

How Three States are Implementing High School Transition Mathematics Courses in Response to COVID-19

Profiles of Georgia, Texas, and Washington

INTRODUCTION

The COVID-19 pandemic is having an unprecedented and profound impact on students and families, educators, and educational institutions across the nation. Severe disruptions starting in the spring of 2020 and continuing today are affecting every dimension of teaching and learning. Existing inequities based on race and ethnicity, socioeconomic level, language, and other factors have been exacerbated and students of color – especially Black, Latinx, and Native American students – continue to be disproportionately affected. High school students, particularly juniors and seniors who are interested in pursuing postsecondary educational and career opportunities, are uniquely impacted by the current situation.

The successful completion of high school mathematics courses is essential to pursuing postsecondary educational opportunities and successfully entering the workforce. Students must complete specific courses to meet high school graduation requirements and qualify for admission at certain institutions of higher education. Furthermore, broad knowledge of mathematics concepts and skills has become increasingly important to a growing number of fields of study and their related professions.¹ Unfortunately, our current system of mathematics education is failing to meet the needs of many of our students.² As a result of inequitable opportunities to learn and also misaligned and outdated mathematics requirements and policies,³ far too few students are learning the mathematical and quantitative skills needed to pursue education beyond high school and successfully earn a credential or degree with value in the labor market.⁴

These issues with mathematics education coupled with the impact of the COVID-19 pandemic – especially learning loss resulting from disrupted schedules; variance with regard to the content, intensity, and quality of instruction; and unequal access to and use of technology – have significant implications on students' ability to complete high school graduation requirements and prepare themselves to enroll in credit-bearing, rigorous postsecondary courses.

Transition mathematics courses, which are designed to provide additional academic support to high school seniors before graduation, serve as a potential and important solution for meeting the dual challenges of equitably supporting students through the pandemic and increasing access to postsecondary opportunities. This brief highlights the efforts of three states – Georgia, Washington, and Texas – to implement new strategies to offer high-quality, rigorous senior year transition mathematics courses while navigating the COVID-19 pandemic. The following profiles present information about strategies implemented in each state to support educators and enhance their capacity to deliver high-quality instruction in virtual and hybrid learning environments, address essential issues of equity and access, and respond to unexpected challenges related to the pandemic.

LAUNCH YEARS INITIATIVE AND TRANSITION TO COLLEGE MATHEMATICS COURSES

The Launch Years initiative – led by the Charles A. Dana Center at The University of Texas at Austin (Dana Center) in collaboration with Education Strategy Group; the Community College Research Center at Teachers College, Columbia University; and the Association of Public & Land Grant Universities – is a national effort to usher in a new paradigm for mathematics instruction.⁵ By modernizing the content and enhancing structure of high school mathematics courses, establishing rigorous and differentiated high school to postsecondary mathematics pathways, and dismantling institution and systemic barriers that block equitable access and opportunities for Black, Latinx, and Native American students and students in lower-income communities, many more students will be prepared to successfully complete postsecondary mathematics opportunities and earn credentials with labor market value.⁶

This initiative builds on efforts in multiple states to provide more differentiated mathematics experiences and opportunities to all students and also better align high school to postsecondary mathematics courses. A growing number of states are offering senior year/fourth-year transition or bridge mathematics courses, developed in collaboration between high school and postsecondary partners, to provide additional support to students and enhance their preparedness to enroll in postsecondary courses⁷; these courses enable students to demonstrate postsecondary readiness and

meet readiness measures through high school coursework by the end of their senior year.⁸

With the contributions of high school and postsecondary educators and policymakers in Georgia, Texas, and Washington – the state partners for the Launch Years initiative – the Dana Center has developed a [Transition to College Mathematics Course Framework](#) that includes course design principles; sample student learning outcomes that reflect multiple domains of mathematics (quantitative reasoning, statistics, and algebra); knowledge and skills important for students' social, emotional, and academic development; and a suggested scope and sequence. Educators are piloting mathematics courses based on this framework and adapting it to reflect the educational context in their respective states.

The COVID-19 pandemic has presented unexpected challenges but also important opportunities to implement creative and innovative educational strategies; it is an opportune time to maximize the use of transition to college mathematics courses to increase students' access to rigorous and enriching learning opportunities, ensure a seamless transition to postsecondary mathematics experiences, enhance both content and delivery in both in-person and virtual courses, and lastly, mitigate the detrimental impact of learning loss and other factors especially for students of color and students in lower-income communities.

GEORGIA⁹

The Georgia Department of Education (GaDOE) has been a leader with regard to developing and implementing transition mathematics courses for high school students. In collaboration with the Technical College System of Georgia (TCSG) and the University System of Georgia (USG), different course options that meet high school graduation requirements are available to students.

The [College Readiness Mathematics course](#) is a fourth-year option for high school students who have completed Algebra I or Coordinate Algebra, Geometry or Analytic Geometry, and Algebra II or Advanced Algebra but need additional support to meet standards in first-year postsecondary courses required for non-STEM (science, technology, engineering, and mathematics) majors; this course has been approved by USG for students who are not pursuing STEM fields of study.

The [Technical College Readiness Mathematics course](#) is a second- or third-year option for students who have completed Algebra I or Coordinate Algebra and they can enroll in the course after or concurrently with Geometry; this course was designed for students interested in enrolling at a TCSG institution who experienced difficulty with meeting middle school summative assessments, struggled in high school mathematics courses, or did not meet a specific score on the Arithmetic Next Generation ACCUPLACER Assessment. All school districts also offer the Math Ready course which was developed in collaboration with the Southern Regional

Educational Board; this senior year course includes multiple topics and was designed to ensure that students learn mathematical concepts, gain critical thinking skills, and the ability to apply these concepts and skills to real-world situations.

GaDOE staff members are engaging in efforts to revise standards for all mathematics courses and integrate different transition courses into a single course that will enable students to pursue multiple postsecondary pathways and opportunities. The new, unified course has a greater emphasis on statistical reasoning and mathematical modeling topics to reflect the changing higher education and workforce expectations. In collaboration with TCSG, USG, and the Dana Center, GaDOE is piloting this new course in Floyd County and Rome City and providing continuous professional development to enhance the content knowledge of educators.

In response to the COVID-19 pandemic, GaDOE is implementing both statewide and regional strategies to increase students' access to high-quality mathematics instruction, restructure the content and delivery of professional learning opportunities for educators, and address issues of equity and access.

Availability of Courses. The College Readiness Mathematics course is offered in both synchronous and asynchronous formats in the Georgia Virtual Learning/School platform. The new transition mathematics course is offered in both virtual and hybrid learning formats.

Instructional Materials. In August 2020, GaDOE staff members presented guides for effective mathematics instruction that include evidence-based practices for both synchronous and asynchronous instruction, sample learning plans, and diagnostic assessment strategies and tools that educators can use to both identify and address gaps resulting from interrupted school schedules and learning loss. In addition, GaDOE staff members developed approximately 1,300 resources, organized by grade level and course, that include specific online and other activities that are aligned with each unit of study.

For the new transition mathematics course that is being piloted in Floyd County and Rome City, GaDOE and the Dana Center are partnering to use Dana Center/Agile Mind® curricular and instructional materials that were revised to reflect the Launch Years framework; given that these materials were designed for use in synchronous and asynchronous learning environments, educators have been able to adapt them for virtual and hybrid instructional models.

Professional Learning and Support Services. GaDOE is implementing multiple strategies to provide differentiated support to educators across the state. All professional learning opportunities are offered online and different modalities have been developed to respond to educators' needs. In addition to offering scheduled sessions during which participants can interact with their peers and facilitators, GaDOE has developed on demand modules to increase educators' access to engaging content. These modules have been structured to ensure that participants can successfully complete all components on their own time.

GaDOE has also launched a new program whereby instructional and classroom experts for each grade level and course serve as Virtual Specialists. Mathematics experts engage with teachers (by course and also grade level) on a monthly basis using the Georgia Learning Community online platform to share information and provide updates about new content and other topics, facilitate discussions about issues of interest, and respond to questions from the field.

GaDOE is also establishing a new method for recognizing educators' participation in and completion of professional development sessions. Educators can earn badges to demonstrate further learning related to specific topics and present these badges on resumes or professional profiles. The agency is developing badges related to mathematics instruction (including learning how to teach in a digital environment).

In order to better support teachers who are piloting the new transition mathematics course, GaDOE staff members are utilizing the professional learning community that was established prior to the onset of the COVID-19 pandemic and providing support related to the content/structure of the course and effective instructional strategies. In addition, a regional task force that was established to support the implementation of the course (comprised of high school teachers, school and district administrators, and representatives from local institutions of higher education) has been meeting virtually to maintain both momentum and collaboration among the partners, respond to educators' concerns, and advance the work.

Equity and Access. During the spring of 2020, GaDOE created a task force to eliminate unacceptable disparities among communities related to WiFi access and availability of both hardware and software. In partnership with Verizon, AT&T, and Sprint, GaDOE staff members worked with superintendents to count the number of towers and assess coverage in every single county; the agency allocated Coronavirus Aid, Relief, and Economic Security Act (CARES) and grant funding to school districts to increase WiFi connectivity and provide devices to students.

In order to address issues related to instructional and pedagogical equity in mathematics courses and disparities

related to digital learning, GaDOE has convened two annual Equity Summits for teachers, school and district leaders, higher education faculty members and administrators, state policymakers, and other stakeholders from Georgia as well as other states. The primary purpose of these summits is to create opportunities for participants to discuss issues and concerns but also identify a variety of strategies (for example, related to classroom instruction and instructional leadership) that should be implemented to increase educational equity. These events, coupled with ongoing professional learning opportunities, are creating important forums for educators and other key stakeholders to identify and directly address issues of equity and access – both for students and educators.

TEXAS¹⁰

Texas was the first state to implement postsecondary mathematics pathways at scale and a central strategy has been to establish robust partnerships between K-12 and higher education entities. The success of these partnerships, such as the Central Texas Mathematics Alignment Taskforce and the mathematics task force convened by the Texas Success Center of the Texas Association of Community Colleges, established an important foundation for ongoing work. The passage of House Bill (HB) 5 in 2013 established new high school graduation requirements and included provisions requiring that school districts partner with at least one institution of higher education to develop and offer college preparatory mathematics courses to high school seniors who have not yet demonstrated college readiness as measured

by state assessments or successful completion of high school courses. Students who successfully complete these courses are exempt (for a period of 24 months after graduating from high school) from enrolling in postsecondary developmental education courses at partnering institutions and are eligible to enroll in college-level mathematics courses. All districts are required to partner with an institution of higher education but all high schools within the district are not required to offer college preparatory mathematics courses.

The task force convened by the Texas Success Center identified student learning objectives for a HB 5 College Preparatory Math Content course as a resource for districts and the Texas Higher Education Coordinating Board established guidelines for the development of

the preparatory courses; however, given that the legislation did not include statewide requirements with regard to content or structure, there is variance across the state.

In partnership with the Dana Center, the Central Texas Mathematics Alignment Taskforce, and regional institutions of higher education, three school districts – Austin Independent School District, Hays Consolidated Independent School District, and San Marcos Consolidated Independent School District – are piloting a revised transition mathematics course using Dana Center/Agile Mind® curricular and instructional materials.

In response to the COVID-19 pandemic and increased disparities in college readiness as a result of the interrupted administration of statewide assessments and students' inability to complete college preparatory mathematics courses, the Texas Education Agency (TEA) launched a statewide initiative to offer online college preparatory courses to all students. In addition, TEA is implementing strategies to offer different types of professional learning and support services to educators and also address issues of equity and access.

Availability of Courses. [Texas College Bridge](#), a component of the state's Texas Home Learning online system, is a set of free online, individualized, and self-paced college preparatory courses in both English and mathematics for students in participating school districts. These courses are competency-based and aligned to the ACT, SAT, and Texas Success Initiative college-ready benchmarks. As such, students who successfully complete the mathematics courses can demonstrate college, career, or

military readiness for the TEA academic performance accountability system. In addition, these students are exempt from enrolling in developmental education courses and are allowed to enroll in college-level mathematics courses at institutions of higher education that have established partnerships with school districts. Student access to the courses and educator access to instructional materials and professional learning modules, all of which are housed on the state's Texas Home Learning online system, were funded through investments from the Governor's Emergency Education Relief Fund.

The platform offers dashboards to assess student progress as well as tools and resources to explore postsecondary educational and other opportunities. Students may enroll over the course of the school year and districts can use the platform as part of on-campus, remote, or hybrid instructional models. To date, over 5,200 students in 206 districts have enrolled in the mathematics courses.

Professional Learning and Support Services. For high school teachers and advisors, school and district administrators, and higher education partners, the Texas College Bridge platform offers customized teacher training and support, detailed guides and tools, curricular materials, and other resources. Professional training for educators is provided by the Commit Partnership; EdReady of the Network, Resources, Open, College & Career Partnership; and TEA. For teachers who are monitoring the online courses in participating districts, live and recorded training sessions are available to provide information about engaging and supporting students, instructional and

assessment practices, and implementation strategies. In addition, office hours are held on a weekly basis to provide additional assistance and the agency is covering the cost of the courses and all training sessions. School districts and partner institutions of higher education that are participating in Texas College Bridge are required to develop Memoranda of Understanding (MOU). The Texas College Bridge MOU is one option available to assist school districts and higher education administrators and enable students to enroll in the courses as quickly as possible.

TEA also leveraged approximately \$30 million in CARES Act funding to procure licenses to an online learning management system that provides a full suite of instructional materials to teachers across all core disciplines and grade levels. [Texas Home Learning](#) provides instructional materials aligned with state standards and was designed to reduce variance with regard to the content, structure, and quality of remote instruction; this system includes, among other features, curricular materials and adaptive math learning software, MATHia®, all customized for Texans to access high-quality content that works seamlessly between remote and in-classroom environments.

Education Service Centers, regional entities that provide services to school districts across the state, are providing essential training and support related to the use of the learning management system. Given the differences among school districts and the students they serve, there is considerable variance in instructional strategies and hybrid versus in-person models; these Centers are enhancing the capacity of TEA to disseminate information, offer high-quality support, and provide information about adapting statewide resources as necessary to address local needs.

Equity and Access. In 2018, approximately 121,000 high school students graduated without demonstrating college, career, or military readiness and the percentage who attain this standard varies significantly among different groups of students. The launch of Texas College Bridge and the online learning management platform reflect ongoing efforts of TEA staff members and their partners to address educational inequities related to multiple factors (including race/ethnicity, socioeconomic status, and geographic region) and provide targeted support to the students who are most underserved during the pandemic.

Texas College Bridge courses provide an alternate option for students to demonstrate postsecondary readiness and be exempt from developmental education. In addition, district administrators have the flexibility to participate and enroll their students at multiple points during the 2020 - 2021 school year. TEA administrators recognize that the successful completion of high school mathematics courses – to demonstrate postsecondary readiness and enroll in college-level mathematics courses – continues to be challenging for many students and the pandemic has only exacerbated existing inequities. As such, instructional materials and tools, information and data, and different types of professional learning sessions are being provided to better ensure that educators are continually enhancing their knowledge, skills, and capacity to provide high-quality instruction to their students. TEA staff members are working to maximize the benefits of virtual learning opportunities – both for students most in need of assistance and educators across the state.

WASHINGTON¹¹

Educators, policymakers, and state leaders in Washington have engaged in multiple initiatives to enhance mathematics instruction and promote student success and established cross-sector partnerships to sustain this work. In partnership with the Dana Center, the Washington State Board for Community and Technical Colleges (SBCTC) developed and implemented mathematics pathways at two- and four-year institutions of higher education which resulted in the establishment of transfer agreements between K-12 districts and these institutions. In addition, SBCTC and the Washington Office of Superintendent of Public Instruction (OSPI) convened high school and postsecondary educators to collaboratively develop [Bridge to College Mathematics](#), a high school transition course that provides seniors with another path to demonstrating postsecondary readiness.

This course was designed to increase students' engagement in mathematics, deepen their content knowledge and skills, and enhance their understanding of college-level work. Students who earn a grade of B or above have demonstrated college readiness and are eligible to enroll in college-level mathematics courses at participating state institutions of higher education. As of 2019, completion of an approved Bridge to College mathematics course meets the state's graduation requirements for demonstrating college and career readiness. All 34 community and technical colleges and one four-year institution of higher education include this course in their course placement agreements, and the course meets the baccalaureate admissions requirements for a

senior year quantitative reasoning course. Educators who are registered to offer this course have access to curricular and other resources as well as professional learning and training opportunities throughout the school year.

In partnership with the Dana Center, OSPI is piloting a revised Bridge to College course that reflects the Launch Years Transition to College Mathematics Framework in the Mead School District, Spokane Public Schools, and the West Valley School District.

Availability of Course. The current Bridge to College Mathematics course is being offered in both virtual and blended learning formats in 150 schools in 100 districts.

Professional Learning and Support Services. In response to the onset of the COVID-19 pandemic, OSPI and the state's Education Service Districts (regional entities that provide a range of services to local students, educators, schools, and districts) partnered to provide professional learning sessions about instructional strategies in virtual and blended learning environments. Approximately 4,000 educators attended the initial sessions with over 5,000 additional educators enrolling in subsequent sessions. In addition, OSPI staff members led virtual sessions for approximately 250 Bridge to College Mathematics teachers to discuss short-term instructional concerns and other issues related to distance learning. Many of the issues that were identified during these initial sessions have guided ongoing efforts to provide multiple types of support to educators.

OSPI staff members are continuing to partner with higher education faculty and administrators to offer professional learning sessions that enable OSPI administrators and educators to collaboratively address issues and also develop and implement strategies. Participants have engaged in discussions about the content and sequence of units for the Bridge to College Mathematics courses. The units have been reorganized to shift the sequence of mathematics topics (for example, statistics is now one of the first units of the course) and in recognition of the impact of the pandemic on students' well-being, the course is now addressing social and emotional learning.

Participants are receiving support related to increasing content knowledge and familiarity with both new and revised course materials and implementing effective instructional strategies in virtual and blended learning environments; in particular, as the course was designed to encourage collaboration and conversation among students and educators, educators are continuing to redevelop lessons and continually improve the quality of instructional practices. Teachers who are trained to teach the course also have access to additional instructional materials and resources.

OSPI staff members and their partners have redesigned the format and structure of professional learning opportunities to better address the needs of both new and returning Bridge to College Mathematics teachers. Prior to the pandemic, teachers participated in five days of professional development per school year but now they are attending a series of fourteen 90 to 120-minute sessions to increase both flexibility and access for

participants. Given that all sessions are offered online, there are opportunities to convene teachers in different ways and promote different types of collaboration among participants. OSPI also organized a virtual institute for new teachers (optional for returning teachers) and conducts periodic office hours for educators to receive ongoing support.

Equity and Access. OSPI staff members are engaging in discussions about the policies and practices that serve as barriers to educational equity, and these discussions are focusing attention on issues related to the content, structure, and sequence of high school mathematics courses such as Algebra 2. The impact of the COVID-19 pandemic is prompting discussions about variance among schools and districts regarding the content, dosage, and quality of instruction; student enrollment; and how to address multiple issues that are having impact on students including food insecurity, limited access to WiFi and technology, and economic instability due to parental or family unemployment.

ANALYSIS AND QUESTIONS FOR FURTHER CONSIDERATION

The strategies that are being implemented by state agency staff members and their partners in Georgia, Texas, and Washington are characterized by the following:

- **Intentionality** regarding every domain of work that is related to the provision of transition to college mathematics courses including the content and structure of these courses, adapting and enhancing instructional strategies for virtual and hybrid learning environments, delivery of professional learning opportunities, and collaboration with institutions of higher education to ensure seamless transitions to postsecondary educational opportunities;
- **Increased responsiveness** to the needs of students and educators by providing targeted support in appropriate ways at the appropriate time;
- **Flexibility and creativity** regarding the development and implementation of new strategies, building on successful efforts to date, and adapting as necessary based on lessons learned;
- **Addressing the educational inequities** that have been exacerbated as a result of the pandemic;
- **Maintaining the momentum** of current initiatives and efforts by adapting strategies as quickly and efficiently as possible; and
- **Maximizing human, fiscal, time, and organizational resources** and reallocating these resources as necessary.

In particular, the professional learning and support services that have been provided by these states have created essential forums for collaboration and collective action related to several common issues:

- **Revising the content, format, and structure of transition to college mathematics courses** in response to learning loss, variance among schools and districts, and other consequences of the COVID-19 pandemic on students and educators;
- **Refining instructional strategies** to maximize the benefits of virtual learning environments;
- **Ensuring that educators have the skills and knowledge** to engage and support students; and
- **Building educators' capacity** to adapt to continually changing circumstances and leverage existing resources.

Educators in these states are also engaging in virtual professional learning opportunities offered by the Dana Center (which have also been restructured and redesigned in response to both challenges and opportunities related to the current situation) including sessions focused on mastering the components of the Center’s Transition to College Mathematics framework, preparing to teach redesigned content and implement courses that are aligned to this framework, implementing effective instructional strategies for asynchronous and synchronous learning environments, and maximizing student interactions in virtual learning environments. In addition, the Dana Center is organizing collaborative learning events and creating a professional learning community across states as well as sessions to address state-specific topics.

As state entities continue to implement strategies to offer transition to college mathematics courses, agency staff members and their partners should consider the following questions.

- How will state entities measure the impact of different strategies on students’ college readiness, completion of high school and postsecondary courses, and other outcomes particularly for students of color, students in lower-income communities, and other groups of students?
- How are these strategies prompting shifts with regard to educator mindset, content and structure of courses, pedagogy, and other factors? What impact will these shifts have on ongoing work?
- How can state entities ensure that the transition to college mathematics courses offered are creating inclusive learning environments for all students as well as providing differentiated support to students most in need of assistance?
- How will state agencies and their partners proactively address issues of equity and access?
- For students enrolled in these courses, how will educators enhance student agency, engagement, and empowerment so that they can thrive and succeed?
- With the understanding that it is necessary to differentiate strategies based on student population and other factors, how will state entities reduce variance with regard to instructional quality and rigor, students’ access to academic and other resources, and educators’ access to professional learning and support services?

CONCLUSION

State agency staff members and their partners in Georgia, Texas, and Washington are implementing a comprehensive set of strategies to provide high-quality and rigorous transition to college mathematics courses. They are engaging in essential discussions with educators about mitigating the unprecedented effects of the pandemic and providing critical support to high school students most in need of assistance.

As the work continues to evolve, there are important implications for both policy and practice. For example, states are providing multiple options for students to demonstrate postsecondary readiness and complete high school graduation requirements; in addition, institutions of higher education are adapting admissions and placement requirements to increase flexibility and access. Which strategies that are being implemented in response to the pandemic will continue to be implemented in the long term, and how will organizational practices and policies shift to support and also sustain this work?

The strategies that are being implemented in these states are creating new narratives about providing valuable support to high school students and addressing issues of equity and access, building different types of individual and organizational capacity to offer transition to college mathematics courses, and advancing efforts to create seamless mathematics pathways that will enable students to pursue postsecondary academic and other opportunities. In response to the COVID-19 pandemic and the array of educational and other challenges, our colleagues in Georgia, Texas, and Washington are proactively and decisively creating new opportunities for high school students to meet graduation requirements and successfully pursue postsecondary educational opportunities.

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¹ Saeyun Lee and Ryan Reyna. (2019). *Overview of Launch Years Initiative*. Education Strategy Group.

² Charles A. Dana Center, The University of Texas at Austin; Achieve; Community College Research Center, Teachers College, Columbia University; Education Strategy Group; and Association of Public & Land Grant Universities. (2020). *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*. www.launchyearsreport.org/vision.

³ Ibid.

⁴ *Overview of Launch Years Initiative*.

⁵ Ibid.

⁶ *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*; *Overview of Launch Years Initiative*.

⁷ *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*.

⁸ Ibid.

⁹ The citations for this profile are as follows: Georgia Department of Education. (June 2020). *Georgia Mathematics: Graduation Requirement Guidance*. www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Mathematics/GA-HS-Graduation-Requirement-Mathematics-Guidance.pdf; *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*; meeting with Lya R. Snell, Mathematics Program Manager, Georgia Department of Education, June 18, 2020; interview with Lya R. Snell, November 5, 2020; and www.sreb.org/math-ready.

¹⁰ The citations for this profile are as follows: Texas Education Agency. (June 2020). *Texas College Bridge: Preparing Texas High School Students for College Success*. <https://tea.texas.gov/sites/default/files/covid/Texas-College-Bridge-Overview.pptx>; Texas Education Agency. (July 2020). *Texas College Bridge, Phase II: Fall/Spring 2020-2021, District Implementation Guide*. https://www.texascollegebridge.org/assets/docs/district/TexasCollegeBridge_ImplementationGuide_Fall_7.24.20.pdf; Texas Education Agency. (September 24, 2020). *Texas Home Learning 3.0: Texas College Bridge – Online College Preparatory Courses and Student Advising*. <https://tea.texas.gov/sites/default/files/Texas-Home-Learning-3-0-Texas-College-Bridge-Online-College-Preparatory-Courses-and-Student-Advising.pdf>; Texas Education Agency. (n.d.). *HB 5: Other Frequently Asked Questions*. https://tea.texas.gov/sites/default/files/HB5_Other_FAQ_051514.pdf; Texas Higher Education Coordinating Board. (April 2014). *Guidelines Regarding the Development and Implementation of College Preparatory Courses*. www.theccb.state.tx.us/DocID/PDF/6207.PDF; *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*; interview with Stacy Avery, Director of Postsecondary Preparation Programs and Jarrad Toussant, Division Director of College, Career, & Military Preparation, Texas Education Agency, October 21, 2020; <https://tea.texas.gov/academics/graduation-information/house-bill-5-foundation-high-school-program>; www.texascollegebridge.org/; www.texascollegebridge.org/student.php; and www.texascollegebridge.org/teacher.php.

¹¹ The citations for this profile are as follows: Washington Office of Superintendent of Public Instruction. (June 2019). *BRIDGE TO COLLEGE TRANSITION COURSES: QUESTIONS AND ANSWERS*. www.k12.wa.us/sites/default/files/public/Bridge%20to%20College%20QA%20June%202019%20FINAL.docx; *LAUNCH YEARS: A NEW VISION FOR THE TRANSITION FROM HIGH SCHOOL TO POSTSECONDARY MATHEMATICS*; meeting with Arlene Crum (Mathematics Director, Washington Office of Superintendent of Public Instruction), Bill Moore (Director of K-12 Partnerships & Bridge to College, State Board for Community & Technical Colleges), and Kathe Taylor (Assistant Superintendent of Learning and Teaching, Washington Office of Superintendent of Public Instruction), June 18, 2020; meeting with Arlene Crum, Bill Moore, and Kathe Taylor, July 30, 2020; interview with Arlene Crum, October 15, 2020; www.k12.wa.us/student-success/graduation/transition-postsecondary-education/bridge-college-courses; www.reimaginedwaed.com/what-we-do; www.waesd.org/about-us/; and www.waesd.org/services/.

ABOUT LAUNCH YEARS

Launch Years is an initiative led by the Charles A. Dana Center at The University of Texas at Austin - in collaboration with Community College Research Center, Education Strategy Group, and the Association of Public and Land-grant Universities - focused on addressing systemic barriers that prevent students from succeeding in mathematics and progressing to postsecondary and career success. Leveraging work within states, the initiative seeks to modernize math in high school through relevant and rigorous math courses as well as policies and practices leading to more equitable outcomes for all students.

Learn more at: utdanacenter.org/launch-years