Developmental Education and Corequisite Capacity Building Initiative: Landscape Scan

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Executive Summary

This report details findings of a landscape scan of developmental education (DE) and corequisite courses for students who are assessed as underprepared for college-level (CL) courses in English and mathematics in The University of Texas System (UT System). Using student-level data from the Texas Higher Education Coordination Board (THECB), the report begins by describing the characteristics and academic outcomes of students enrolled in DE and corequisites in the UT System. Then, using survey and focus group data collected from faculty and staff at UT System campuses, the report describes policies, practices, and perceptions of DE and corequisites. The research is designed to support the UT System's Developmental Education and Corequisite Capacity Building (DECCB) initiative to understand the landscape of DE across institutions and identify areas for continued improvement.

Successful completion of gateway mathematics and English courses represents one of the most important academic factors that propels student momentum towards degree attainment (Belfield, Jenkins, & Davis, 2019; Complete College America, 2021; Wang, 2017). For students that enter college underprepared for CL coursework, institutions use various models of DE to support student success in CL courses. In the past five years, the number of students enrolled in DE courses at academic institutions in The University of Texas System (UT System) has grown a dramatic 71.4%, from 4,328 in AY19 to 7,419 in AY23. New research suggests that the growth in student enrollments in DE nationally has been due in part to learning loss that resulted from the COVID-19 pandemic (Sanchez, 2024).

Effective support of DE students is critical to the mission of the UT System and its institutions. A compelling body of literature finds that students assigned to DE have a lower likelihood of degree completion and that this population is more likely to include low-income and racially minoritized students (Bickerstaff et al., 2022; Brathwaite et al., 2020; Edgecombe & Bickerstaff, 2018). From AY19 to AY23, a total of 26,549 students in the UT System were enrolled in DE in mathematics, English, or both subjects, and, on average, 39.5% of these students were not retained in the year following their DE enrollment regardless of completion of the course. Compared to the overall population of students in the UT System, a disproportionate amount of DE students are Pell-eligible (67.1% v. 41.5%) and non-White (86.9% v. 76.2%).

This growth in the population of DE students has corresponded with important policy changes at the state-level designed to improve college outcomes for DE students. In 2017, the 85th Regular Session of the Texas Legislature passed HB 2223 requiring institutions to place almost all underprepared students into corequisite DE models. Prior to this legislation, most DE students were assigned to standalone, prerequisite DE courses that cost time and money but confer no credit towards a degree. The standalone DE model is associated with extremely high rates of attrition and very few students earning CL credit. Corequisite models, in contrast, directly place students into a credit-bearing CL course and with additional developmental support offered concurrently. Corequisites have been causally linked with increased rates of student course completion and graduation and these effects hold across a wide range of preparedness levels (Logue, Douglas, & Watanabe-Rose, 2019; Ran & Lin, 2022).

UT System institutions have increased corequisite supports over time, yet some continue to encounter challenges to scaling corequisites to all DE students. In AY19, only 40.3% of DE students were enrolled in corequisite models and in AY23 that proportion grew to 78.1%. Prior

research has documented challenges faced by Texas institutions in meeting the policy requirement to place 100% of DE students into corequisites (Mokher & Park-Gaghan, 2023). This report adds to that research by detailing specific challenges faced by UT System institutions in scaling corequisites to support all DE students.

Introduction

In the UT System, a growing number of students enter college assessed as underprepared for critical gateway courses in mathematics and English and, as a result, are placed into developmental education (DE), which are non-credit-bearing courses that intend to prepare students for college-level (CL) courses. Between 2019 and 2023, the number of students placed into DE in the UT System grew by 71.4%, from 4,328 in AY19 to 7,419 in AY23. During the same period, the number of DE sections offered by UT System institutions also grew a dramatic 75.8%, from 306 to 538 for English and mathematics combined.

The models of DE that students experience vary across the UT System. Historically, students who require additional preparation for CL coursework had been placed into standalone pre-requisite DE models that require students to complete non-credit-bearing coursework prior to enrollment in a CL class. However, more recently, students are increasingly being placed into corequisite courses which allows them to directly enroll in a CL course concurrently with DE supports. Research finds that corequisite models significantly and causally improve the likelihood that students successfully complete CL courses (Logue, Douglas, & Watanabe-Rose, 2019; Ran & Lin, 2022; Ran & Lee, 2024).

The policy environment governing DE and corequisites for public institutions of higher education in Texas represents an important contextual feature of this analysis. The rules governing DE are collectively referred to as the Texas Success Initiative (TSI) and are administered by the Texas Higher Education Coordinating Board (THECB).[1] The state requires all first-time-in-college students who are not otherwise exempt to be assessed for readiness for CL coursework using a standardized placement exam known as the TSI-A2. Students who do not meet a specific cut score on the TSI-A2 are placed into DE. The THECB permits some institutions participating in a multiple measures assessment study to use instruments other than the TSI-A2 to determine readiness on a temporary basis.[2]

In 2017, the 85th Texas Legislature passed HB 2223 requiring almost all unprepared students to enroll in corequisites. Corequisite models place students directly into an entry-level, credit-bearing college course concurrent to their enrollment in DE. Many institutions in the UT System have responded to this legislation by now assigning 100% of their TSI-liable students to corequisite math and English courses. Some institutions have mostly scaled corequisite supports with very few (less than 5%) students placing into standalone courses. One institution appears to place fewer than 30% of students in corequisite courses and one institution does not currently offer any developmental courses and instead refers TSI-liable students to a partner community college to complete corequisites. In total,17.3% of DE students in the UT System are placed into standalone courses.

This report describes the findings of a landscape scan of existing DE and corequisite supports in the UT System. The landscape scan is one piece of the larger Developmental Education and Corequisite Capacity Building (DECCB) initiative and intends to establish a shared understanding of existing data, policies, and practices across the UT System. The DECCB is a 2-year, UT System funded effort to ensure that all students who enter UT institutions can

[1] Texas Administrative Code, Title 19, Part 1, Chapter 4, Subchapter C, available at: https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=C&rl=Y

[2] For more information on the THECB's multiple measures assessment study refer to this page: https://www.highered.texas.gov/our-work/supporting-our-institutions/institutional-grant-opportunities/college-readiness-and-success-models-2023-crsm-2023/

achieve their academic goals regardless of their assessed preparedness for CL courses. The DECCB initiative is comprised of a Steering Committee and two Communities of Practice, one focused on English and the other on mathematics. The DECCB Steering Committee and the Communities of Practice are exploring and implementing scalable solutions to support our institutions in addressing the influx of students in need of developmental coursework and to build capacity to offer high quality corequisite courses.

The report is organized into the following sections. First, the methodology section describes how data was collected and analyzed for each of the three sources: student-level data from THECB reports, surveys, and focus groups. Second, the main results from the analysis are broken into three sections: the first uses descriptive statistics to illustrate characteristics and outcomes for the overall population of DE students in the UT System; the next sections are separated by subject (one each for mathematics and English) describing subject-specific student data along with survey and focus group findings for each discipline. Third, the discussion section summarizes the results and limitations and concludes with recommendations to consider for policy actions and practice improvement.

Methodology

This report includes data from three sources: 1) student-level data; 2) survey data from key faculty and staff members responsible for the delivery of DE supports in mathematics and English; 3) focus group data from members of the DECCB Communities of Practice in mathematics and English.

Student-level administrative data

The Office of Institutional Research and Analysis (OIRA) at UT System used Texas Higher Education Coordinating Board (THECB) CBM reports on Enrollment (CBM 001/0C1), Student Schedule (CBM 00S), Graduation (CBM009), and FADS from the 2019-2023 Academic Years to analyze trends in undergraduate DE enrollment.

Students were identified based on their enrollment in DE courses. DE courses were identified through several methods: course catalogs, survey items, and numbering (most DE courses start with the number 0). Then, students were separated into groups based on their DE enrollment type: standalone, corequisite, and both. For the standalone group, these students were identified if they enrolled in a DE course and did not simultaneously enroll in a CL course of the same subject in the same semester. For the corequisite group, students were identified based on their enrollment in a DE and CL course of the same subject in the same semester. Finally, a small segment of students was identified as “both” if they were in a corequisite and standalone DE class in the same semester. Often, this group of students were placed into a corequisite course in one subject and a standalone DE course in another subject.

Using this identification method, dashboards were built to provide descriptive data on the DE student population, course outcomes in DE and CL coursework, and student success metrics of persistence, retention, and graduation. Each UT System institution was granted access to a campus-level dashboard to explore their own student-level data. This report only includes aggregate information for all students across UT System, with the exception of Table 1 that shows DE enrollment counts for each institution.

Further details on the sources, filters, and analysis of this data are included in *Appendix A.*

Surveys

The survey instruments and data visualizations were created using Qualtrics. Separate surveys were made for English and mathematics so that faculty members in those respective departments could provide responses specific to their discipline. The only difference between the English and mathematics surveys was that the latter had items asking about multiple entry-level mathematics courses.

Links to the surveys were distributed to DECCB Steering Committee Members on February 21, 2024, and final responses were collected on February 28, 2024. A total of 12 respondents completed the English survey and 11 respondents completed the mathematics survey. All UT System academic institutions are represented in the results. All results are anonymous.

A copy of the mathematics survey is included in *Appendix B* and the English survey is in *Appendix C.*

Focus Groups

DECCB Steering Committee members nominated select faculty with responsibility to serve on the projects' Communities of Practice (CoP) for English and mathematics. The launch meetings for CoPs were used as the data source for the focus groups. The mathematics CoP meeting occurred on March 19, 2024, and the English CoP meeting occurred on March 20, 2024.

The CoP meetings were recorded using Zoom and the auto-transcription feature of the software was used to create the transcript. Some quotations from the transcript have been edited to improve readability and correct errors in the automatically generated transcripts. The data was analyzed using an iterative process to identify common themes. These themes from the focus groups were combined with common themes from the open-response items in the survey and the results are reported in the qualitative data sections for each subject. A copy of the focus group protocol is included in *Appendix D.*

Results

Overall Population of DE Students in the UT System

Enrollments

This section describes trends in student enrollments in DE. Table 1 shows the counts of students enrolled in DE at each UT System institution from AY 2019 through AY 2023. The number of students enrolled in DE varies between institutions and AYs. The total number of students enrolled in DE has grown by 71.4% during this period. It is worth noting that UT Dallas does have students who are TSI-liable, but the campus does not offer DE. Instead, those students enroll in DE courses at partner community colleges. In AY 2019, UT Tyler also enrolled TSI-liable students in DE at a local community college but began offering DE the following year. Over this period, UT RGV has enrolled the largest total number of DE students and UT Austin has enrolled the fewest.

Table 1: Count of Students Enrolled in DE at UT System Institutions, AY2019-2023

Institution	2019	2020	2021	2022	2023	Total
UT Arlington	504	560	513	1139	1145	**3861**
UT Austin	88	75	117	118	184	**582**
UT Dallas	0	0	0	0	0	**0**
UT El Paso	1364	1318	880	818	1674	**6054**
UT Permian Basin	150	161	246	244	299	**1100**
UT Rio Grande Valley	930	809	1211	1743	1926	**6619**
UT San Antonio	553	549	880	1018	1113	**4113**
Stephen F. Austin	739	617	600	777	785	**3518**
UT Tyler	0	49	100	260	293	**702**
Total	**4328**	**4138**	**4547**	**6117**	**7419**	**26549**

Figure 1 shows the distribution of DE enrollments by subject over a 5-year period. In AY19, mathematics represented the majority of DE enrollments (71.6%) compared to English only (13.7%) and to both subjects combined (14.7%). This distribution has changed over time, with the proportion of English DE enrollments representing nearly 30% of total enrollments in AY23. In the same AY, mathematics DE enrollments dropped to 50.1% of the total and DE enrollments in both mathematics and English grew to nearly 21%.

Figure 1: DE Enrollment by Subject and Academic Year

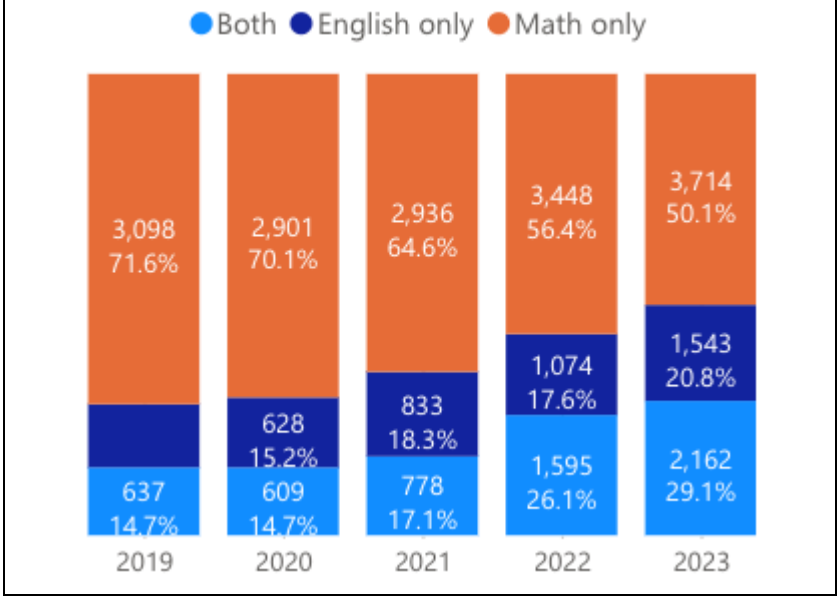


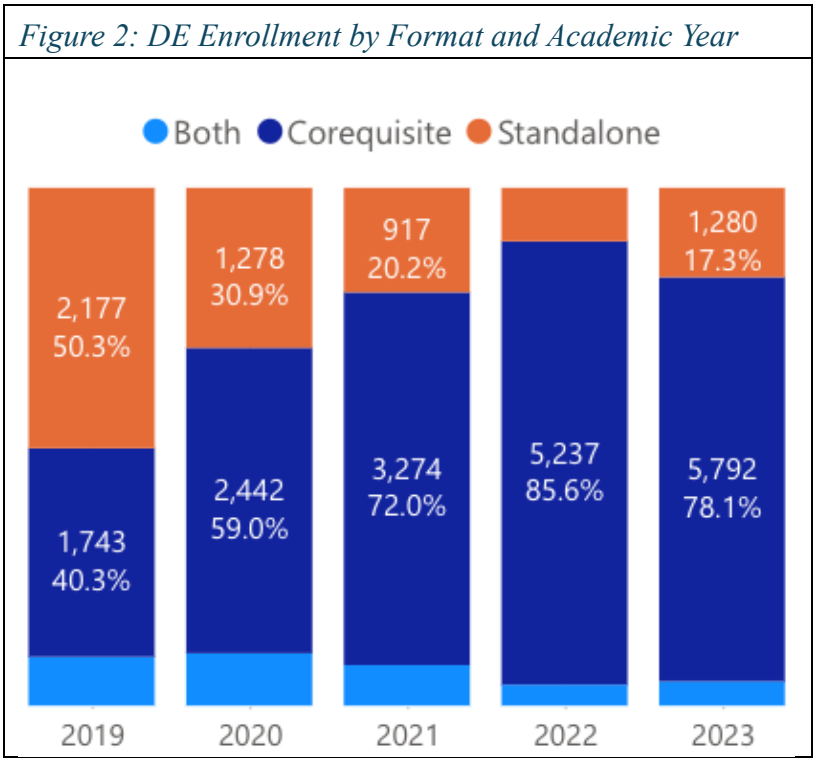
Figure 2 shows the distribution of student enrollments between standalone DE courses, corequisite courses, and students who enrolled in both standalone and corequisites in the same

semester. The proportion of students enrolled in corequisites has nearly doubled over time (from 49.3% in AY19 to 82.3% in AY23) yet appears to have declined by more than 5% between AY22 and AY23.

HB 2223 phased in a requirement for students to enroll in corequisites at increasing rates over time. Beginning in AY19, 25% of students were required to enroll in corequisites, growing to 50% in AY20, and 75% in AY21. In the spring of 2020, the THECB amended TSI rules to require that 100% of TSI-liable students enroll in corequisites, with some exceptions (THECB, 2020). Based on this data, it appears that some UT System institutions have experienced challenges in meeting the requirement to enroll 100% of TSI-liable students into corequisites. Prior research has documented challenges that institutions in Texas have faced in scaling corequisite support to 100% of TSI-liable students, including communication, advising, instructional capacity, classroom space, and adaptation of models to meet the needs of this growing population of students (Mokher & Park-Gaghan, 2023).

Another explanation could be that UT System institutions continue to place students into standalone DE based on low placement scores on the TSI-A2. TSI rules permit institutions to place students with very low placement scores into standalone DE courses.[3] Focus group data revealed that some institutions use low placement scores to assign students to standalone DE by default.

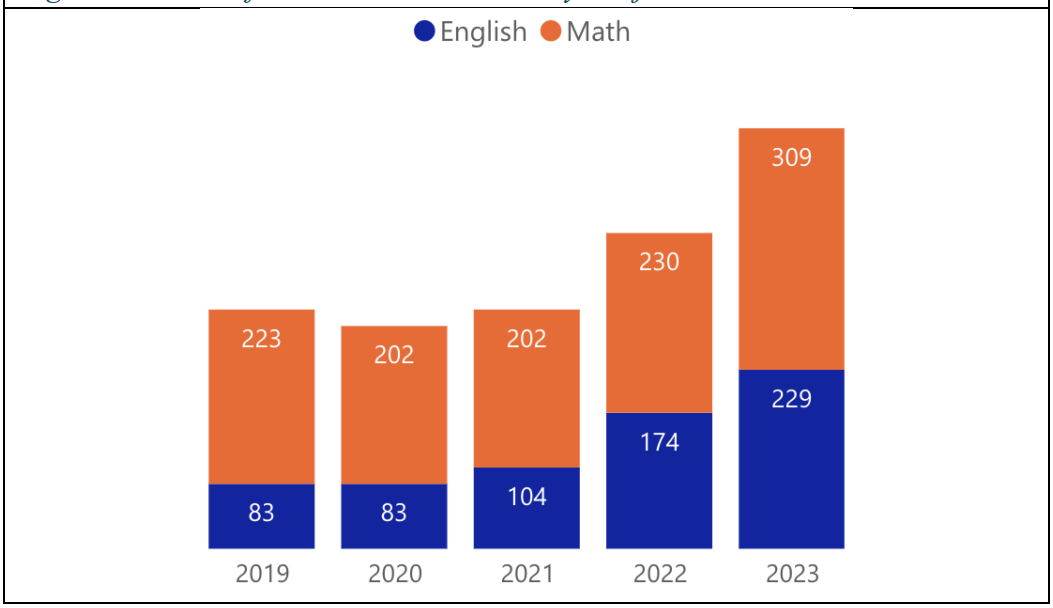
Figure 2: DE Enrollment by Format and Academic Year



[3] Students who score at Diagnostic Levels 1-4 on the TSI-A2 are permitted to be placed in standalone DE courses by rule, see: https://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=1&ch=4&rl=61

Figure 3 shows the count of enrolled DE sections from AY19-AY23. The number of DE sections in mathematics has grown 38.6% from 223 in AY19 to 309 in AY 23. For English, the growth of DE sections is a dramatic 176% from 83 in AY19 to 229 in AY23.

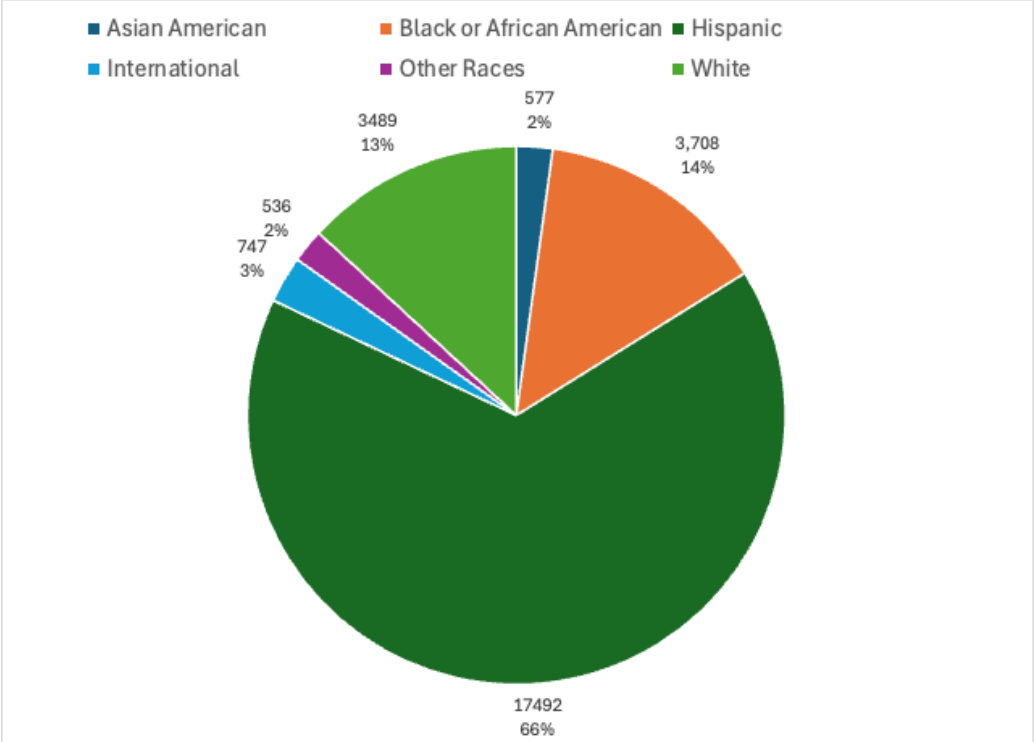
Figure 3: Count of Enrolled DE Sections by Subject and Academic Year



Student Characteristics

This section describes characteristics of students placed into DE. Figure 4 shows the distribution of student enrollments in DE by race. Hispanic students represent the majority of DE enrollments (65.9%), which is far greater than the total enrollments of Hispanic students across the UT System (44%). Black and African American students, similarly, are enrolled in DE at nearly double the rate of their overall enrollment in UT System (13.1% v. 7%, respectively). Conversely, white and Asian American students enroll in DE at much lower rates than for their total enrollment distribution across the system.

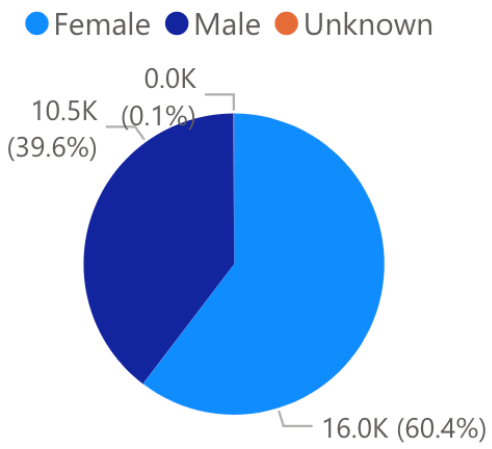
Figure 4: Race of Students Enrolled in DE, AY2019-2023



Distribution for all UT System enrollments: 12.4% Asian American, 7.4% Black or African American, 44.4% Hispanic, 8.8% International, 3.2% Other races, 23.8% White

Figure 5 shows the distribution of DE enrollments by gender. The distribution of male and female enrollments in DE is similar to the overall distribution of enrollments in the system. However, female students do have a slightly higher rate of enrollment in DE (60.5%) than they do in the UT System (55.6%).

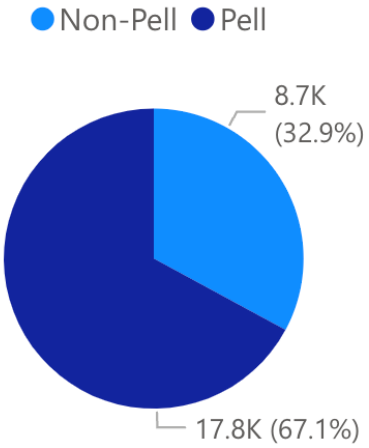
Figure 5: Gender of Students Enrolled in DE, AY19-23



Distribution for all UT System enrollments: 55.6% Female, 44.4% Male

Figure 6 shows the distribution of Pell-eligible and non-Pell-eligible students enrolled in DE. Pell-eligible students are significantly more likely to enroll in DE (67.1%) than they are to enroll in the system overall (41.5%).

Figure 6: Pell Status of DE Students, AY19-23

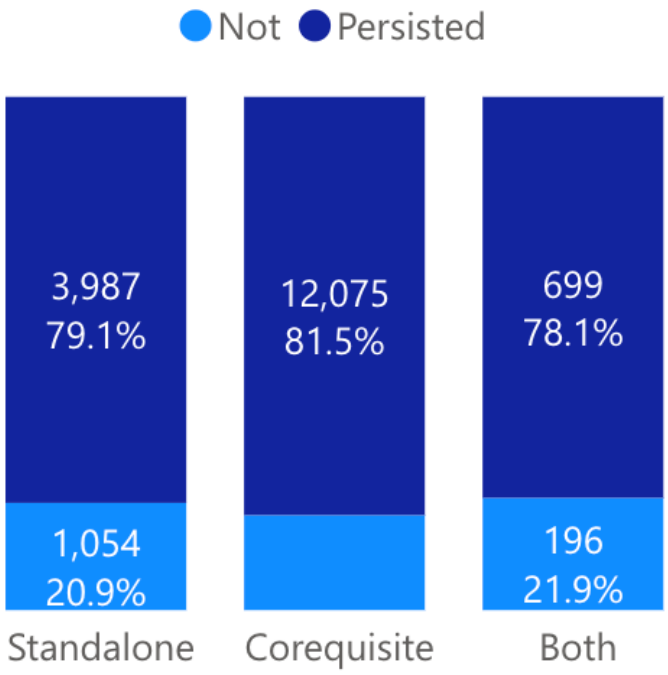


Distribution for all UT System Enrollments: 41.5% Pell, 58.5% Non-Pell

Student Outcomes

The following section describes academic outcomes, including persistence, retention, and graduation rates, for students by DE placement status and subject. Figure 7 shows fall-to-spring persistence for all students enrolled in DE by format (corequisite, standalone, and both). Students in standalone DE fail to persist at a slightly higher rate than students in corequisites and the overall population of students in the UT System, but the difference is not substantial.

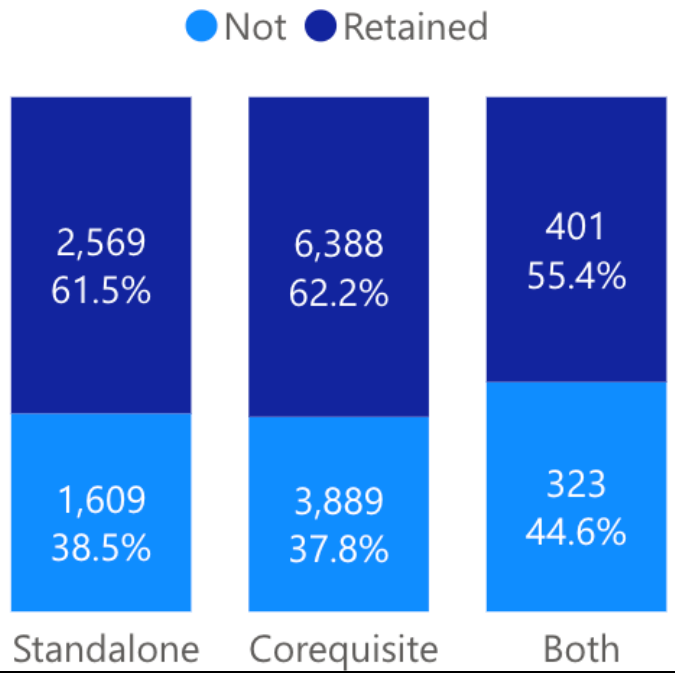
Figure 7: Fall-to-Spring Persistence for Developmental Students by Format, AY19-23



All UT System students: 18.3% did not persist, 81.7% persisted

Figure 8 shows fall-to-fall retention for students in different models of DE. Students in corequisites and in standalone DE continue to enroll in their second year at roughly the same rate, 61.5% and 62.2% respectively. Of students with an initial placement in both a corequisite and a standalone DE course, only 55.4% are retained. For all students that place into DE, the retention rates are lower than those for all UT System students at 71.1%.

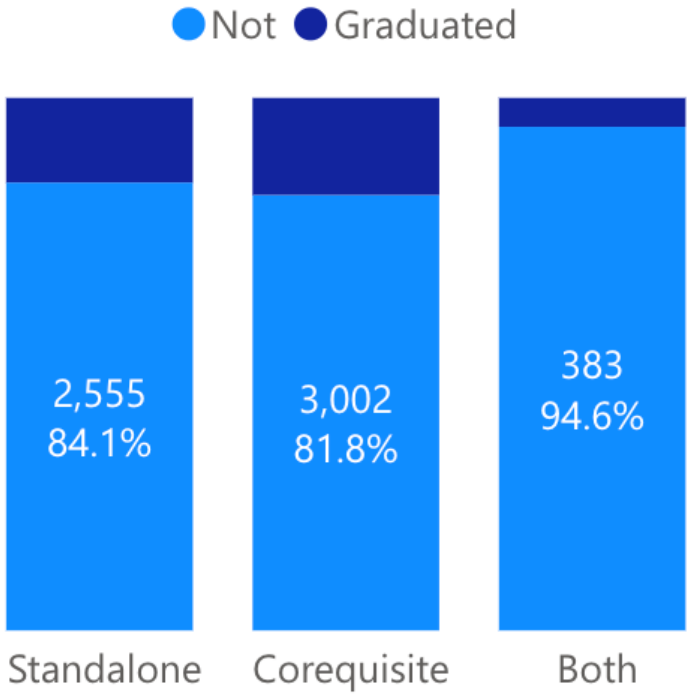
Figure 8: Fall-to-Fall Retention for Developmental Students by Format, AY19-23



All UT System students: 28.9% not retained, 71.1% retained

Figure 9 shows the 4-year graduation rates for two cohorts of DE students. Since this dataset only looks at 5-years of student outcomes, only students who initially enrolled in AY 19 and AY 20 are included in 4-year graduation rates. Students placed into corequisites have the highest 4-year graduation rates at 19.2%, followed by standalone DE at 15.9%, and, finally, 5.4% for students placed into both models. Students placed into DE have significantly lower 4-year graduation rates than the overall population of UT System students at 46.1%.

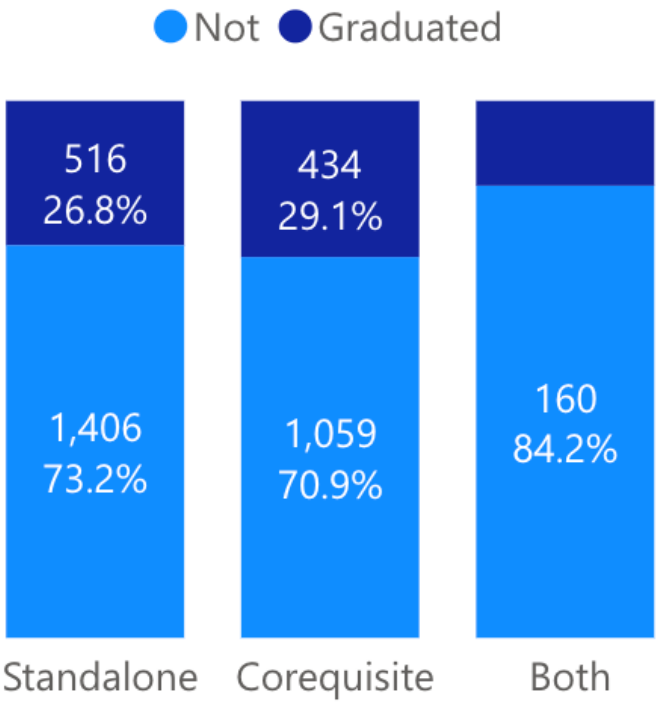
Figure 9: Graduation Within 4 Years for Developmental Students by Format, AY19 and AY20



All UT System students: 53.9% did not graduate, 46.1% graduated

Fortunately, the five-year graduation rates for DE students are higher than the four-year graduation rates, but still far from optimal. Figure 10 shows the five-year graduation rate for DE students that initially enrolled in AY19 by format. Students in standalone DE experienced a 5-year graduation rate of 26.8% and students in corequisites had a slightly higher graduation rate at 29.1%. Students in both standalone and corequisites had a significantly lower graduation rate of 15.8%.

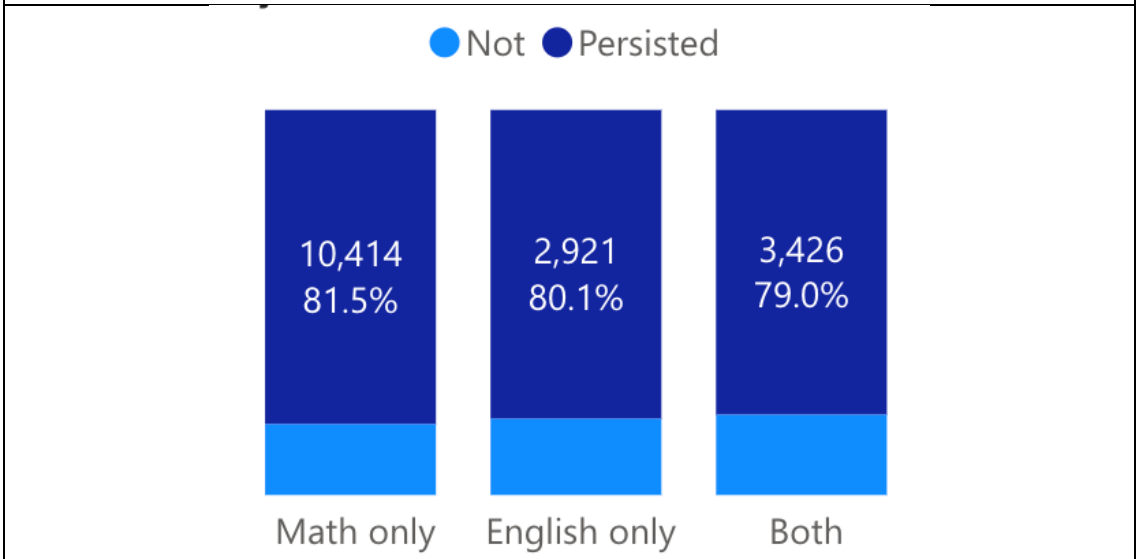
Figure 10: Graduation Within 5 Years for Developmental Students by Format, AY19



All UT System students: 40.6% did not graduate, 59.4% graduated

The next set of figures looks at student persistence, retention, and graduation rates by DE subjects. Figure 11 shows fall-to-spring persistence rates for students placed into DE for mathematics, English, and both subjects. Student persistence for all DE placements is roughly 80%, which is comparable to the overall rate of persistence in the UT System. However, students placed into both mathematics and English have a slightly lower persistence rate than all other student groups.

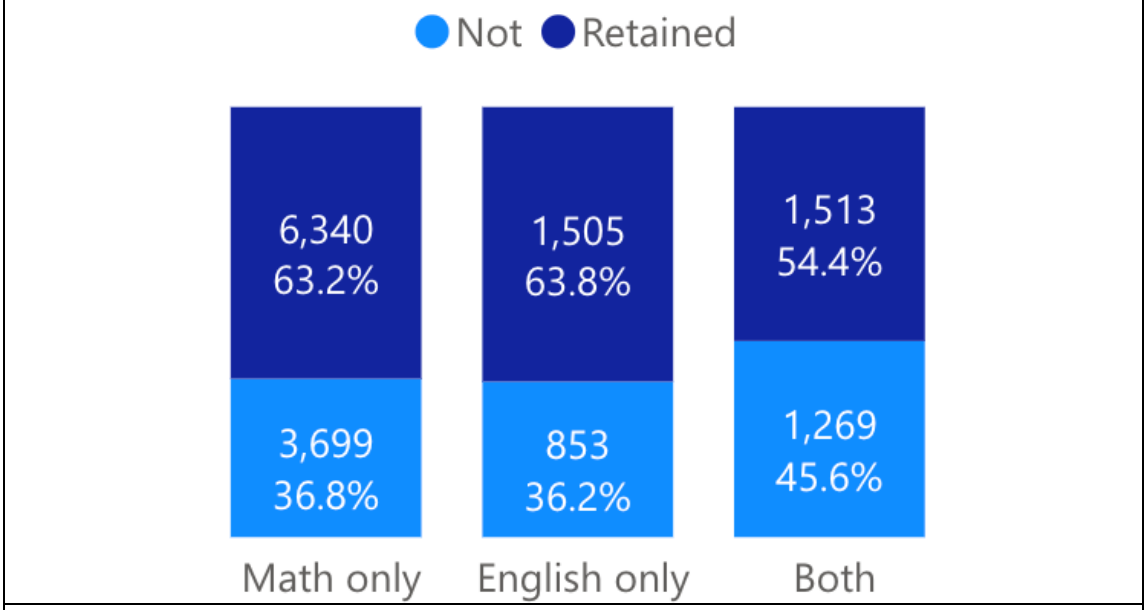
Figure 11: Fall-to-Spring Persistence for Developmental Students by Subject, AY19-23



All UT System students: 18.3% did not persist, 81.7% persisted

Figure 12 shows fall-to-fall retention for the same sets of students by DE subject. For students placed into DE for either mathematics only or English only, retention between years is approximately 63%. Students with a DE placement in both subjects drops to 54.4%. All DE students are retained at a lower rate than students in the system overall at 71%.

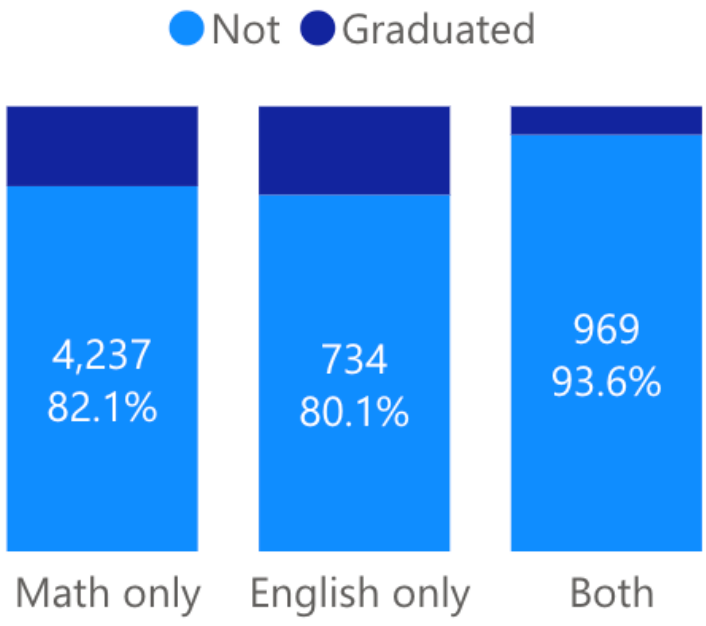
Figure 12: Fall-to-Fall Retention for Developmental Students by Subject, AY19-23



All UT System students: 28.9% not retained, 71.1% retained

Figure 13 shows 4-year graduation rates for students by DE subject for the AY19 and AY20 cohorts. Students placed into DE for mathematics and English have a graduation rate of 17.9% and 19.9% respectively. Students placed into DE in both subjects have a much lower graduation rate at 6.4%. DE students, in general, have a 4-year graduation rate lower than all UT System students.

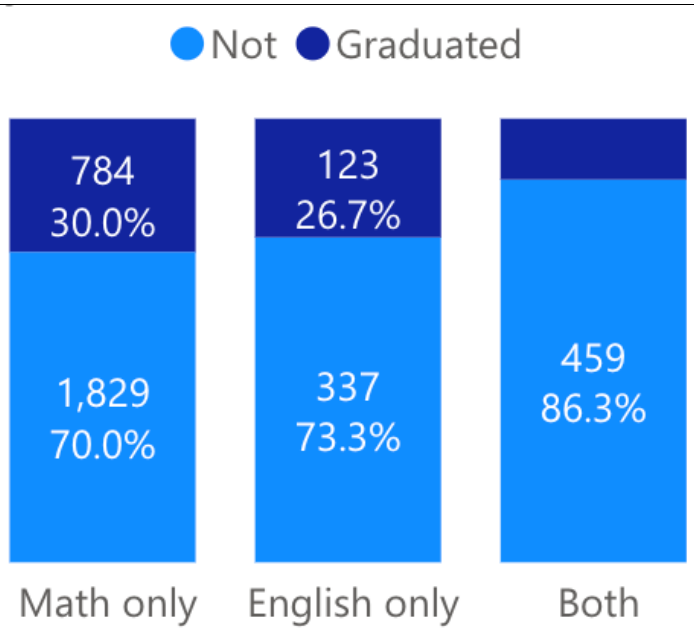
Figure 13: Graduation Within 4 Years for Developmental Students by Subject, AY19 and AY20



All UT System students: 53.9% did not graduate, 46.1% graduated

Finally, Figure 14 shows the 5-year graduation rates for DE students by subject for the AY19 cohort. Students placed into DE for mathematics only experienced a 30% 5-year graduation rate. Students in DE for English only had a lower 5-year graduation rate of 26.7%. Students in DE for both subjects had the lowest graduation rates at only 13.7%.

Figure 14: Graduation Within 5 Years for Developmental Students by Subject, AY19



All UT System students: 40.6% did not graduate, 59.4% graduated

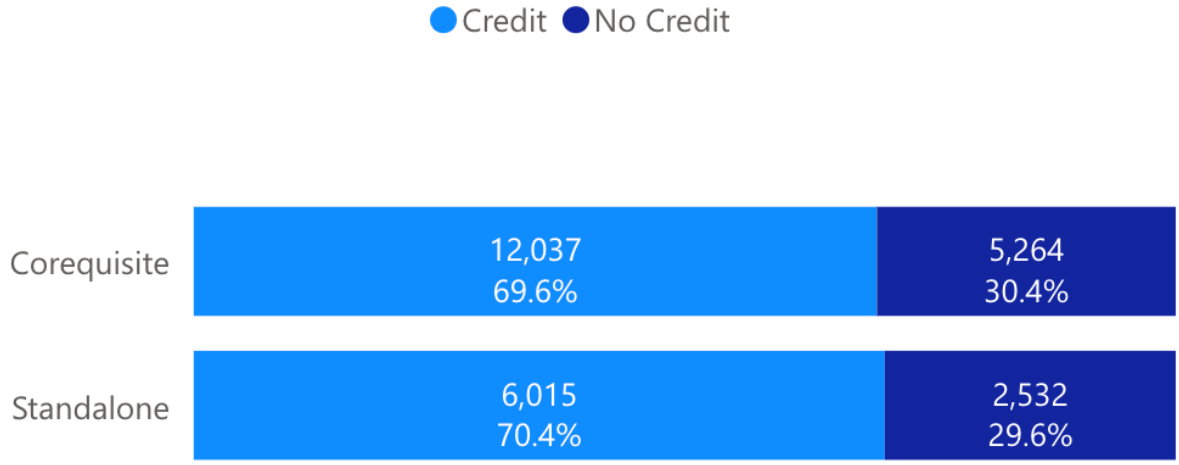
Math

This section describes results for mathematics from the student-level data analysis, survey, and focus groups. Although institutions use different criteria for determining successful course completion, each of the following figures were calculated using a standard cut score of "C or better" to determine if students earned course credit.

Student-level Data

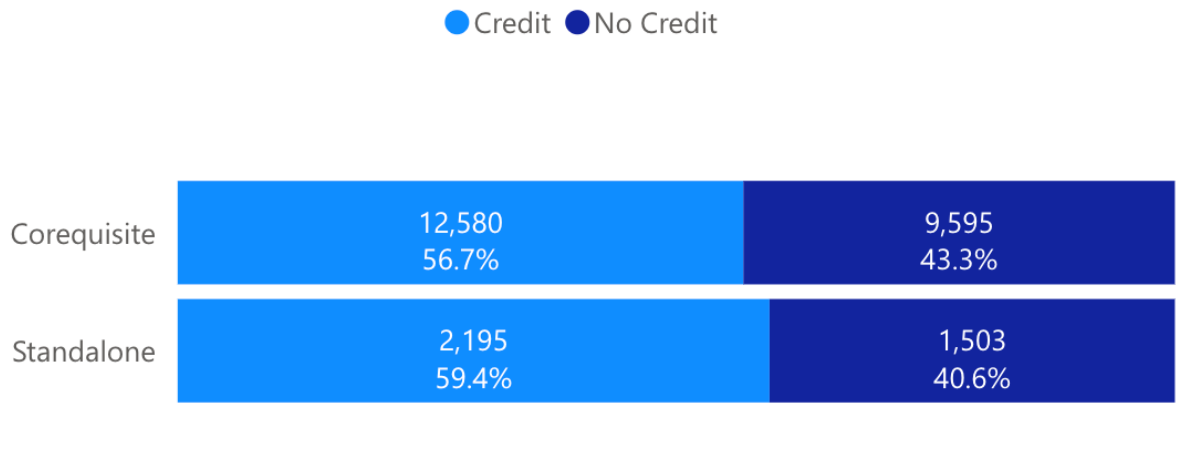
The next set of figures shows the course outcomes for students in developmental mathematics by format. Figure 15 shows developmental course completion for students in corequisite versus standalone DE. Students in both corequisite and standalone models earn developmental mathematics course credit at a rate of around 70%.

Figure 15: Developmental Math Course Completion Outcomes by Format, AY19-23



Next, figure 16 shows the proportion of students who earn credit in a CL course by DE format. 56.7% of students in corequisites earn CL credit in a corequisite while 59.4% of students who earn credit in a standalone DE course go on to earn credit in the CL course.

Figure 16: College-level Math Course Completion Outcomes by Format, AY19-23

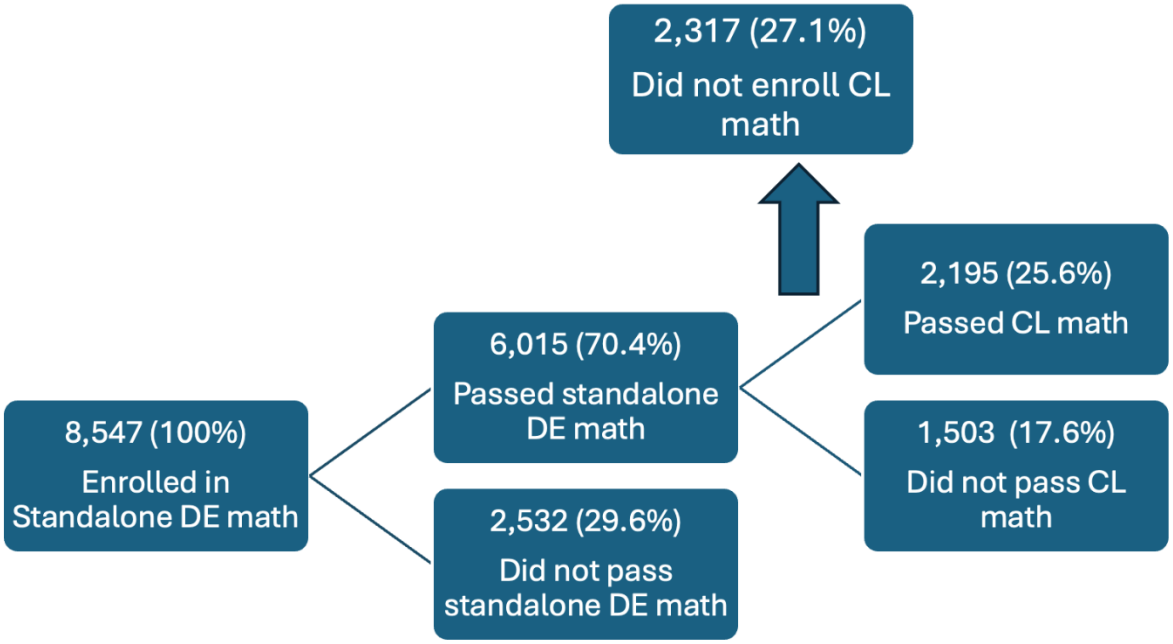


Although students in standalone DE appear to pass CL classes at a slightly higher rate than corequisite students, this does not mean that corequisites are less successful models and a few nuances are important to acknowledge. First, the volume of students placing into and passing corequisites is significantly larger than the number of students who pass a CL class after completing standalone DE. For mathematics, 12,580 students passed a corequisite course compared to 2,195 students who passed a CL course after completing standalone DE. This shows that significantly more students can pass CL courses in at least half of the time than they would in standalone models.

Second, looking only at individual course pass rates hides the fact that many students in standalone models never earn DE credit or enroll in a CL course. In other words, in the

standalone model, the students who earn CL credit after completing a DE course only accounts for students that successfully completed the prerequisite DE sequence *and* enroll in a CL course. Another way of measuring the success rate of students in standalone models is "throughput rate" analysis. Throughput rates calculate CL course completion rates for cohorts of students based on their initial placement into standalone DE, which includes students who did not earn DE credit and students who did earn DE credit but never enrolled in a CL course. As a result, throughput rates represent a more accurate measure of CL course completion for standalone students by accounting for multiple levels of attrition between DE and CL courses. Figure 17 shows the throughput rate analysis for students standalone DE for mathematics. Unfortunately, a large portion (27%) of students that successfully completed standalone DE in mathematics never went on to enroll in a CL mathematics class. In total, only 25.6% of students originally placed into standalone DE for math went on to earn CL credit in the subject.

Figure 17: Throughput Rates for Standalone DE Mathematics, AY19-AY23



Survey Data

For the following survey findings, the results represent responses for more than one individual from a UT institution. In other words, some institutions may be overrepresented in the results if more than one individual from the same institution responded to the survey. Thus, the *n* for each figure represents total responses, not institutions.

Figure 18 shows that most institutions only offer corequisite courses in mathematics. However, up to three institutions still offer standalone DE sections.

Figure 18: Count of respondents who say their institution offers standalone developmental math courses.

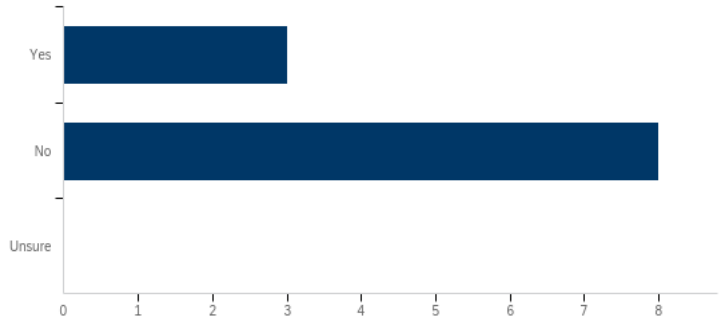


Figure 19 shows that one institution offers Adult Basic Education (ABE) courses in mathematics. ABE courses are generally used for workforce programs and public universities do not tend to receive federal or state funding to offer these courses. Historically, 2-year colleges are primarily responsible for offering ABE courses.

Figure 19: Count of respondents who say their institution offers Adult Basic Education (ABE) courses for mathematics.

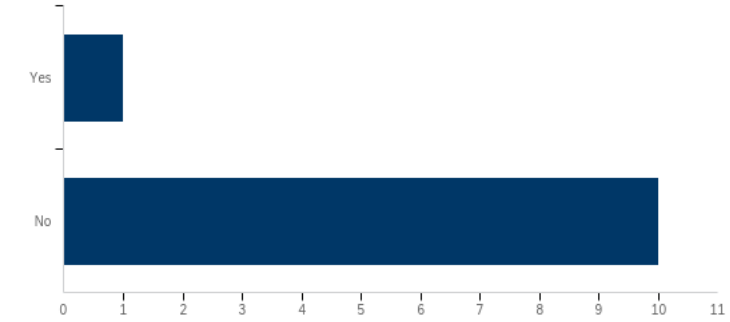


Figure 20 shows that almost all institutions offer corequisites for multiple mathematics pathways (MMP). MMP are curricular and policy changes that allow students to complete their degree requirements using mathematics courses that are best aligned to their programs of study (Burdman et al., 2018; Ganga & Mazzariello, 2018). For example, students in social sciences take a statistics course, liberal and fine arts students take a quantitative reasoning course, and students in programs that require calculus begin in a college algebra or precalculus course. MMP represents a growing recognition that the content of college algebra is not as relevant as other courses for programs that do not require calculus. Research suggests that corequisites are most likely to positively improve student outcomes when aligned with MMP (Douglas, Logue, & Watanabe-Rose, 2022; Ran & Lin, 2022).

Figure 20. Count of respondents who say their institution offers corequisites for multiple mathematics courses.

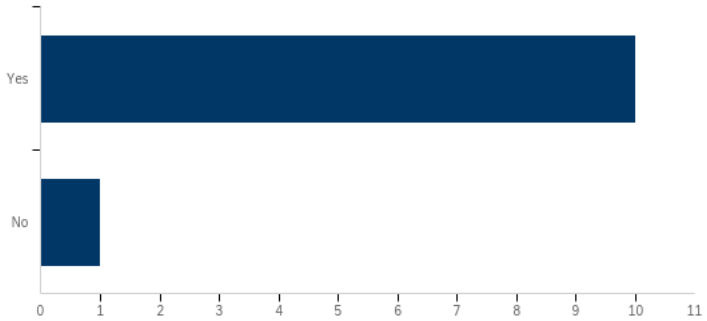


Figure 21 shows the distribution of MMP options at UT System institutions. Math 1314 College Algebra and Math 1332 Quantitative Reasoning/Contemporary Mathematics are the most frequently offered options, with 8 respondents indicating their institutions offer corequisite versions of these courses. Next, 6 respondents indicate that their institution offers Math 1324 Mathematics for Business and Social Sciences as a corequisite. Only 5 respondents indicate that their institution offers Math 1342 Elementary Statistical Methods as a corequisite.

Finally, three respondents indicate that their institution offers other mathematics courses as corequisites. These courses are not defined by THECB as one of the four "entry-level courses" that are required to be offered as corequisites. These institutions have taken additional steps to ensure that students are placed in corequisites that best aligned to their programs of study and readiness. One additional course offered as corequisites is Math 1350 Mathematics for Teachers, which is the first course of a three-course sequence designed for students pursuing an elementary teaching certificate. The other course is Math 2312 Pre-Calculus, which some institutions offer as a corequisite with Math 1314 College Algebra for students who must complete calculus for their degree program. In addition, 2 institutions have offered corequisites for Math 2314 Calculus 1. Typically, Calculus 1 corequisites are not offered for students with a TSI-liability, but rather for students that do not score high enough on placement tests for calculus readiness.

Figure 21. Count of respondents who say their institution offers various entry-level math courses with corequisite support.

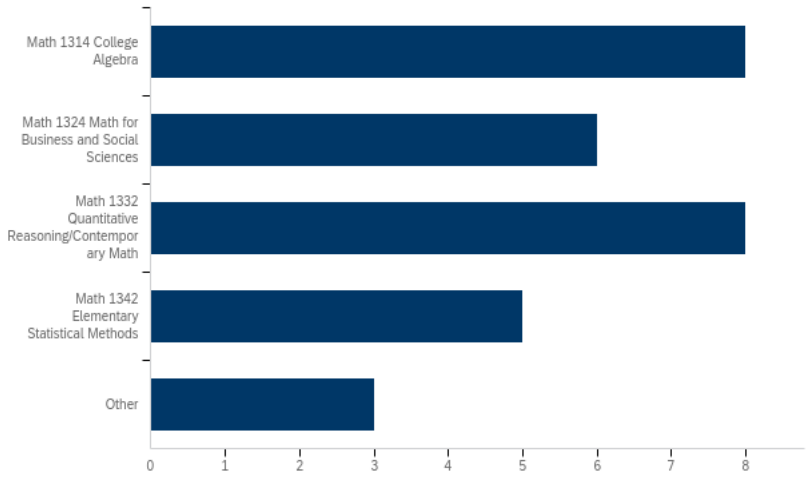


Figure 22 shows that half of the survey respondents use more granular TSI-A information to place students into different levels of developmental supports. For some institutions, this means that students with lower TSI-A scores are assigned to more intensive levels of support, whereas students who score near the top-range of the cutoff may receive less intensive support. Half of respondents do not differentiate support based on TSI-A score ranges.

Figure 22. Count of respondents who say their institution sets different TSI-A scores for placement into different levels of developmental or corequisite support.

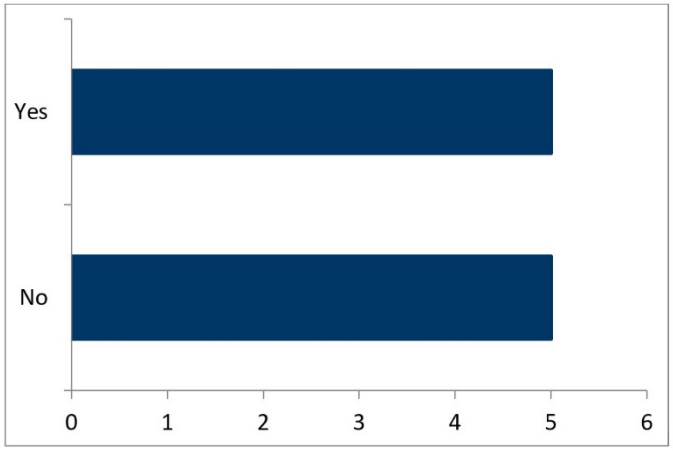


Figure 23 shows the count of respondents who report that their institution uses multiple measures to assess the readiness of students for different levels of developmental mathematics support. Multiple measures assessment (MMA) refers to the principle that TSI-A scores alone are not accurate or reliable predictors of student readiness for CL coursework. Research shows that measures like high school GPA are more predictive of student outcomes in CL courses and that

standardized placement scores are prone to errors that tend to underestimate student readiness (Scott-Clayton, Crosta, & Belfield, 2014).

TSI rules permit institutions to use multiple measures to determine the dosage of developmental support for students. However, unlike common policies in other states, THECB does not allow institutions to use MMA to exempt students from placement into DE. The only exception is for institutions participating in THECB-sponsored MMA studies.

Figure 23. Count of respondents who say their institution offers uses multiple measures (other than TSI-A scores) to place students into different levels of support.

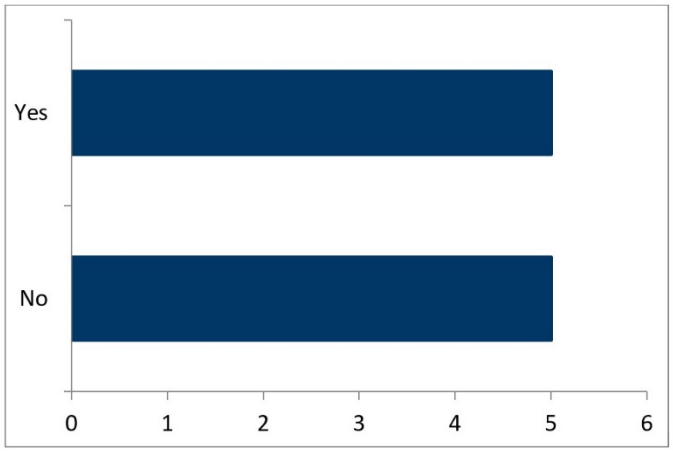


Figure 24 shows the counts of metrics that institutions use for MMA. High school GPA and prior coursework are the most common options, followed by high school rank and workforce experience.

Figure 24. Count of respondents who specify additional measures their institution uses to determine placement levels.

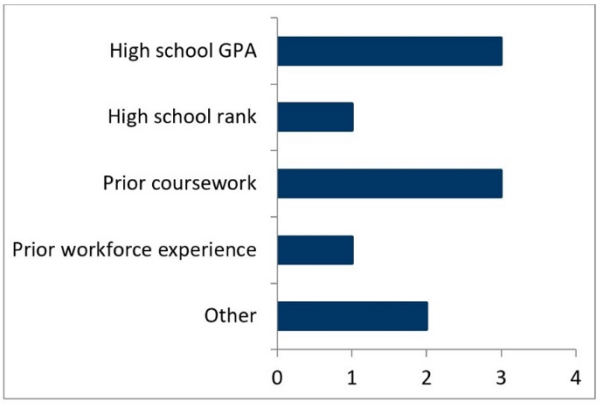


Figure 25 shows the count of institutions who report that their institution has a partnership with a local school district to exempt students from TSI-liability using a "transition course." Three of 9 institutions report having a transition course partnership, 5 do not have a transition course, and 1 is unsure about the existence of a transition course. Transition courses were authorized by the Texas Legislature in 2013 through HB 5 and are developmental courses offered to high school students. Students that successfully complete the transition course can enroll directly into an entry-level mathematics course upon matriculation to their partnered institution. Transition courses could help students improve readiness for CL mathematics, but existing program evaluations show limited evidence that these courses promote student preparedness and success (Pustejovsky & Joshi, 2020).

Figure 25. Count of respondents who say their institution offers a partnership with a local ISD to use the HB5 Transition Course for students to receive a TSI liability waiver.

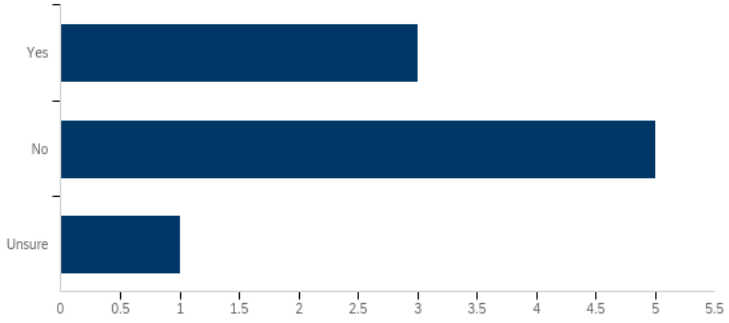


Figure 26 shows the various models of corequisite mathematics offered by institutions in the UT System. The survey displayed the following graphic from Park-Gaghan et al. (2022) and asked institutions to select which of the following approaches most closely matches their approach to corequisite supports.

Figure 26: Image of corequisite models from Park-Gaghan et al. (2022)

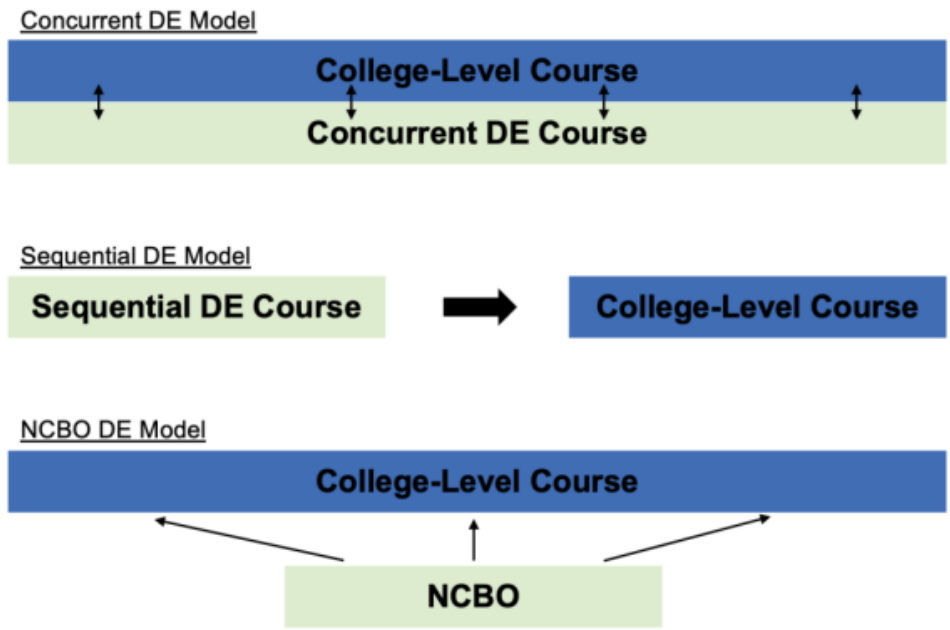
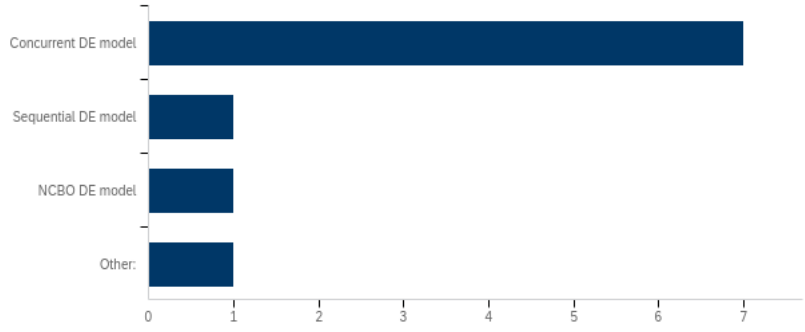


Figure 1. Different structures of corequisite DE courses

Figure 27 shows that the majority of respondents selected the concurrent DE model, with one institution selecting sequential and another selecting non-course-based option (NCBO). The institution that selected "other" indicated that their campus does not offer DE. The concurrent model is the most common across Texas and the most likely to deliver just-in-time supports for that align the content of the DE course with the CL course (Park-Gaghan et al., 2023; Richardson, 2021).

Figure 27. Count of respondents who say their institution offers various models of corequisite support for mathematics.



Qualitative Data from Survey and Focus Group

Qualitative data from the survey and focus group offer additional contextual information concerning the strengths and challenges of corequisite mathematics at UT System campuses. The following sections detail those findings, and a summary of the results is as follows:

Summary of Strengths

- Corequisite models that have tightly aligned content and instruction between the DE and CL sections.
- Instructional techniques that support student engagement and motivation, while connecting students with additional non-academic supports.
- Curriculum that adopts multiple mathematics pathways as a strategy for aligning learning outcomes to programs of study.

Summary of Challenges

- Corequisite models that separate the DE and CL sections into separate departments, resulting in limited coordination between instructors and misalignment of course content.
- Large class sizes and logistical challenges with scheduling.
- Insufficient numbers of qualified instructors to meet enrollment demand and limited opportunities for professional development.
- Curriculum that is heavily weighted towards college algebra and underplacement of students.

Strengths

Several responses focused on the features of their corequisite models that they attribute to student success. For institutions using a concurrent model for corequisites, the “just-in-time" delivery of developmental content to align with the learning needs of the CL course was a key strength. One respondent stated, “it is mastery learning with modularized content created as just-in-time content for their college-level courses.” Another reported the strength of their corequisite as, “just-in-time teaching utilizing scaffolding.”

Another feature of corequisite models identified by many respondents as a strength was having a single instructor for the DE and CL sections of the corequisite. One respondent stated, “same instructor for lab/lecture and/or foundations/credit-bearing class.” Another response stated, “Having the same instructor teach the credit-level and the developmental section.”

Another focus was the importance of communication that frames the corequisite support in terms of students’ strengths. One respondent stated, “A corequisite class is taught by one instructor as a single class and the word "developmental" is never used. We talk about the advantages of the extra supports and the students feel special as a result.” A focus group respondent discussed the importance of student communication in framing the integration of CL and DE,

> All of [our corequisite] classes are just-in-time models. So, the same professor teaches those courses. I saw somebody ask about lab or lecture. We don't break it up. Students sign up for a developmental section and a regular section and they meet with the same instructor for those classes. Once they are signed up, we completely drop any language about developmental and we talk only about how lucky the students are to be provided

> with the extra support that they need to be successful in their first math class. And that mindset, I think, has really helped students be successful.

Another participant also spoke about the importance of framing the corequisite support for students,

> So, our goal is to keep making it a safe place for them to ask questions and to be continually surrounded by the same people. We also engage in conversation that this is a positive thing for you. You don't see this as having to do math every single day, [instead] see this as the university doing everything that we can to make sure you are successful and continually providing you with this process to get the help you need.

Another participant spoke about specific efforts to reduce stigma of DE placement,

> I always try at the very beginning of the school year to not make being in the [developmental education] course or coreq any kind of stigma. So, I try to reiterate over and over and over again just how important communication is and how useful it will be to be in this course, because having an extra person to....help to teach how the course goes is usually helpful.

Even for institutions that do have a separate instructor for the DE and CL sections of their corequisite, some respondents did emphasize effective collaboration across departments as a key to success. One respondent stated, "instructors are knowledgeable about other support and success initiative resources on campus. We work with success offices and our [learning center] across the institution to make sure our students are part of these and offer more support through workshops and tutoring sessions." Another participant said that having separate instructors allows for flexible scheduling to accommodate student schedules,

> The department places my course either on the same day or on alternate days, just really depending on the schedules of the students. They really try to structure when I meet with them based on when is the best time to fit my schedule in. So, this semester, for example, I am seeing students on Monday and Wednesday, and they have their [college-level] class on Tuesday, Thursday.

A final feature of successful corequisites was the presence of multiple mathematics pathways aligned to student majors. Respondents identified that they may have started with providing corequisite support for a single course, but over time expanded corequisite support for multiple entry-level math courses. One focus group participant described the way that their corequisites have evolved over time, signaling the need for continuous improvement and patience as corequisites move from pilots to scaled interventions. They stated,

> We started offering our first corequisite…a decade ago. The first time we offered one was in college algebra and we've changed a lot since then. Of course, we adapt as we go. We now offer corequisite courses in all of our entry-level mathematics pathways, except for calculus. So, we have college algebra [Math 1314], 1332 [Quantitative Reasoning], 1342 [Statistics], 1350 [Mathematics for Elementary Teachers], and 1324 the business pathway.

Another respondent also described their multiple corequisite mathematics pathways,

> So we have 4 coreqs and all of our students are enrolled based on pathways by their discipline. So, our general college algebra course is typically nursing majors and some psych that needs algebra for chemistry or biology. Our other version of college algebra is for STEM, like engineers and scientists. We do a business algebra course and our liberal arts quantitative reasoning course. All students are placed in the coreqs. We have no standalone dev ed anymore.

Challenges

One of the most common challenges reported by institutions is the limited availability of instructors to meet student demand for corequisite courses. One survey respondent stated, "staffing is a challenge," and, "high enrollment and not enough faculty." A focus group participant added,

> Right now, there are not enough corequisite courses. They just do not currently have the capacity to do that. I'm not exactly sure why, [but] I think it comes down to staffing and budgets. Currently, they don't have enough ways to support all those different students and all the different majors.

Some departments have addressed the issue of "[insufficient] SACSCOC qualified faculty to cover the sections" by using graduate assistants to staff the developmental sections of corequisite courses. One focus group participant noted, "the way our developmental courses are typically structured is separate from the math department. Our courses are actually taught through graduate TAs as the facilitators for the developmental side of the house."

While this represents one possible strategy to address staffing capacity, having separate instructors in separate departments can create additional challenges. For institutions that have DE housed in a separate department, coordinating with the academic department was a key challenge. One survey respondent stated,

> Buy-in from the college-level department.... no control over the college-level course instructor and their understanding of how to work with underprepared students; no control over college-level curriculum nor when or how changes occur; difficulty aligning the co-requisite course to college-level course because each college-level instructor can determine their own assignments.

A focus group participant shared a similar concern, "the biggest issue may be the communication between the college-level faculty and the developmental faculty and really linking [the courses] together. The ideal situation is where we're working in a partnership."

Nonetheless, some have established strong coordination and communication across departments. A focus group participant stated,

> So, before the semester starts, I'm communicating with the professors, letting them know about my role in their students' success, and how developmental courses works with their corequisite courses. I try to communicate with them about any students that I notice having issues with anything that they can share with me, you know, without breaking any kind of protocol about how students are doing in their course.

Limited instructional capacity is compounded by the lack of professional development opportunities for corequisite instructors. One response stated, "The need of funding to support

staff needs." And another added, "professional development for adjunct faculty." Another stated, "Lack of formal training for instructors specifically related to this population of students." Given the unique learning needs for the population of students assigned to corequisites, providing instructors with the knowledge and skills to promote students' success is essential.

An additional challenge was interconnected issues of large class sizes, difficulty scheduling, and insufficient space. One respondent commented on each of these topics together, "Class size is way too large. Scheduling the amount of time needed for 6 hours of class. Physical classroom space." Another added, "student [enrollment] growth, finding enough staff and spaces." A focus group participant also commented on these dynamics, stating, "scheduling and linking the sections is quite complicated. I think Banner isn't always easy to link the sections. and then you're always having to check enrollment to see if their schedule matches. It's a time-consuming efforts on our part."

Another challenge to accessing corequisites appears to be underplacement of students. TSI rules permit institutions to place students into standalone DE if they score at the lowest levels of the TSI-A. However, some mathematics departments appear to use this placement procedure as a default by automatically placing students with low scores into standalone DE. One focus group participant describes how this occurs at their institution,

> The COVID numbers have dramatically decreased [the number of students placing into corequisites] because all of our students are placing lower than [our corequisite level]. [Students are] placing into that diagnostic level 1 through 4 [which is exempt from the corequisite mandate]. We use the TSI-A as our placement into corequisites and they have to be diagnostic level 5 [to be eligible for corequisites based on our institution's policies]. We put them in an NCBO and then into an intermediate algebra class. That's a 4-week, plus a 12-week, and they complete that entire sequence in one semester.

Since students are significantly more likely to earn college credit through a corequisite, and significantly more likely to stop out because of standalone DE placement, this practice should be reconsidered. In addition, because standardized placement tests systematically underestimate student readiness, institutions should consider using multiple measures to more accurately assess readiness for corequisites.

Another challenge that many participants voiced was how to encourage student participation in the DE section of a corequisite. Some institutions appear to be using a practice of linking performance in the DE section with the grade in the CL section to try to encourage students to more actively engage with the DE material, noting that some students perceive the DE section as optional. One focus group participant stated,

> Getting the students who are required to be in those courses to be equally engaged and understand that them being in that is not a punishment as they view it. My wording is [that] this is for your benefit. This is to ensure your success. But a lot of our students think well, 'I have to attend the college algebra. I can choose to attend or not attend the developmental.' Well, that's not true, because the attendance to the developmental is paired with the corequisite course. So, their attendance is part of the grade that they receive in the other.

Although institutions should work to ensure that the content of the DE section is tightly linked to the CL course and use pedagogical practices that engage students in both sections, they should avoid policies that punish students for their performance in the DE component of the corequisite. Another option would be to construct a corequisite model that fully integrates DE and CL material so that students do not experience a separation between the sections.

Finally, one instructor noted how much non-academic factors affect student success in corequisites. They stated,

> I do have some students who have huge hurdles to get through outside of school. Some of them are single parents. Some of them are insecure as far as like home security, like not having a stable housing. So, there's some students who I'll talk to them, and they'll explain what's going on outside of school, whether it's how many hours they have to work, lack of sleep, lack of ability to attend all their classes, because there's just all these outside pressures that they're having. And as a faculty member, that's just not something I can help with."

Since most DE students receive Pell grants, this population is most vulnerable to these challenges. Corequisites can represent an opportunity to shrink the gap between academic and non-academic support and instructors can work to increase their knowledge of institutional resources available to address student basic needs.

Questions

Finally, the survey and focus groups asked participants to identify some of the most pressing questions that they are facing with corequisites. Most responses indicated that they simply wanted to learn more about what is happening at other campuses and the CoP meetings are already creating a forum for addressing that interest. Some of the specific questions that others were interested in are listed here:

- Our math faculty are new to the idea so ground up information will be helpful.
- How does your campus communicate TSI requirements to admitted students? What are some of the funding opportunities your institution is applying to in order to meet the demand of students? What are the ways in which other institutions are preparing during summer advising?
- What are the admissions and placement standards of other institutions? What are the departmental curricular resources they have available? What publisher and/or online learning resources are they using? How are their co-requisite courses split between lecture and lab? What are their average class sizes? Are other requirements tied to their grade? (i.e. tutoring, etc.)?
- How are students placed? How are you dealing with the growth in number of students or adapting content/course structure to account for the growth? How do you get students to be actively engaged in your coreqs? What is attendance like and how is it weighed? Do you offer online versions of the coreqs, and how successful are they?
- Are there effective approaches we can use to better support student success and increase grade distributions in co-requisite paired courses? Are there alternative pathways that avoid classes like College Algebra but still sufficiently prepare students for their majors in STEM and non-STEM fields?

- What are strategies to engage students and keep them motivated to learn the math needed? What are strategies needed in developmental education?

English

The following sections describe findings specific to English corequisites from each of the data sources. Although institutions use different criteria for determining successful course completion, each of the following figures were calculated using a standard cut score of "C or better" to determine if students earned course credit.

Student-level Data

Figure 28 shows student outcomes for the developmental course section by format. Students appear equally likely to earn credit for the developmental English class in both the corequisite model and the standalone model, 74.7% versus 75.8% respectively.

Figure 28: Developmental English Course Completion Outcomes by Format, AY19-23

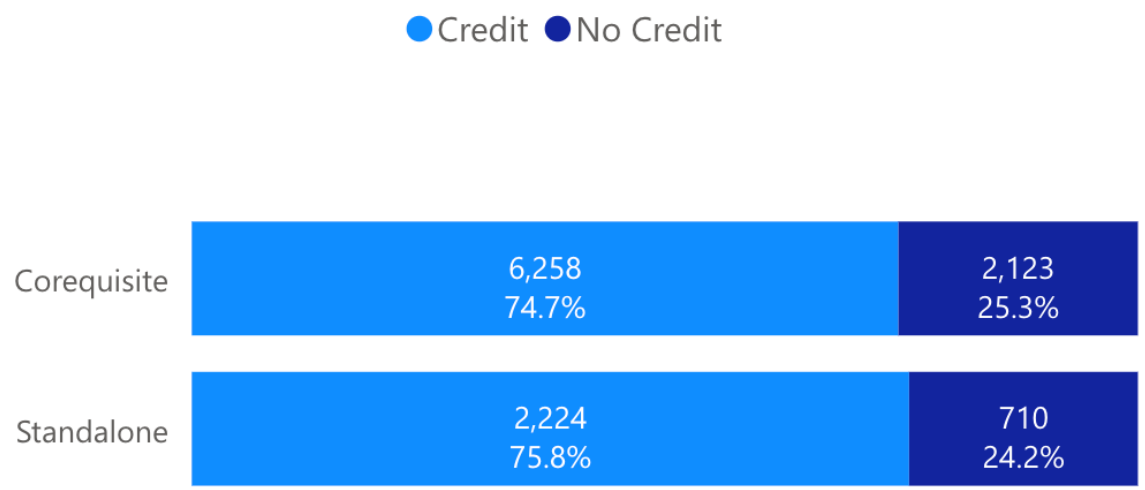
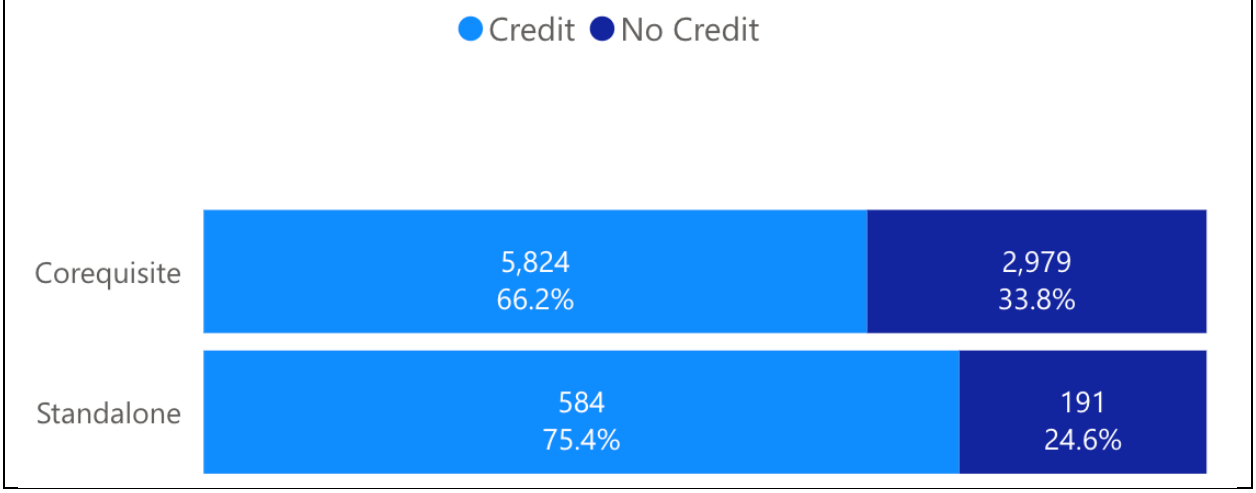


Figure 29 shows student outcomes in CL English by DE format. Students in the corequisite English model appear to pass the CL class at a lower rate than students from the standalone model, 66.2% versus 75.4% respectively. However, a couple of nuances are worth exploring. The volume of students passing corequisites is significantly higher than the volume of students passing in the standalone model. With corequisites, 5,824 students earned CL credit in English and in standalone model only 584 students completed the CL course. In addition, this does not account for the more than 700 students in a standalone model who never earned credit for the DE course and, thus, were never able to access a CL English class.

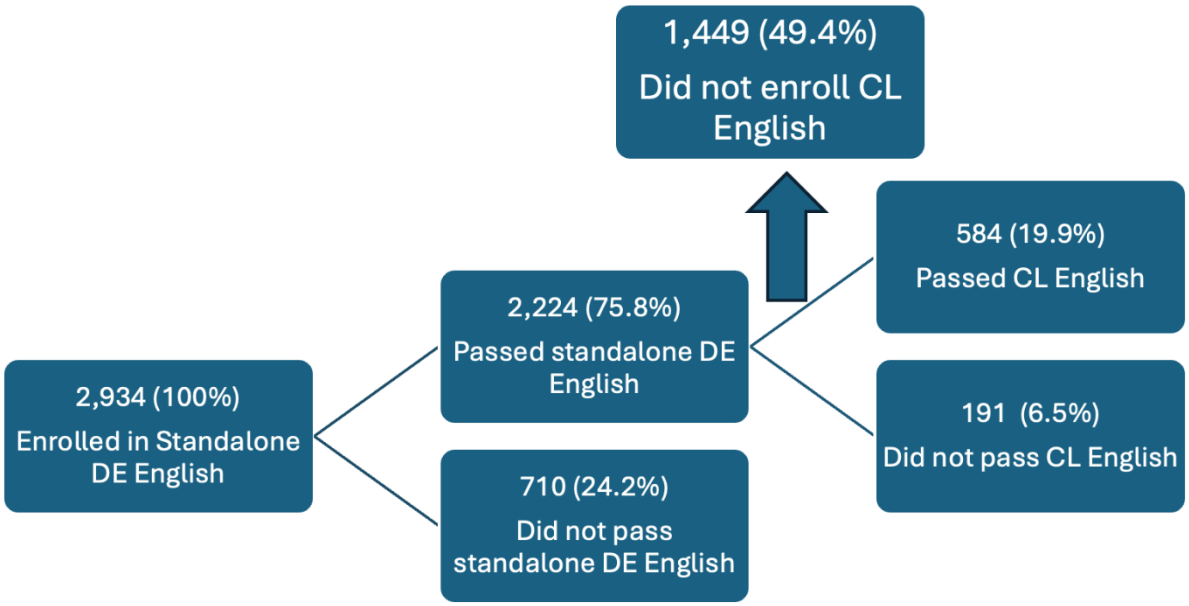
Figure 29: College-level English Course Completion Outcomes by Format, AY19-23



Furthermore, looking only at individual course pass rates hides the fact that many students in standalone models never earn DE credit or enroll in a CL course. In other words, in the standalone model, the students that earn CL credit after completing a DE course only accounts for students that successfully completed the prerequisite DE sequence *and* enroll in a CL course. Another way of measuring the success rate of students in standalone models is "throughput rate" analysis. Throughput rates calculate CL course completion rates for cohorts of students based on their initial placement into standalone DE, which includes students who did not earn DE credit and students who did earn DE credit but never enrolled in a CL course. As a result, throughput rates represent a more accurate measure of CL course completion for standalone students by accounting for multiple levels of attrition between DE and CL courses.

Figure 30 shows the throughput rate analysis for students standalone DE for English. Unfortunately, almost half of the students that successfully completed standalone DE in English never went on to enroll in a CL English class. In total, only 19.9% of students originally placed into standalone DE for English went on to earn CL credit in the subject.

Figure 30: Throughput Rates for Standalone DE English, AY19-AY23



Survey Data

Figure 31 shows the count of survey respondents who state that their institution uses TSI-A score levels to differentiate the intensity of developmental support. For example, students who score near the cutoff would receive less support and students who score lower would be assigned to more intensive support. Most respondents (8 of 12) indicated that their institution does not use this strategy. Although TSI-A scores are only one indicator of readiness for CL English, it can be useful for differentiating the intensity of DE supports that a student needs.

Figure 31. Count of respondents who say their institution sets different TSI-A scores for placement into different levels of developmental or corequisite support.

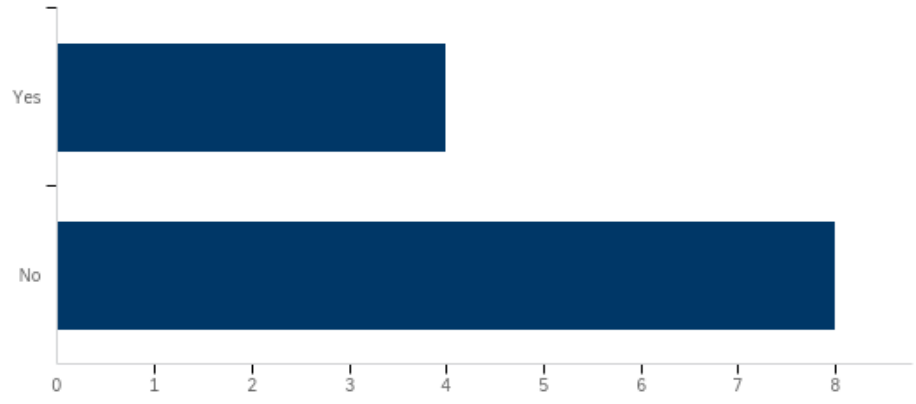


Figure 32 shows the count of respondents who indicate that their institution uses multiple measures to place students into different levels of DE support. Fewer than half (5 of 12) respondents indicate that their institution uses multiple measures assessment (MMA). MMA refers to the principle that TSI-A scores alone are not accurate or reliable predictors of student readiness for CL coursework. Research shows that measures like high school GPA are more predictive of student outcomes in CL courses and that standardized placement scores are prone to errors that tend to underestimate student readiness (Scott-Clayton, Crosta, & Belfield, 2014).

TSI rules permit institutions to use multiple measures to determine the dosage of developmental support for students. However, unlike common policies in other states, THECB does not allow institutions to use MMA to exempt students from placement into DE. The only exception is for institutions participating in THECB-sponsored MMA experiments.

Figure 32. Count of respondents who say their institution offers uses multiple measures to place students into different levels of support.

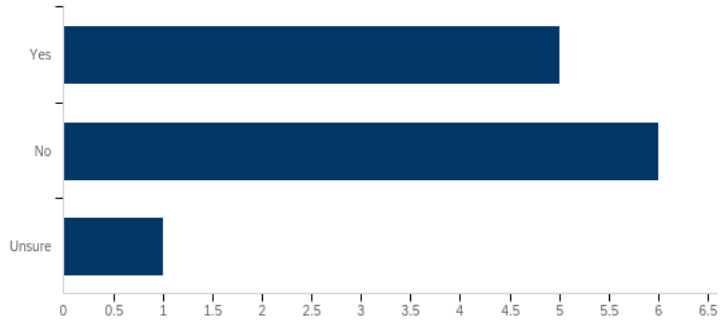


Figure 33 shows the counts of metrics that institutions use for MMA. High school GPA and prior coursework are the most common options, followed by high school rank and other metrics. The other metrics that were specified include scores on other standardized tests, such as SAT and ACT.

Figure 33. Count of respondents who specify multiple measures that their institution uses to determine placement levels.

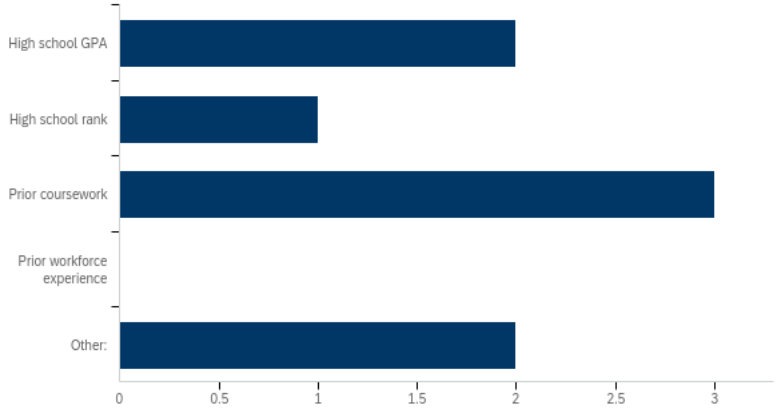


Figure 34 shows the count of respondents who indicate that their institution has a policy allowing students to retake the TSI-A. Most respondents (7 of 11) say that their institution does have a retake policy, while 2 said 'no' and 2 were 'unsure.' Institutions that do not have a formal retake policy should consider adopting one to allow students additional opportunities to demonstrate college readiness.

Figure 34. Count of respondents who say their institution has a policy allowing students to retake the TSI-A.

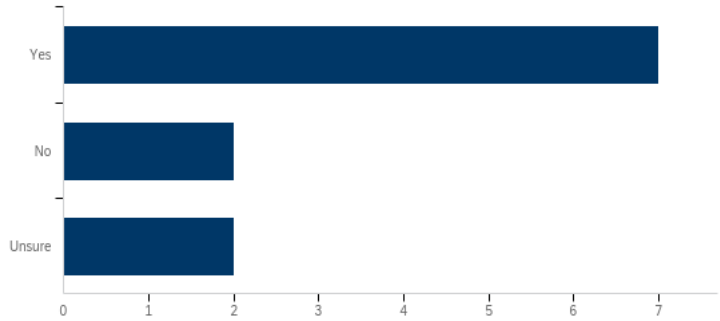


Figure 35shows the count of institutions who report that their institution has a partnership with a local school district to exempt students from TSI-liability using a "transition course." Only 2 (*n = 11*) respondents indicate that their institutions have established a transition course partnership, 4 do not have a transition course, and 5 are unsure about the existence of a transition course. Transition courses were authorized in 2013 by HB 5 during the 83rd Texas Legislature regular session and are developmental courses offered to high school students. Students that successfully complete the transition course can enroll directly into a CL English course upon matriculation to their partnered institution. Transition courses could help students improve readiness for CL mathematics, but existing program evaluations show limited evidence that these courses promote student preparedness and success (Pustejovsky & Joshi, 2020). Comparable evaluations for English transition courses have not been conducted.

Figure 35: Count of respondents stating that their institution has a partnership with a local ISD to use the HB5 Transition Course for students to receive a TSI liability waiver.

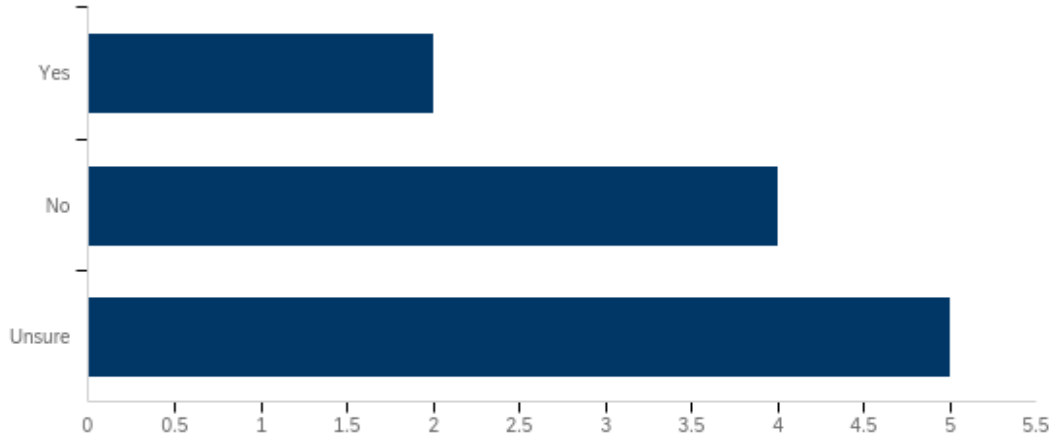


Figure 36shows the various models of corequisite English that could be offered by institutions in the UT System. The survey displayed the following graphic from Park-Gaghan et al. (2022) and asked institutions to select which of the following approaches most closely matches their approach to corequisite supports.

Figure 36: Image of corequisite models from Park-Gaghan et al. (2022)

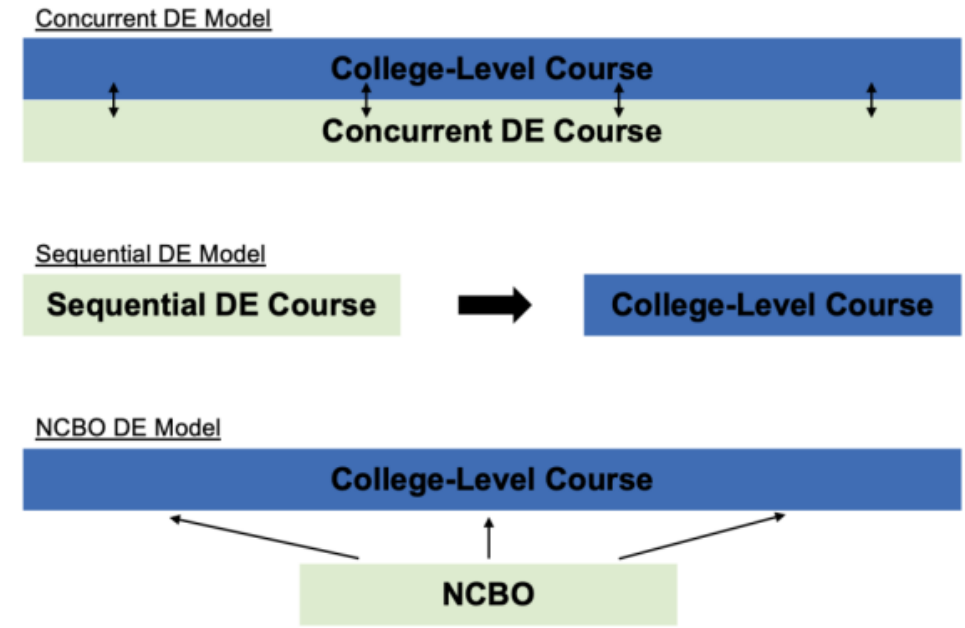
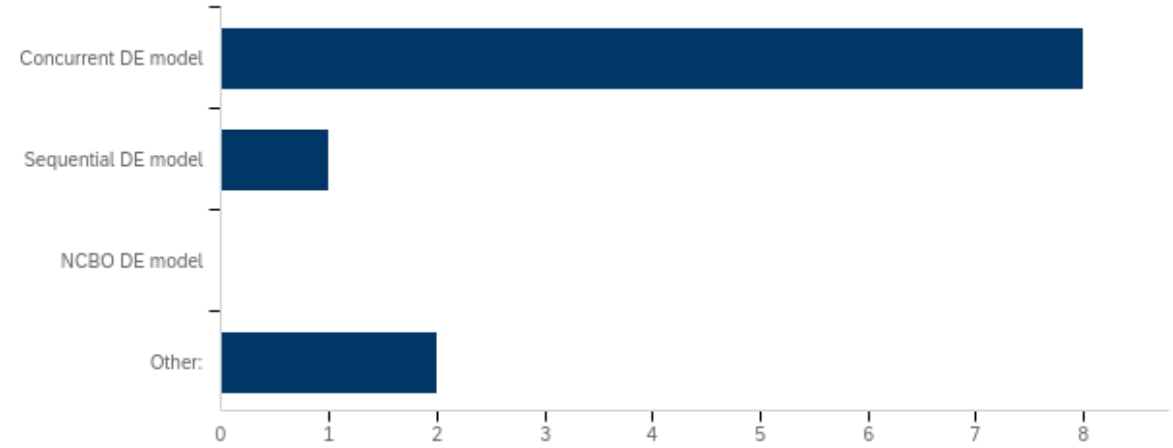


Figure 1. Different structures of corequisite DE courses

Figure 37 shows that a majority of respondents selected the concurrent DE model, with one institution selecting sequential and two selecting "other." The institution that selected “other” indicated that their campus does not offer DE. The concurrent model is the most common across Texas and the most likely to deliver just-in-time supports for that align the content of the DE course with the CL course (Park-Gaghan et al., 2023; Richardson, 2021).

Figure 37: Count of respondents offering various models of corequisites.



Qualitative Data from Survey and Focus Group

Qualitative data from the survey and focus group offer additional contextual information concerning the strengths and challenges of corequisite English at UT System campuses. The following sections detail those findings, and a summary of the results is as follows:

Summary of Strengths

- Corequisite models that have strong alignment between DE and CL sections and close coordination within and between departments.
- Small class sizes and tailored one-on-one student support.
- Continuous improvement of corequisite models overtime to adjust based on student needs, including differentiation of support based on placement.
- Instructional techniques that promote student engagement, motivation, and self-efficacy.

Summary of Challenges

- Insufficient supply of instructors to meet enrollment demand and limited professional development opportunities to train instructors to support DE students.
- Corequisite models that separate the DE and CL sections causing misalignment of curriculum and limiting student participation in the DE courses.
- Logistical challenges with scheduling, attendance, and ‘last minute’ hiring to fill sections.

Strengths

Respondents from across campuses highlighted numerous features of the English corequisite models that their institutions have designed. Survey responses focused on how well aligned the DE sections are with the CL sections. For institutions that have separate instructors for the developmental and CL sections credit, institutions emphasized that close coordination between instructors across sections was critical for success. Other institutions highlighted that the same instructor is responsible for the CL and developmental courses and attributed this as a strength of their design. Finally, one institution identified the presence of embedded tutors in the corequisite as a strength.

Across each of these various models, institutions also described how their approaches have shifted and matured over time. One focus group response stated,

> We've been a hundred percent corequisite for many, many years. In fact, I think even in the semester before we were required to do it. I think we were 100% corequisite because of the way we designed [our model] previously. But it's changed a lot. We've been through so many iterations. I don't even remember them all. I think the biggest challenge for change over time for us has been, oddly enough, the role that reading plays and the way that we're defining college readiness and helping students. There's been an emerging idea of skill transfer that has changed drastically over time, and I feel like we're in a place where we can be more responsible for transfer of skills and concepts outside of first year writing, but that that ebbs and flows with the tide of institutional and state policies.

Another institution noted a similar dynamic,

> And we have always kind of stayed ahead of the game. So, we're very fortunate. We started corequisites I think in 2018. Right as [Complete College America] started making these recommendations, we were able to go to 100%. So, pre-pandemic we have our introductory English courses paired with an NCBO lab and we are able to then spend 2-hours of extra instruction that is taught by the professor of the course. Everything in the NCBO is directly tied to whatever is happening in the course, and that has been one of the keys for us of making the NCBO more useful for our students is getting the professors to teach those courses. So, we did. You know, previously we had standalone developmental. Then we switched to the INRW [integrated reading and writing] model. Then we went to corequisites. We've been constantly changing and trying to adapt.

Regardless of the mechanics of various corequisite models, respondents also focused on the importance of tailored instructional approaches as a key to student success. Survey responses noted strengths such as personalized face-to-face instruction, extensive verbal and written feedback. Multiple responses emphasized the importance of having small class sizes (fewer than 25 students) given the intensity of the instruction and curriculum. Another survey response also spoke to the importance of technology integration to support students through learning management systems, e-books, and other instructional materials.

Focus group responses reinforced these findings emphasizing the importance of instructional design. One participant stated, “we were able to have a slightly smaller student-teacher ratio in the corequisite classes. And so, the students are a lot more comfortable, actually

asking questions so that's been very helpful." Other participants noted the importance of integrating non-academic supports in the corequisite,

> The other thing, too, that that we've seen some real gains out of in our coreq courses with this program is that it's that noncognitive side. We make a point of making these students feel like we're pouring real resources and time and effort in these communities. And one of the things I've kind of meditated on over the last year or two is how students in corequisite classes are already dealing with the stigma of the test. And of course, as we all know there are students in our coreqs who have no business being there who would be just fine in composition one by themselves. But here they are and so they're dealing with that stigma. And they're also dealing with all the noncognitive challenges.

Another participant built on this statement,

> We all know that just making the effort to show students that we want you, we believe in you, and we think that even though you're in this coreq class we think you're going to graduate. So that growth and strengths building mindset has been really improved over the last year or so with those of us who are who are bringing in these professionals into our classes to talk about the kinds of writing that they do. So that's been a success story.

Finally, respondents emphasized areas of the curriculum that they considered strengths of their corequisite English courses. Survey responses shared some specific insights, including:

- "Curriculum is revised on a yearly basis to meet students' needs. We make sure to align our course curriculum to the CL course curriculum as much as possible."
- "Curriculum design. Our summer bridge is designed to help students with understanding their learning processes for reading and writing, research, and feedback. Our corequisites in long semesters use the same writing about writing approach as standard 1301s with more time dedicated to writing and reading development. We are currently revising 1301/0301 to incorporate valuable strategies from Jumpstart bridge course (college readiness) and to be more strategic about reading and revision instruction."
- "We are currently developing a goal setting assignment where we teach students to set SMART goals every week to become more aware of the work that they have to do not only for their core-requisite class but overall classes at the university."

Focus group participants extended these comments when describing how their various models of corequisite create the conditions for aligned curriculum between the DE and CL sections. One stated,

> So, what I like about our model right now is that our developmental courses are actually really successful in terms of helping students pass their college-level courses. We seem to have really hit our stride in terms of aligning our assignments to the college-level courses. Even though we ourselves are not part of rhetoric and writing studies, we're actually part of the entering student program.

Another participant also noted,

> So, we have two corequisites right now. And students are just placed into them based on their TSI score. They both are sort of similar in curriculum because they both align directly with the credit-level course. All of the reading and writing tasks are related

> directly to the credit-level course. The only difference is one meets 3-hours a week and one meets 1-hour a week. We use a kind of mini-lecture for about 15-minutes and go into an active workshop. So, this allows students to practice skills immediately, which is very helpful. Students also say that they love that the credit-level material is previewed and reviewed in the developmental section.

Challenges

The most frequently cited concern in the survey and focus group was student engagement and attendance in the developmental sections of the corequisite. One participant stated it this way,

> Our main concern has been the success of those students and trying to get them to attend the NCBO and the college-level courses. I'm really curious if other schools see the same thing. The kids who are identified as needing this extra instruction just have a really hard time with attendance. So that's our number one problem is they just don't show up, so we don't even get the chance to teach a lot of those kids.

One explanation for this could be how students perceive the developmental course and how well the content aligns to the CL curriculum. This problem appears most likely to occur in models that have separate instructors between sections or where DE departments are separate from academic departments. One survey participant described this challenge in detail,

> Buy-in from the college-level department....no control over the college-level course instructor and their understanding of how to work with underprepared students; no control over college-level curriculum nor when or how changes occur; difficulty aligning the co-requisite course to college-level course because each college-level instructor can determine their own assignments/readings.

One of the reasons this separation can occur is underlying staffing challenges, which was another dominant theme from these data. Several institutions report using mostly adjuncts or graduate assistants to teach corequisite classes and add that these class assignments often happen late giving instructors little time to prepare. Others note that they have an incredibly hard time identifying and hiring enough accredited faculty to meet the enrollment demand for these courses. One survey noted, “The main challenges are the high number of students who need developmental education and finding more faculty to teach our courses. I will say also financial resources to pay for instructors.”

Respondents further articulated how important training and instructional expertise matters for the unique needs of students in corequisite courses. One focus group participant explained,

> Our top concerns mostly have to deal with capacity and numbers and recruiting professors to teach those courses rather than just filling the gap. Because I think we can all agree you don't just need warm bodies to teach these courses. You need people who are well trained to address the motivational components that these students need in addition to the learning support and in addition to the content. So having a good enough team that's prepared to address all of those angles is always a challenge.

The student-level data revealed a substantial increase in the numbers and proportions of students enrolling in DE English courses and these qualitative data suggest that institutions have struggled to adjust rapidly enough to meet the challenge of this enrollment growth.

Other challenges that emerged in the data relate logistical constraints such as scheduling and classroom space. One participant noted how their developmental lab model requires computer labs, which can be difficult to access, "A challenge for us is finding computer lab classrooms. Since we do a lot of workshopping on campus making sure that all those spaces are available because our enrollment has ballooned." Another participant noted a similar challenge,

> You know, the challenges for us have been capacity building. We've committed to having our composition faculty working in our corequisite courses one-to-one but it's like calculus, you know, scheduling figuring out room, scheduling and working with students who are fluidly moving back and forth between. You know, are they TSI liable? Are they in the corequisite course? Okay, last week they were, but now they're not.

Another participant explained that despite having strong administrative support and a sufficient pool of instructors, that the "the greatest challenges has been the strategic...nuts and bolts of scheduling and staff corequisite courses." They elaborate,

> Our problem isn't capacity cause we have a really great upper-level administration that gives us the money when we need to hire people. And we have a lot of people that are trained in rhetoric and writing in our department. So, we're really lucky that way. And it's been built over 15-years. Our problem is, we still have to hire people at the last minute, and we still have to assign classes and reassign classes, and we don't have the support and time to professionally develop people to handle what they need to do for the developmental and summer bridge courses and not enough time to get them ready for that so they feel comfortable.

Questions

Finally, the survey and focus groups asked participants to identify some of the most pressing questions that they are facing with corequisites. Most responses indicated that they simply wanted to learn more about what is happening at other campuses and the CoP meetings are already creating a forum for addressing that interest. Some of the specific questions that others were interested in are listed here:

- How do you ensure just-in-time alignment with the college-level courses? Considering enrollment increases due to learning loss how do you ensure the hiring of quality instructors for your classes? What kinds of courseware, if any, are you using in your courses?
- Top-to-bottom understanding of the models.
- We would like to learn more about what our peer institutions are doing--what has worked well, what challenges they have faced, what recommendations do they have for creating these courses/program.
- How do you find financial resources and faculty to meet the demand of students? How are you dealing with orientation? How do you measure student success in your courses?

- Curricular approaches; assignment design; strategies for student attendance and engagement
- We would like to know about attendance policies that have proved successful, optional student support systems, and required supp work such as tutoring.
- How is progress assessed in the developmental sections?
- Multiple measures for placement; success of hybrid modality; variable credit hour options; pass rates; longitudinal outcomes for student success
- What are the needed reading comprehension strategies that need to be taught in order to ensure students are successful in subsequent courses? What comprises the typical content covered in reading and writing developmental education programs?

Discussion

The landscape of DE and corequisite supports varies significantly across institutions and departments within the UT System. Some institutions enroll thousands of students in DE while others have not yet begun offering DE courses at all. In addition, the distribution of student characteristics across DE enrollments are different on each campus, requiring attention to the unique needs of each institutions' student population. While data on the diversity of student populations was not detailed in this report, the underlying student data has been disaggregated by institution and shared with individual campuses to further explore characteristics of their students' data. In addition, institutions have developed various models of corequisite support across institutions and disciplines. Some institutions have adopted models that use the same instructor for the DE and CL section, while others use separate instructors in these sections. Some institutions have finely tuned placement practices that assign students to various levels of DE support based on multiple indicators of readiness, while others primarily rely on TSI-A scores and place students into a standard model of support.

Despite these differences, there are many commonalities between institutions in terms of their experiences with DE and the challenges that they face. All institutions have witnessed a significant growth in their population of DE students over the previous 5 academic years. Concurrent with the overall growth in student enrollment in DE, a larger proportion of students are being assigned to developmental English. All institutions express a sincere commitment to better understanding their DE students and providing support that will allow them to flourish academically. In addition, almost all institutions reported significant challenges with hiring enough well-trained instructors to meet student enrollment demand. Most institutions also shared challenges with establishing predictable schedules for courses and aligning content between the DE and CL sections.

Another important finding is that UT System institutions demonstrate the importance of committing to program improvements over time to meet the evolving needs of their students. Some institutions adopted corequisite models more than a decade ago and over time have been able to effectively scale supports to all of their DE students. Other institutions that have had less time for their corequisite programs to mature, perhaps only beginning to offer corequisites in response to the legislative mandate of HB 2223, may need additional time and resources to successfully place all DE students into high-quality corequisite models. Institutions that have been working on corequisites over longer periods of time demonstrate more confidence in their models given the maturity of their programs over numerous years.

Analysis of the qualitative data, along with anecdotal conversations that the researcher had with institutional representatives for DECCB and other projects, reveals a need for improved understanding of the administrative rules and policies that govern DE in Texas. Participants presented many questions to clarify the policy requirements for placement, assessment, grading, NCBOs, and other issues addressed in TSI rules. Some of the varied understanding of TSI policy could be a result of the THECB's revisions to rules over time and inconsistent communication within institutions about policy requirements. Regardless of the underlying drivers, all institutional actors need to enhance their collective understanding of permissible practices under the rules, as well as the ways that state policy may undermine adoption of best practices such as multiple measures assessment.

Finally, despite the significant contributions of time, effort, and care in designing and implementing corequisite supports for DE students, outcomes for this population continue to lag those of the overall population of students in the UT System. One the one-hand, significantly higher numbers of DE students are earning CL course credit in the corequisite model than they did in the standalone model. And students in corequisites also have a slightly higher 4-year graduation rate than students in standalone DE. On the other hand, only 78% of DE students are enrolled in corequisite courses meaning that nearly one-in-five DE students are still being enrolled in standalone classes. Furthermore, any type of DE enrollment is associated with low rates of fall-to-fall retention, with an average of 59.7% of DE students remaining enrolled in an institution one year after their DE placement.

In response to these findings, institutional leaders should consider the following recommendations to continue scaling and improving corequisite supports for DE students.

1. *Encourage active participation in cross-institutional learning opportunities*. This report shows that the maturity of corequisite models varies across the UT System, with some institutions only recently offering corequisite support to students and other institutions implementing corequisites for many years. Institutions that have successfully offered corequisites for longer periods of time can serve a leadership role in mentoring institutions that have ongoing questions about how best to scale corequisites to all students. This cross-institutional learning can occur in the CoPs for mathematics and English that the UT System Office of Academic Affairs convene through the DECCB initiative. The CoPs will give institutional stakeholders an opportunity to engage with subject matter experts, explore relevant research literature, and work collaboratively to enhance corequisite models and curriculum alignment.

2. *Audit, evaluate, and enhance institutional TSI policy.* This research also finds variation in institutional policies related to TSI and corequisites. Some institutions do not appear to have policies that align with research-based best practices, such as multiple measures assessment, multiple mathematics pathways, retesting, and default placement for all TSI-liable students into corequisites. Similarly, not all individuals on a campus that have responsibility for TSI and corequisites have a full or clear understanding of how THECB policy impacts institutional policy for TSI. Efforts to improve the delivery of corequisites will require concerted attention to the policies environment that governs those practices.

3. *Build on student strengths through instruction, non-academic support, and consistent communication across stakeholders.* Even though DE students can face considerable challenges in navigating the path towards an undergraduate degree, they have numerous strengths that can be leveraged to improve the likelihood of their success. Student engagement in learning is driven by their sense of belonging, motivation, and self-efficacy, and corequisite instructors play a crucial role in cultivating these capacities. Many students report feeling stigmatized and demotivated by placement into DE and instructors must take measures to guard against these tendencies by helping students understand that all college students need support and that the corequisite is designed to ensure that they will pass their critical gateway courses. The additional support offered by corequisite models also presents an opportunity to connect students with non-academic supports across campus to meet their basic needs and acculturation to the institution. Finally, it is vital that all personnel who work with DE students are able to communicate the value of corequisites and discuss policies and practices clearly.

4. *Allocate resources to address common challenges.* Each institution expressed challenges in hiring and assigning enough qualified faculty members to meet student demand for corequisites. In addition, many instructors assigned to teach corequisite courses may not have significant prior exposure to the DE student population and, as a result, many respondents in this research identified needs for professional development to enhance instructional capacity. Logistics challenges, such as scheduling, linking courses in student information systems, and reserving lab space, were present across institutions and should be a focus future funding priority.

Although the report offers important findings for consideration for leaders across the UT System related to corequisite supports, some limitations of the data and research design should be considered. First, OIRA has access to less granular student-level data than institutions and some of those limitations have particular relevance for DE students. For example, OIRA does not have access to students' TSI-liability status, thus the sample estimates in this report are based solely on enrollment in DE courses. A related complication is that the THECB reports do not have reliable indicators for DE and corequisite course sections. In the course identification process used for this report, we found numerous instances of upper-division courses and courses outside of mathematics and English that were flagged as DE or corequisite that did not meet the criterion we used for identifying such courses. Although we took extra steps to ensure alignment between the inventory of DE and corequisite courses that used for this report and the actual implementation of those courses at institutions, there are possibly some inaccuracies. One of those steps was to ask institutions to verify our enrollment estimates against their own institution data. In most cases, the counts of student enrollments were well aligned, but there were some examples of our analysis underestimating DE enrollment. We worked closely with institutional IR staff to reconcile those differences and our final dataset was well aligned with institutional data.

Second, this research was designed to collect system-level data on DE and corequisite capacity rather than information for individual institutions. Although the aggregate findings can enhance understanding of the landscape of DE and corequisites across institutions, it may not

provide actionable information at a campus-level. At a minimum, the themes that surfaced in the qualitative analysis may provide some signal of the shared strengths and challenges for institutions to focus on. In addition, we plan to make data dashboards available to each institution with their students' DE data to supplement this report.

Conclusion

This report represents an important initial step in understanding the landscape of strengths and challenges associated with DE and corequisites across the UT System. By combining student-level data analysis with survey and focus group information from practitioners at campuses, the research points to important themes that can provide a foundation for directing future research and sustaining improvement efforts. The hope is that these findings will spark deeper discussions among staff, faculty, and administrators about how best to direct policy, practice, and resources to improve the experiences and outcomes of DE students. And, further, that those discussions will help us build momentum as a system to become an exemplar of high-quality corequisite support for DE students by elevating best practices that emerge from institutions and committing to refine corequisite models over time.

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Appendices

Appendix A – Student-level Data Analysis Notes

Prepared by the Office of Institutional Research and Analysis, April 2024

DE Students Tab

- DE enrollment determined by student enrollment in list of courses identified as DE, Source CBM00S
- Corequisite/standalone status determined by student enrollment in a list of courses identified as DE in tandem with enrollment with a list of courses identified as college-level, Source CBM00S
- Gender - UT System comparison data: AY 2023, fall semester, Academic Institutions, Source CBM001
- Race/ethnicity- UT System comparison data: AY 2023, fall semester, Academic Institutions, Source CBM001
- Pell - UT System comparison data: AY 2023, fall semester, Academic Institutions, Source CBM001, FADS

Course Credit Tab

- Corequisite/standalone format determined by student enrollment in a list of courses identified as DE in tandem with enrollment with a list of courses identified as college-level, Source CBM00S
- Course outcomes include all attempts. For college-level courses, this can be from any semester (conditional on the student having passed the DE level course for standalone students).
- Credit reflects grade outcomes of 'A', 'B', 'C', 'Credit/Passed', or 'D'
- College-level course completion outcomes - UT System comparison data: AY2019-2023, Academic Institutions, Source CBM00S

Student Success Outcomes Tab

- All outcomes are for SAME institution
- All outcomes are calculated for fall semester DE students only
- Source CBM001, CBM009
- Slicers for Passed DE Math, Passed DE English, Passed CL Math, Passed CL English are within the appropriate time frame for the metric. For example, persistence is measured in the Spring, so the passed course must have happened in the fall prior.
- Slicers for Passed DE Math and Passed DE English only apply for students in a standalone model.
- Slicers for Passed CL Math and Passed CL English for students in a standalone model are only available if the student has passed the DE level course.
- UT System comparison data: FTIC, transfers only, from Academic Institutions, Persistence is AY2022 cohort, Retention is AY2022 cohort, Graduation is AY2020 cohort,

Source CBM001, 009 (note that DE students may not be new FTICs or transfers in their first semester, so the UTS vs. DE data is not apples to apples)

* Note that cells <5 are masked. The more you narrow down your selection, the more likely you are to have outcomes based on less than five students

Appendix B – Math Survey

DECCB Survey (Math)

Start of Block: Introduction and informed consent

Q1 Hello and welcome,

The University of Texas System is conducting this survey to better understand current developmental education and corequisite supports offered to students throughout the system.

Results from this survey will be used to inform the strategic direction of the Developmental Education and Corequisite Capacity Building (DECCB) project. Specifically, data from the survey will be analyzed and included in the Landscape Scan report, along with student-level data from the UT System's Office of Institutional Research and Analysis, and interview data from institutional representatives.

Results will be shared with the DECCB Steering Committee and the Communities of Practice, technical service providers (Sova, Dana Center, etc.), and with UT System staff. Your institution may be identified in this reporting but your name and title will not.

Data from this survey may also be used to support research projects for graduate coursework in the PhD Program in Higher Education Leadership at UT Austin. Neither your institution nor your name or title will be used for these research projects. If the graduate course research projects result in publications, we will share draft manuscripts with respondents for additional review and consent.

This survey should take approximately 10-minutes to complete.

If you have any questions please contact Jeremy Martin, Senior Research & Policy Analyst, UT System Office of Academic Affairs, at jemartin@utsystem.edu.

By advancing to the next page, you agree that you have read the study information and voluntarily agree to participate. You may withdraw from the study at any time.

Q2 Click to write the question text

Browser (1)
Version (2)
Operating System (3)
Screen Resolution (4)
Flash Version (5)
Java Support (6)
User Agent (7)

End of Block: Introduction and informed consent

Start of Block: Respondent identification

Q3 Select your institution:

- ○ UT Arlington (1)
- ○ UT Austin (2)
- ○ UT Dallas (3)
- ○ UT El Paso (4)
- ○ UT Permian Basi (5)
- ○ UT Rio Grande Valley (6)
- ○ UT San Antonio (7)
- ○ Stephen F. Austin State University (8)
- ○ UT Tyler (9)

Q4 Enter your name:

_____

Q5 Enter your title:

_____

End of Block: Respondent identification

Start of Block: Course identification

Q6 Does your institution offer any standalone developmental education courses for mathematics?

- Yes (1)
- No (2)
- Unsure (3)

Q7 Does your institution offer any Adult Basic Education (ABE) courses for mathematics?

- Yes (1)
- No (2)
- Unsure (3)

Q8 Does your institution offer corequisites for multiple mathematics courses?

- Yes (1)
- No (2)
- Unsure (3)

Display This Question:

If Does your institution offer corequisites for multiple mathematics courses? = Yes

Q9 Select the entry-level math courses that are offered with corequisite supports at your institution. (Note: the courses here are listed with TCCN information and you should select the ones that most closely match your institution's offerings. In the following sections, you will be asked to specify the unique names and numbers of the courses at your institution that correspond to the TCCN courses).

- ☐ Math 1314 College Algebra (1)
- ☐ Math 1324 Math for Business and Social Sciences (2)
- ☐ Math 1332 Quantitative Reasoning/Contemporary Math (3)
- ☐ Math 1342 Elementary Statistical Methods (4)
- ☐ Other (5)

Display This Question:

If Does your institution offer corequisites for multiple mathematics courses? = No

Or Does your institution offer corequisites for multiple mathematics courses? = Unsure

Q10 What is the name and number of the college-level section of your corequisite mathematics course?

_____

Display This Question:

If Does your institution offer corequisites for multiple mathematics courses? = No

Or Does your institution offer corequisites for multiple mathematics courses? = Unsure

Q11 What is the name and number of the developmental-level section of your corequisite mathematics course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1314 College Algebra

Q12 What is the name and number of the college-level section of your corequisite Math 1314 College Algebra course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1314 College Algebra

Q13 What is the name and number of the developmental-level section of your corequisite Math 1314 College Algebra course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1324 Math for Business and Social Sciences

Q14 What is the name and number of the college-level section of your corequisite Math 1324 Mathematics for Business and Social Science course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1324 Math for Business and Social Sciences

Q15 What is the name and number of the developmental-level section of your corequisite Math 1324 Mathematics for Business and Social Science course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1332 Quantitative Reasoning/Contemporary Math

Q16 What is the name and number of the college-level section of your corequisite Math 1332 Quantitative Reasoning / Contemporary Mathematics course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1332 Quantitative Reasoning/Contemporary Math

Q17 What is the name and number of the developmental-level section of your corequisite Math 1332 Quantitative Reasoning / Contemporary Mathematics course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1342 Elementary Statistical Methods

Q18 What is the name and number of the college-level section of your corequisite Math 1342 Elementary Statistical Methods course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Math 1342 Elementary Statistical Methods

Q19 What is the name and number of the developmental-level section of your corequisite Math 1342 Elementary Statistical Methods course?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institution... = Other

Q20 What is the name and number of the college-level section of the "Other" corequisite math course or courses you selected?

_____

Display This Question:

If Select the entry-level math courses that are offered with corequisite supports at your institutio... = Other

Q21 What is the name and number of the support section of the "Other" corequisite math course or courses you selected?

_____

End of Block: Course identification

Start of Block: Placement

Q22 Does your institution set different TSI-A scores for placement into different levels of developmental or corequisite support?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)

Q23 Does your institution set require a specific TSI score or TSI completion status in English in order to be eligible for a corequisite in mathematics?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)

Q24 Does your institution use multiple measures (other than TSI-A scores) to place students into different levels of support?

- ○ Yes (1)
- ○ No (2)
- ○ Unsure (3)

Display This Question:

If Does your institution use multiple measures (other than TSI-A scores) to place students into diff... = Yes

Q25 Which multiple measures does your institution use to determine placement levels? Select all that apply:

- ☐ High school GPA (1)
- ☐ High school rank (2)
- ☐ Prior coursework (3)
- ☐ Prior workforce experience (4)
- ☐ Other: (5) _____

Q26 Can you share a link to a website or resource that is used to explain placement decisions to students?

_____

Q27 Does your institution have a policy allowing students to retake the TSI-A?

- ○ Yes (4)
- ○ No (5)
- ○ Unsure (6)

Q28 Does your institution have a partnership with a local ISD to use the HB5 Transition Course for students to receive a TSI liability waiver?

- Yes (1)
- No (2)
- Unsure (3)

Q29 Does your institution require students to enroll in developmental or corequisite courses by a specific point in time (e.g. first semester, first year, by 15 SCH, summer bridge, etc.)?

- Yes (4)
- No (5)
- Unsure (6)

Display This Question:

If Does your institution require students to enroll in developmental or corequisite courses by a spe... = Yes

Q30 Please specify the enrollment requirements you indicated in the prior question (e.g. first semester, first year, by 15 SCH, summer bridge, etc.).

_____

End of Block: Placement

Start of Block: Models, modalities, and curriculum

Q31 For the next questions referring to *Models of Corequisite Support,* please refer to *Figure 1.*

Source: Park-Gaghan, T.J., Mokher, C., Daniels, H., McCoy, K., Henning, H., & Moran, A. (2022). Exploring corequisite developmental education models in the Lone Star State: A first report on student success and corequisite implementation. *Center for Postsecondary Student Success*, Florida State University.

Q32 Which of the models from *Figure 1* most closely matches your institution's corequisite model for mathematics? Please select all that apply.

- ☐ Concurrent DE model (1)
- ☐ Sequential DE model (2)
- ☐ NCBO DE model (3)
- ☐ Other: (4) _____

Q33 What is the most common course delivery modality for your institution's mathematics corequisite? Select all that apply.

- ☐ Face-to-face (1)
- ☐ Hybrid (2)
- ☐ Online synchronous (3)
- ☐ Online asynchronous (4)
- ☐ Other: (5) _____

Q34 Does your institution use a specific curriculum for your corequisite mathematics courses?

- ○ Homegrown / developed by the department (4)
- ○ Commercial product / externally developed (5)
- ○ Other: (6) _____

Display This Question:

If Does your institution use a specific curriculum for your corequisite mathematics courses? = Commercial product / externally developed

Q36 Which commercial / externally developed curriculum does your institution use?

_____

Display This Question:

If Does your institution use a specific curriculum for your corequisite mathematics courses? = Commercial product / externally developed

Q37 How much does it cost for students to access course materials for your commercial / externally developed curriculum?

_____

End of Block: Models, modalities, and curriculum

Start of Block: Open response

Q38 What are the main challenges your institution faces in the development and delivery of corequisite math courses?

_____

Q39 What are the key features of your corequisite math courses that you believe makes them successful?

_____

Q40 What are some essential questions you would like to learn more about regarding corequisite mathematics from your colleagues at other UT institutions?

_____

End of Block: Open response

Appendix C – English Survey

DECCB Survey (English)

Start of Block: Introduction and informed consent

Q1 Hello and welcome,

The University of Texas System is conducting this survey to better understand current developmental education and corequisite supports offered to students throughout the system.

Results from this survey will be used to inform the strategic direction of the Developmental Education and Corequisite Capacity Building (DECCB) project. Specifically, data from the survey will be analyzed and included in the Landscape Scan report, along with student-level data from the UT System's Office of Institutional Research and Analysis, and focus group data from institutional representatives.

Results will be shared with the DECCB Steering Committee and the Communities of Practice, technical service providers (Sova, Dana Center, etc.), and with UT System staff. Your institution may be identified in this reporting but your name and title will not.

Data from this survey may also be used to support research projects for graduate coursework in the PhD Program in Higher Education Leadership at UT Austin. Neither your institution nor your name or title will be used for these research projects. If the graduate course research projects result in publications, we will share draft manuscripts with respondents for additional review and consent.

This survey should take approximately 7-minutes to complete.

If you have any questions please contact Jeremy Martin, Senior Research & Policy Analyst, UT System Office of Academic Affairs, at jemartin@utsystem.edu.

By advancing to the next page, you agree that you have read the study information and voluntarily agree to participate. You may withdraw from the study at any time.

Q2 Click to write the question text

Browser (1)

Version (2)

Operating System (3)

Screen Resolution (4)

Flash Version (5)

Java Support (6)

User Agent (7)

End of Block: Introduction and informed consent

Start of Block: Respondent identification

Q3 Select your institution:

- o UT Arlington (1)
- o UT Austin (2)
- o UT Dallas (3)
- o UT El Paso (4)
- o UT Permian Basi (5)
- o UT Rio Grande Valley (6)
- o UT San Antonio (7)
- o Stephen F. Austin State University (8)
- o UT Tyler (9)

Q4 Enter your name:

_____

Q5 Enter your title:

_____

End of Block: Respondent identification

Start of Block: Course identification

Q6 What is the course name and number for the college-level section of your English corequisite course? If you offer more than one college-level English corequisite course, please include those additional course names and numbers.

_____

Q7 What is the course name and number for the developmental section of your English corequisite course? If you offer more than one developmental-level English, reading, or writing section, please include those additional course names and numbers.

_____

Q8 Does your institution offer any standalone developmental reading, writing, and/or English courses? If so, enter the course name(s) and number(s).

_____

Q9 Does your institution offer any Adult Basic Education (ABE) courses for reading, writing, and/or English?

_____

End of Block: Course identification

Start of Block: Placement

Q10 Does your institution set different TSI-A scores for placement into different levels of developmental or corequisite support?

o Yes (1)

o No (2)

o Unsure (3)

Q11 Does your institution use multiple measures (other than TSI-A scores) to place students into different levels of support?

- o Yes (1)
- o No (2)
- o Unsure (3)

Display This Question:

If Does your institution use multiple measures (other than TSI-A scores) to place students into diff... = Yes

Q12 Which multiple measures does your institution use to determine placement levels? Select all that apply:

- ▢ High school GPA (1)
- ▢ High school rank (2)
- ▢ Prior coursework (3)
- ▢ Prior workforce experience (4)
- ▢ Other: (5) _____

Q13 Can you share a link to a website or resource that is used to explain placement decisions to students?

_____

Q14 Does your institution have a policy allowing students to retake the TSI-A?

- o Yes (4)
- o No (5)
- o Unsure (6)

Q15 Does your institution have a partnership with a local ISD to use the HB5 Transition Course for students to receive a TSI liability waiver?

- o Yes (1)
- o No (2)
- o Unsure (3)

Q16 Does your institution require students to enroll in developmental or corequisite courses by a specific point in time (e.g. first semester, first year, by 15 SCH, summer bridge, etc.)?

- o Yes (4)
- o No (5)
- o Unsure (6)

Display This Question:

If Does your institution require students to enroll in developmental or corequisite courses by a spe... = Yes

Q17 Please specify the enrollment requirements you indicated in the prior question (e.g. first semester, first year, by 15 SCH, summer bridge, etc.).

_____

End of Block: Placement

Start of Block: Models, modalities, and curriculum

Q18 For the next questions referring to Models of Corequisite Support, please refer to Figure 1.

Source: Park-Gaghan, T.J., Mokher, C., Daniels, H., McCoy, K., Henning, H., & Moran, A. (2022). Exploring corequisite developmental education models in the Lone Star State: A first report on student success and corequisite implementation. Center for Postsecondary Student Success, Florida State University.

Q19 Which of the models from Figure 1 most closely matches your institution's corequisite model for English?

- ☐ Concurrent DE model (1)
- ☐ Sequential DE model (2)
- ☐ NCBO DE model (3)
- ☐ Other: (4) _____

Q20 What is the most common course delivery modality for your institution's English corequisite?

- ☐ Face-to-face (1)
- ☐ Hybrid (2)
- ☐ Online synchronous (3)
- ☐ Online asynchronous (4)
- ☐ Other: (5) _____

Q21 Does your institution use a specific curriculum for your corequisite English courses?

- o Homegrown / developed by the department (4)
- o Commercial product / externally developed (5)
- o Other: (6) _____

Display This Question:

If Does your institution use a specific curriculum for your corequisite English courses? = Commercial product / externally developed

Q22 Which commercial / externally developed curriculum does your institution use?

_____

Display This Question:

If Does your institution use a specific curriculum for your corequisite English courses? = Commercial product / externally developed

Q23 How much does it cost for students to access course materials for your commercial / externally developed curriculum?

_____

End of Block: Models, modalities, and curriculum

Start of Block: Open response

Q24 What are the main challenges your institution faces in the development and delivery of corequisite English courses?

_____

Q25 What are the key features of your corequisite English courses that make them successful?

_____

Q26 What are key questions you would like to learn more about regarding corequisite English from your peers at other UT institutions?

_____

End of Block: Open response

Appendix D - Focus Group Protocol

Interview Informed Consent
As part of the UT System's Develop Developmental Education and Corequisite Capacity Building (DECCB) project, we are collecting data to better understand the landscape of current developmental education and corequisite supports offered to students across campuses. When Teams meetings are being recorded the meeting transcripts may be used as data for evaluation purposes.

This data will inform the strategic direction of the Developmental Education and Corequisite Capacity Building (DECCB) project and results will be shared with institutional representatives that participate in the DECCB Steering Committee and the Communities of Practice.

Data may also be used to support research projects for graduate coursework. If the graduate course research projects result in publications, we will share draft manuscripts with participants for additional review and participant and campus names will remain anonymous.

Priority questions
Continuous improvement

- What changes have your institution made to your corequisite models over the past several years?

- What data is used to make placement decisions?
- What additional data do you wish you had to inform decision making?

Capacity

- Does your institution offer a sufficient supply of seats/sections to meet student demand for co-req sections?
- What are some key constraints that you face in offering corequisites to all students?

Advising

- How do students learn about corequisites?
- What tools do advisors use to guide students into corequisites? Can you share an artifact?

Time-permitting questions

Faculty

- What are some common challenges for faculty in delivering corequisite courses.
- What PD opportunities and supports does your institution offer to corequisite instructors?

Leadership and decision-making

- How do corequisites factor into the institution's strategic goals?
- How do institutional leaders communicate with faculty and staff about corequisite (can you share an artifact)?