an endorsement. Most allow students to select an endorsement prior to ninth grade, while a few put all freshmen in the multidisciplinary

track and have students choose endorsements later in the high school experience. Some districts use proprietary software for scheduling courses, while others continue to use paper-based or other nonproprietary methods developed at the district level. Almost all districts reported that all five endorsements are offered to students (although not all endorsements are available to students in some districts).

Although HB 5 specifies that students must select an endorsement prior to the transition into high school, the statute also states that students must be able to change their endorsement at any point throughout high school. In most cases, respondents indicated that students have the flexibility to change endorsements. However, in one district, the director of career and college readiness said:

“Once students pick their endorsement and plan, then they stick to their endorsement. Pick your route, stick to your page.”

In short, while districts appear to have relatively coordinated approaches to assisting students in their transition to high school, the priority given to college and career advising at the middle school level is uneven across the state, potentially resulting in students and families being forced to select educational options without being fully cognizant of their implications. This may be particularly problematic in districts that expect adolescents to persist in their chosen pathway, despite HB 5's requirement to allow students to change paths.

A central objective of transition between middle and high school is that students select a graduation plan and endorsement. HB 5 specifies that the foundation high school program with an endorsement is the default plan for all students. Students must opt in to the distinguished plan, and students are only able to opt out of an endorsement after their sophomore year of high school and with the consent of their parent or guardian. A concerning finding is that approximately one in six middle school educators who responded to the survey indicated

that the foundation plan with no endorsement was the default graduation plan for students, even though HB 5 specifies that all entering ninth grade students must select an endorsement. Another 8% of respondents indicated that they didn't know what the default plan was, and only one-quarter reported that the distinguished level of achievement was the default graduation plan at their school. Although this plan is not the default in state policy, it is nonetheless concerning that so few educators reported that their school used the distinguished plan as the default, given the requirement to complete this plan in order to be eligible for Texas' automatic admissions policy.

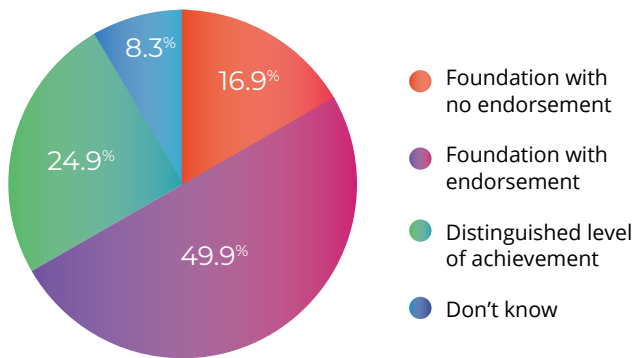


Figure 11. Default graduation plans as reported by middle school educators.

While transition processes appear to be well coordinated across the districts in this sample, there are also ways that statewide systematic approaches can be made better through clear communication of the implications of default graduation plans. Conclusions support recommendations for state-level support of postsecondary career and college readiness for middle school students.

What type of instructional approaches do middle schools use for career exploration and to familiarize students with career pathways? Who delivers this type of instruction in middle schools?

Responses to our Counselor and Adviser Survey showed a high degree of HB 18 implementation at the middle school level across Texas. Over 94% of survey respondents who worked at middle school campuses indicated that their school provides instruction that helps students prepare for high school, college, and career as mandated by HB 18. However, of the five topics HB 18 mandated to be covered in this instruction (reflected in the chart below), more than one-third of respondents indicated that the instruction they provide does not cover topics such as college readiness standards and the distinguished level of achievement, and roughly one-quarter indicated that this instruction does not cover the new endorsement options created by HB 5. Specific areas of training most often cited for inclusion in related instructional programs include the creation of a high school graduation plan, endorsements, and career exploration.

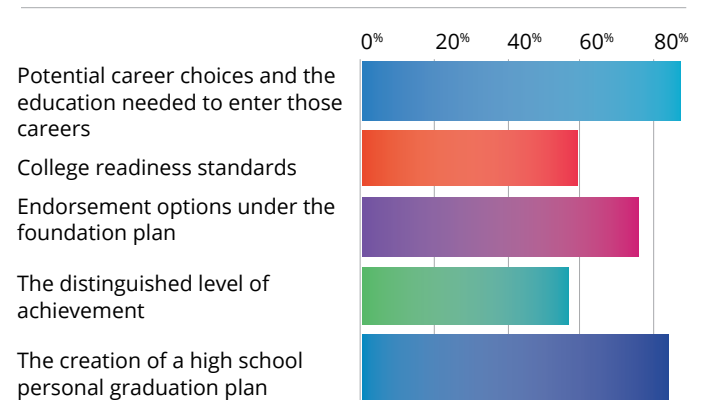


Figure 12. Instruction related to career and college readiness provided to seventh and eighth graders.

HB 18 also specified that this instruction could be provided in one of three ways: as part of an existing course in the required curriculum, as part of an existing career and technology course, or through a new elective course. We asked counselors and advisers how this instruction was provided through our survey. Approximately 29% of respondents indicated that the instruction forms part of an existing course in the required curriculum, 42% said it was provided in a career and technology course, and fewer than 10% of respondents indicated that a new course was created specifically to address the requirements of HB 5 and other postsecondary topics. However, 43% of respondents said that this instruction was provided through other methods, with drop-in guidance lessons and

technological solutions used in advising being the most common of these methods.**

We decided to pursue this question more comprehensively in our Middle School Field Exploration study in order to more fully understand how HB 18 instruction is being delivered in schools. We found that the drop-in guidance lesson and stand-alone course methods were used equally across the districts represented in this sample, regardless of the district method of postsecondary and career advising. Additionally, we found no relationship between well-articulated district-wide visions for postsecondary readiness directed toward middle school students and the type of school-level methods. The following sections dive deeper into these approaches.

Drop-in guidance lessons.

Drop-in guidance lessons refer to a method where school counselors or advisers schedule lessons with teachers within an existing course that does not necessarily relate to career and college exploration. For example, guidance counselors schedule time to go into an academic core classroom to talk with students about career exploration and potential pathways.

The counselors who deliver lessons about postsecondary content through drop-in guidance lessons shared that the focus of lessons tends to start with general career exploration. In some districts, drop-in guidance lessons targeted toward career and college exploration begin as early as elementary school. Some counselors and advisers expressed that teachers have been receptive to drop-in guidance lessons during instructional time, a sentiment echoed by an assistant principal who previously served as a middle school counselor.

Although drop-in guidance lessons were commonly mentioned among our interviewees, counselors expressed frustrations about how this strategy was used to deliver advising. Some counselors expressed that the reliance on drop-in guidance lessons reflects a lack of priority given to college and career advising compared to academic content. For example, a counselor said:

“Trying to get in the class to teach skills like career exploration and resume writing is difficult, so I have to go into classes that are not held accountable (the arts, social studies).”

Similarly, counselors lamented a lack of involvement in the delivery of career and postsecondary instruction to students. One counselor stated that the majority of career and college exploration and teaching about endorsements in her district happens through the eighth-grade writing class, and she is infrequently able to provide instruction to students in this course. While this does not imply a lack of implementation of HB 18 necessarily, it does suggest that perhaps some middle school counselors feel disconnected from the work of preparing students for postsecondary readiness. It also highlights that school counselors and advisers are not the only professionals for whom related training is relevant and necessary.

Stand-alone courses.

Stand-alone courses are designed to address postsecondary and career exploration. In many cases, course content addresses issues beyond postsecondary and HB 5 requirements and includes other subject matter content. At the state level, two courses – *Investigating Careers* and *College and Career Readiness*, each with associated TEKS – have been developed for this purpose. However, schools and districts also use locally developed courses to provide this instruction. The specific titles of these courses often vary, as do the titles of the professionals who teach them.

Our interviews revealed a number of forms of stand-alone courses schools were using to provide this instruction. One district that provides a mandatory eighth-grade course assigns a CTE professional to teach the class. Another district has a well-articulated AVID^{††} program that spans 7th through 12th grades. Another district offers a stand-alone course that takes students

** These percentages sum to more than 100% as respondents could indicate that this instruction was provided through multiple methods.

^{††} Advancement Via Individual Determination, or AVID, is a nationwide program designed to support low-income and underrepresented students in completing rigorous coursework in high school and transitioning into postsecondary. More information may be found at AVID's website: <https://www.avid.org/>.

through a process of career self-awareness and interest assessments to assist them in identifying possible career pathways aligned with their interests and purposefully aligns career exploration and the selection of a high school endorsement. In short, schools have adopted a variety of approaches to provide this instruction in ways that are aligned with district-wide visions of college and career planning, the availability of technological and human resources in the district, and the needs of the population of students the school serves.

The use of assessments in college and career advising.

One question that motivated this study is this: How do educators know if middle school students are prepared to select an endorsement and create their personal graduation plan as they transition into high school? This led to an investigation of whether schools and districts use formal or systematic methods to assess students' understanding of topics related to educational and career planning. Under the umbrella of assessments used for postsecondary and career advising, we were particularly interested in two specific approaches: the use of assessments to help students evaluate their interests and abilities – often known as *interest inventories* – and assessments to determine students' understanding of topics related to HB 5 and HB 18 such as endorsements and the distinguished level of achievement, career pathways, and the education needed to enter different careers.

Despite some examples of purposeful district-wide coordination of approaches to postsecondary and career planning, there is little evidence of schools using formal assessments to evaluate the efficacy of postsecondary advising for middle school students. When asked about the use of assessments for these purposes, counselors and district leaders we spoke to primarily gave examples of class assignments. Below are various responses to the question regarding whether assessments are used to measure student understanding of these topics:

“No pre or post test, but [we] use the CTE [assessments] for the course itself and grading of assignments, quizzes, and projects done in the class.”

“We haven't done that yet. We have done surveys with the parents.”

“I don't think so. It is more related to the class focus. We used career interest inventories (the Kudor?), but the district moved away from that.”

“[We] monitor assessments by meeting with students several times per year, through exploration, exposure, guest speakers, then come back and have a guidance lesson.”

Approaches to assessment generally rest at the student level rather than the system level. Students are evaluated on work products, such as resume building, or through the completion of career interest inventories. There is no indication of mechanisms to evaluate the merits of the instructional methods or content schools and districts are using to provide career guidance. Additionally, schools and districts do not appear to be collecting any systematic data to determine whether students understand the implications of HB 5 – that they must be prepared to create a personal graduation plan and select an endorsement aligned with their educational and career goals. While there were some anecdotal examples given to support the fact that students generally seem to understand the vocabulary and substance behind HB 5, there is no evidence of the systematic use of assessments to evaluate student proficiency in this area.

Technological tools and resources.

Participants readily agreed that easily accessible, high-interest content related to college and career advising is very important. The tools and resources employed by school professionals largely correspond with the degree of district-level coordination.

One observation gleaned from the multiple conversations with district- and school-level respondents is that when a district-wide approach is well articulated, there tends to be a greater emphasis on, and use of, purposeful and coordinated online technological tools and resources.

Respondents agreed that tools and resources must fit within existing district structures and must be easily accessible and user-friendly. A sentiment shared by all respondents was captured by a counselor in a central city:

“We all wish we could have curriculum and resources at our fingertips.”

The districts with a higher degree of vertical coordination reported using online technological tools and resources that are supported through an integrated district-wide approach. Some district examples include:

- Articulated scope and sequence that incorporates the use of interest inventories and a host of proprietary (Campus2Careers, Career Cruising, Naviance, etc.) and nonproprietary online resources (Texas Cares, Texas Education Agency resources, regionally developed tools through Education Service Centers, etc.)
- Coordinated AVID program that nurtures outside partnerships with regional colleges and universities
- The use of information technology for early exploration of educational and career pathways in elementary and middle school followed by course decision-making and planning as students move into high school

Less district-level coordination tended to correspond with respondents sharing their personal journeys to find worthwhile online and paper resources. Some expressed frustration over the time spent sorting through the multitude of career and interest inventories available online. Some respondents gave examples of curricular materials developed at the state and local levels. There were mixed reactions to the quality of these materials. For example, one counselor gave the example of taking an outdated video produced at the state level and incorporating a more age-appropriate focus to the material in the video. Several other respondents shared their pride in some of their personally created materials and lessons. Overall, participants repeatedly expressed that easily accessible, high-interest content is critically important to the efficacy of tools for middle school students.

Barriers to HB 5 and HB 18 implementation.

Throughout the Middle School Field Exploration project, we inquired about educators’ perceptions of the greatest barriers they faced to implementing the provisions of HB 5 and HB 18. The most commonly reported barriers to implementation include limited high school course offerings compared to student interest; a perceived lack of coordination between technological infrastructures and online course-scheduling tools; and human resource capacity in terms of staffing needs to deliver the requisite instruction. Staff members, usually counselors, are responsible for many other school initiatives outside the scope of HB 5 implementation. As mentioned earlier, some shared that parents may have difficulty understanding endorsements, which erects a barrier for students in terms of making informed decisions about endorsement selection and graduation plans.

In terms of course offerings, there were diverse perceptions about the responsiveness of high schools to create course schedules that reflect students’ stated interests according to endorsements. Some reported having a flexible master schedule that attempts to create sections of courses to meet student-expressed interests according to endorsement selection, but others did not.

Technology infrastructures can either assist or stymie the processes for scheduling students for courses. In terms of technology infrastructures that can be a barrier to implementation of efficient scheduling, one counselor said that “changes in management system, loss of programmers” makes it difficult to schedule students for four high school years. Several districts shared examples of sophisticated online processes for scheduling students into high school classes. In most cases, these districts rely on proprietary software. Another district created its own system that, according to the middle school counselors interviewed for this study, is a seamless, user-friendly process for registering students for high school courses for one to four years.

Finally, the issue of human resource capacity surfaced in this study, which supports previous studies of how school counselors carry an abundance of responsibility that makes it difficult to give an adequate amount of

time to eighth-grade students who are preparing to make important high school academic decisions related to HB 5. One counselor shared that while she tries to get into the classrooms, responsibility surrounding administrative duties and paperwork “gets in the way.” Another counselor estimated that this type of work accounts for

25% of her time, preventing her from dedicating any significant amount of time to postsecondary and career advising. A district coordinator for college and career readiness shared that there was little buy-in from the building principals regarding pulling kids for instruction related to postsecondary and career readiness.

| Discussion

The transition to high school is a critical time in the life of our students, and not only for its symbolic value – the curricular pathways students choose at this time and subsequently complete have a profound influence on their opportunities and outcomes after high school, including whether they will go to college, the selectivity of colleges they gain access to, and their likelihood of completing a college credential.¹² Socio-economically disadvantaged and underrepresented minority students are less likely to complete a rigorous or college-preparatory curriculum compared to their peers,¹³ placing them at a distinct disadvantage in terms of college access and success. We also know that students who complete college courses early have a better chance of completing a postsecondary degree; this is especially true for first generation college-going students.¹⁴

The vision of HB 5 is to provide students with more flexibility in selecting courses aligned with their educational and career interests. The Texas Legislature recognized that without sufficient advising and supports, students and families may remain unaware of the implications of these curricular decisions. HB 18 sought to build on the foundation of HB 5 by ensuring that students have access to the instruction and resources they need to make well-informed decisions about the optimal courses to take in high school. While the vast majority of educators who participated in this study reported that their school was providing instruction to middle school students in preparing for high school, college, and career, this study sheds light on a number of critical factors related to how this instruction is being provided and how prepared students are for their transition to high school.

Students have high postsecondary aspirations, but many have lower expectations even before they enter high school.

While students indicated high hopes for degree attainment, their educational expectations often fell short of their stated aspirations. This aspiration-expectation gap was evident despite the fact that the majority of students expressed a high degree of confidence in their abilities to take steps needed to effectively plan for their future.

Although this study could not definitively answer why this aspiration-expectation gap exists, the findings suggest a number of possibilities. The first is that a significant proportion of students hold relatively fixed views of their intelligence and abilities. If students have high educational aspirations, perceive their current abilities to be insufficient to accomplish their goals, and do not believe their intellectual abilities are malleable, they may lack confidence in developing the capabilities to realize their aspirations. The fact that the majority of students reported that avoiding “looking stupid” is one of their primary motivations in class is concerning, given that students who hold this belief may avoid challenging coursework if they believe they may struggle to succeed, even if those courses best prepare them to realize their aspirations.

But perhaps an even more compelling explanation for this aspiration-expectation gap is that students simply lack the information they need to know what high school pathways are best for them. Students were far

less confident in their knowledge of endorsements and the distinguished plan than they were in their other abilities in planning for college and career. Students also expressed only moderate familiarity with topics such as ways to earn college credit while in high school. Without clear and accessible information about curricular opportunities, students may lack the roadmap they need to make their educational dreams become reality.

There is a high degree of variation in instructional methods and delivery approaches, which leads to questions about equal access to quality and comprehensive HB 5 instruction.

Over 90% of educators who participated in the Counselor and Adviser Survey reported that their school provides instruction to students in preparing for high school, college, and career. However, this instruction does not always cover the topics required by HB 18, and the provision of this instruction is at times inconsistent and prioritized far lower than academic content. Additionally, only half of counselors and advisers indicated a high level of confidence in their knowledge and skills related to HB 5, suggesting that even if this advising is provided it may not be accurate or effective. Counselors and advisers continue to express the need for training and online technological tools to increase their knowledge and to streamline the transition processes between middle and high school. This lack of adequate training among counselors is compounded by the fact that many other educators, often with less access to training related to college and career preparation, are the primary providers of this instruction to middle school students.

Default graduation plans lack coordination with encouraging students to pursue higher levels of achievement.

Our research identified two primary issues with regard to default graduation plans. First, among the respondents who indicated their district has a default graduation plan, one in six reported that the foundation

plan with no endorsement was the default, despite HB 5 specifying that all entering ninth graders must select an endorsement, and less than a quarter offer the distinguished level of achievement as the default. Additionally, fewer than half of counselors and advisers agreed or strongly agreed that students understand the implications of the graduation plans. If students are unaware of the benefits of the distinguished plan and it is not the default curriculum, students may be unknowingly shut out of postsecondary opportunities, such as automatic admission to public universities granted by the top 10% plan.

Second, while some interview respondents indicated that students have the flexibility to change endorsements as they progress through high school, this was not the case in all districts. Our example of a school district that does not allow students to change endorsements or graduation plans is troubling for students who do not select the distinguished plan as they enter high school. Overall, the results of this study underscore the need to develop and implement mechanisms for the effective dissemination of accurate information to counselors, advisers, students, and families about the consequences of the curricular choices students are faced with as they enter high school. Doing so will help to ensure that students are completing educational pathways that align with their aspirations, which overwhelmingly are to go onto some type of postsecondary education. By supporting students in choosing the pathways that are right for them, we believe students will be better prepared to make successful transitions out of high school and into their next phase of life.

The educational success of this generation of middle and high school students will determine whether Texas is able to meet the lofty postsecondary attainment goals set forth by the Texas Higher Education Coordinating Board in the 60 × 30TX plan. We believe these goals can only be accomplished if students have the tools and information they need to navigate their education and educators have the training and resources they need to effectively guide their students. To learn more about Texas OnCourse's approach to streamlining student pathways to college and career success, visit texasoncourse.org.

Appendix A

Middle School Field Exploration Methodology

The Middle School Field Exploration project included interviews with school- and district-level personnel across nine school districts in Texas. The original participation pool consisted of middle school counselors and advisers who shared personal information with Texas OnCourse through the spring 2016 survey portal. Using the list of respondents who indicated willingness to participate in our project, we selected potential participants based on district representation factors of urbanicity and regions. Urbanicity refers to community types using factors such as student enrollment, growth in enrollment, economic status, and proximity to urban areas. The final sample of districts included one major urban, one major suburban, four central cities, one central city suburban, one non-metro fast growing, and one rural district.

Participant Sample

Consideration was also given to regional representation as relevant to education service center locations. District representation from eight of the education service centers included the following regions:

- Region 1 (South Texas)
- Region 4 (Southeast Texas)
- Region 9 (Far North Texas)
- Region 12 (North Central Texas)
- Region 13 (Central Texas)
- Region 14 (West Texas)
- Region 17 (Northwest Texas)
- Region 19 (Far West Texas)

As described earlier, the original selection method

included reaching out to middle school counselors and advisers who indicated willingness to participate in future projects with Texas OnCourse. From the original email solicitation, we found five participants. The remaining four participants were found using additional sampling methods. We reached out to district-level professionals familiar with our work and asked them to suggest people we could speak with regarding the nature of postsecondary and career readiness initiatives at the middle school level. From this effort, we were able to find an additional three participants. Finally, one district represented in the sample includes findings from a focus group of three district-level administrators whom Texas On Course had interviewed in the summer of 2016 regarding the Student Success Initiative in Texas.

In the end, participants represented several classes of professionals at the district and school level:

- 10 middle school counselors
- 3 directors of career and technology education
- 1 director of counseling
- 1 assistant principal
- 1 dean of academic affairs
- 1 district superintendent

Interviews

Interviews were conducted in two ways: over the phone and face-to-face. Interview participants were given a copy of a verbal consent agreement that clearly delineated the terms of participation. The interviewer covered key aspects of the verbal consent form so that all relevant issues of privacy, confidentiality, and voluntary participation status were made clear to participants.

Approach to Analysis

The Middle School Field Exploration project implemented a case-study approach for qualitative analysis. The general approach to data analysis included categorizing interview responses according to general topic areas: instructional delivery approaches, curricular resources and content, assessments, and transition processes between eighth grade and high school. Within each topic area, themes emerged. As themes emerged, codes were assigned to organize themes.

Complementary sources of data were also included to give context to interview findings where appropriate

(e.g., curricular guides, websites, lesson plans). In some cases, the interviewer had the opportunity to meet with district-level professionals after interviewing school-level professionals. In these cases, analyses included an additional layer of context, which greatly added clarity to some of the findings.

In all cases, interview transcripts were reread by the interviewer immediately after the interview so that any additional notes could be added to the document for greater clarity.

Appendix B

Student Survey Sample Characteristics

Measures	Districts That Administered the Student Survey	All Other Texas Districts
Avg % of African American Students	9.85%	9.33%
Avg % of Hispanic Students	47.51%	40.56%
Avg % of White Students	38.05%	46.28%
Avg % of American Indian Students	0.33%	0.41%
Avg % of Asian Students	2.24%	1.29%
Avg % of Native Hawaiian and Pacific Islander Students	0.08%	0.09%
Avg % of Multiple Races Students	1.94%	2.05%
Avg % of Economically Disadvantaged Students	58.62%	58.54%
Avg % of High School Dropout Rate	1.23%	1.02%
Avg % of Students Met College Admission Criterion	20.24%	18.54%
Avg % of District's Budget Spent on Career/Technical Education	4.3%	4.92%

District Size	Districts That Administered the Student Survey	All Other Texas Districts
1,000 to 1,599 Students	6.85%	12.17%
1,600 to 2,999 Students	9.59%	11.64%
10,000 to 24,999 Students	12.33%	4.76%
25,000 to 49,999 Students	6.85%	2.03%
3,000 to 4,999 Students	16.44%	6.79%
5,000 to 9,999 Students	9.59%	6.17%
50,000 and over	6.85%	1.32%
500 to 999 Students	13.7%	20.28%
Under 500	17.81%	34.83%

Community Type	Districts That Administered the Student Survey	All Other Texas Districts
Charters	6.85%	15.7%
Independent Town	8.22%	5.47%
Major Suburban	17.81%	5.82%
Major Urban	2.74%	0.79%
Non-metropolitan Fast Growing	4.11%	2.47%
Non-metropolitan Stable	10.96%	14.64%
Other Central City	9.59%	3%
Other Central City Suburban	13.7%	13.32%
Rural	26.03%	38.8%

Glossary

Career Decision-Making Self-Efficacy

Career decision-making self-efficacy is a construct that relates to how confident individuals feel in their abilities to complete certain tasks to prepare for career success. Researching jobs, connecting with someone employed in a field of interest, or choosing the best major to prepare for a chosen career are some such tasks. Career decision-making self-efficacy applies Albert Bandura's self-efficacy theory to the study of career decision-making developed by Taylor and Betz (1983). A shortened version of the career decision-making self-efficacy survey instrument developed by Taylor and Betz was used in this study.

Default Graduation Program

The passage of House Bill 5 (HB 5) in 2013 made the new foundation high school program (see below) with an endorsement the default graduation program for Texas students entering ninth grade beginning with the 2014–2015 school year.

Distinguished Level of Achievement

The distinguished level of achievement goes beyond the default graduation program and requires additional math and science courses. This graduation program is also required for eligibility for automatic admission to Texas colleges and universities for students who graduate in the top 7–10 percentile from public high schools in Texas (the top 10% plan).

Endorsement

Endorsements are high school curricular pathways based on areas of educational and career interest established by HB 5. The five endorsements are arts and humanities, business and industry, public service, STEM (science, technology, engineering, and math), and multidisciplinary studies. To earn an endorsement, students must complete four credits beyond the requirements of the foundation high school program.

Foundation High School Program

HB 5 created new high school graduation requirements that became effective in the 2014–2015 school year, including the new default foundation high school program. For more information regarding the foundation high school program, visit <http://tea.texas.gov/graduation.aspx>.

High School Personal Graduation Plan

HB 5 required that all students transitioning into high school create a high school personal graduation plan that includes the endorsement(s) they intend to complete and whether they plan to earn the distinguished level of achievement. School counselors or administrators are required to assist students in creating a plan in consultation with the students' parents or guardians.

House Bill 5

HB 5, passed by the Texas Legislature in 2013, made substantial changes to the state's curriculum and graduation requirements, assessment program, and accountability system. HB 5 changed the default graduation plan, established the endorsements, and reduced the criteria to reach the distinguished level of achievement.

House Bill 18

HB 18, passed by the Texas Legislature in 2015, mandated that school districts provide instruction to students in grades seven or eight in preparing for high school, college, and career. HB 18 also charged the University of Texas at Austin with creating tools and resources that districts may use to provide this instruction as well as online training for counselors and advisers. This initiative is now known as Texas OnCourse.

Postsecondary

Postsecondary refers to the time directly after high school. Postsecondary education refers to education and training programs that provide students with additional knowledge and skills to help prepare them for the workforce. Universities, community colleges, technical and proprietary colleges, apprenticeship programs, and others are all providers of postsecondary education.

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About Texas OnCourse

As Texas' definitive resource for college and career preparedness, Texas OnCourse equips middle and high school students for postgraduation success. Students discover and prepare for future opportunities with our career and college exploration and course planning tools. Parents and guardians stay on top of vital information and milestones to keep their child on track. And educators connect to professional learning tools and an essential roadmap to guide their students to plan for their own futures. Texas OnCourse is an initiative from the University of Texas at Austin, in partnership with other institutions of higher education, the Texas Education Agency, the Texas Workforce Commission, and the Texas Higher Education Coordinating Board. For more information about Texas OnCourse, visit texasoncourse.org.

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