Board of Regents Policy: Alignment and Timely Completion of Mathematics and English Implementation at Connecticut State Community College in fall 2023 Executive Summary DRAFT

The Policy

Equity Statement: This policy commits Connecticut State Community College to ensuring that all policies, practices, and procedures related to placement and student success in gateway English and mathematics courses are designed to be anti-racist, eliminate structural inequities, identify, and address implicit biases, and promote equitable course completion. All components of the policy will be rigorously assessed annually to maintain transparency, policy efficacy, institutional accountability, and advance the BOR twin goals of improving student success and eliminating achievement disparities among different racial/ethnic, economic, and gender groups.

Policy Goals:

- Maximize the probability that each student will enter and complete gateway, college-level, transferable coursework in English and mathematics within one-year, or 24 credits, of initial enrollment
- Minimize the disproportionate impact on students created through inaccurate placement processes
- Eliminate the completion gap in gateway, college-level, transferable coursework in English and mathematics, specifically the gap that exists for Black and Latinx students when compared to White students.

Key Components of the Policy

Corequisite rather than Prerequisite Delivery of Support:

- All students are enrolled directly in college-level English and mathematics with supports to maximize success as needed
- Elimination of prerequisite developmental sequences

Mathematics Pathways - Aligning Mathematics to Program and Career:

- Mathematics courses are aligned to academic and career requirements
- Algebra is no longer the required prerequisite for any math pathways
- Algebra remains the foundation for STEM programs and careers
- Transfer of and applicability of mathematics courses is based on course outcomes alone and not on course prerequisites

Placement Based on High School GPA:

- Placement into levels of support for each student will be determined primarily by high school Grade Point Average (GPA)
- Students may opt to self-report their high school GPA. Students may also elect to provide an official record of their high school GPA
- Multiple measures may supplement GPA, but only to place a student into a higher level course in the case of mathematics or to reduce the level of support

The Process

The Connecticut State Colleges and Universities Alignment and Completion of Math and English (ACME) working group was charged by Dr. Jane Gates, Connecticut State Colleges and

Universities (CSCU) Provost and Senior Vice President for Academic & Student Affairs, on March 18, 2019. The charge reads,

To use Guided Pathways design principles and existing expertise in the CSCU community colleges to develop and recommend policies and practices that facilitate student completion of college level math and English within the first year. The group will facilitate the alignment of the appropriate math and English requirements with programmatic, transfer, and workforce needs.

The group was led by Heidi Zenie, Francine Rosselli-Navarra, and Michael Stefanowicz, and included co-chair Kim Sorrentino, along with dozens of faculty, staff, and administrators from across CSCU. Additionally, ACME membership included math and English faculty from UConn.

With the support of the Charles A. Dana Center at The University of Texas at Austin, ACME Work Group Members

- investigated national best practices to improve math/English alignment and completion, with particular attention to practices for placement, models of remediation, appropriate gateway courses, math transfer pathways, and K-12 and CT employer partnerships
- identified specific barriers to math/English alignment and completion within CSCU using our own system data
- used national research on best practices to identify effective solutions to the problems and challenges students face in attempting to complete transferable math and English
- developed evidence-based recommendations to address barriers and improve math/English alignment and completion

In May 2020, ACME work teams as well as related groups provided recommendations for placement, remediation, and transfer applicability. Overall, over 100 faculty and staff were involved in crafting the recommendations. The CSCU Provost and staff developed this policy draft with consultation from the Charles A. Dana Center with full consideration of these recommendations and of national research and best practices.

The Research in Summary

Corequisite Support: Traditional prerequisite models of remediation typically require students who are assessed as not "college-ready" in a discipline to complete remedial courses in that discipline prior to taking college-level courses. However, for students of virtually all levels of placement, these prerequisites – especially in math – are more of a barrier to earning college credits than they are an on-ramp (Boatman & Long, 2018; Calcagno & Long, 2008; Dadgar, 2012; Jaggars & Stacey, 2014; Martorell & McFarlin, 2011; Xu, 2016).

Developmental students who enrolled in embedded and corequisite math and English courses showed significantly higher gains in gateway course completion rates than similar peers who enrolled in prerequisite developmental courses before PA 12-40. On the other hand, students who enrolled in an intensive or transitional course under PA 12-40 did not complete gateway courses at meaningfully higher rates (CSCU ORSE, 2019). National evidence also supports moving away from pre-requisite remediation and toward corequisites for all students. Colleges and systems have seen impressive gains in gateway math and English course completion after implementing corequisite courses (Boatman, 2012; Cho et al., 2012; Jenkins et al., 2010; Logue et al., 2016; Ran & Lin, 2019). In math, co-requisites have been especially effective when paired with math pathways, a reform to diversify the course offerings that meet the college math requirement beyond algebra (Logue et al., 2016; Ran & Lin, 2019).

Corequisite remediation has several advantages over pre-requisite remediation that explain its 11/17/2020

positive impact on gateway course completion rates. First and foremost, compared to prerequisite remediation, corequisite remediation eliminates a potential exit point for students at the beginning of their college experiences, simply making it less likely for them to drop out prematurely (Attewell et al., 2012; Bailey et al., 2010; Hern & Snell, 2014; Wang, 2017). Second, researchers have found that students feel more motivated, less stigmatized, and a greater sense of belonging in the college community if mainstreamed into college-level courses (Bailey, 2009; Goldrick-Rab, 2007; Scott-Clayton & Rodriguez, 2012).

GPA Placement: "The research is clear that the use of single high-stakes tests to place students in developmental education is harmful and inequitable" (Kadlec & Dadgar, 2020, p. 7). Student placement through standardized tests often results in misplacement (Bahr et al., 2019; Belfield & Crosta, 2012; Cullinan et al. 2018; Hodara et al., 2016; Ngo & Kwon, 2015; Research for Action, Multiple Measures [RAMM], 2020; Scott-Clayton, 2012; Woods et al., 2019), with more students under-placed than overplaced (Bahr et al., 2019; Hodara et al., 2016; Scott-Clayton, 2012; Woods et al., 2019).

Bahr and associates (2019) report that "cumulative high school grade point average (GPA) is the most consistently useful predictor of performance across levels of math and English coursework" (pp. 178-179). Multiple other articles reiterate a similar viewpoint in regards to the association between high school GPA and/or coursework and college success (Belfield & Crosta, 2012; California Community Colleges, Academic Senate for California Community Colleges [CCC-ASCCC], 2018; Cullinan et al., 2016; Hodara et al., 2016; Kadlec & Dadgar, 2020; Ngo & Kwon, 2015; RAMM, 2020; Scott-Clayton, 2012; Woods et al., 2019).

A challenge in using high school GPA for placement can be the availability of transcripts (Belfield & Crosta, 2012; Cullinan et al. 2018; Kadlec & Dadgar, 2020; Ngo & Kwon, 2015; Scott-Clayton, 2012) and "some colleges were reluctant to require students to submit transcripts, considering it to be a barrier to entry" (Cullinan et al. 2018). Kadlec and Dadgar (2020) state that, "although there is much more to know about the fairest approaches to placement, the latest research indicates that students' self-reporting of high school course grades and GPAs can be reliably used in place of official high school transcripts" (p. 7).

References

- Attewell, P., Heil, S., & Reisel, L. (2012). What is academic momentum? And does it matter? Educational Evaluation and Policy Analysis, 34(1), 27–44.
- Bahr, P. R., Fagioli, L. P., Hetts, J., Hayward, C., Willett, T., Lamoree, D., Newell, M.A., Sorey, K., & Baker, R. B. (2019). Improving placement accuracy in California's community colleges using multiple measures of high school achievement. Community College Review, 47(2), 178-211. https://journals.sagepub.com/doi/full/10.1177/0091552119840705
- Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of developmental education in community college. *New Directions for Community Colleges, 145*, 11–30.
- Bailey, T., Jeong, D. W., & Cho, S. W. (2010). Referral, enrollment, and completion in developmental education sequences in community colleges. Economics of Education Review, 29(2), 255–270.
- Belfield, C. R., & Crosta, P. M. (2012, February). Predicting success in college: The importance of placement tests and high school transcripts (CCRC Working Paper No. 42). Community

- College Research Center, Teachers College, Columbia University. https://ccrc.tc.columbia.edu/media/k2/attachments/predicting-success-placement-tests-transcripts.pdf
- Boatman, A., & Long, B. T. (2018). Does remediation work for all students? How the effects of postsecondary remedial and developmental courses vary by level of academic preparation. *Educational Evaluation and Policy Analysis*, 40(1), 29–58.
- Calcagno, J. C., & Long, B. T. (2008). The impact of postsecondary remediation using a regression discontinuity approach: Addressing endogenous sorting and noncompliance (NBER Working Paper No. 14194). Cambridge, MA: National Bureau of Economic Research.
- California Community Colleges, Academic Senate for California Community Colleges (CCC ASCCC). (2018, July 10). Memorandum: Assembly Bill (AB) 705 implementation. https://asccc.org/sites/default/files/AA%2018-40%20AB%20705%20 Implementation%20Memorandum .pdf
- Cho, S. W., Kopko, E., Jenkins, D., & Jaggars, S. S. (2012). New evidence of success for community college remedial English students: Tracking the outcomes of students in the Accelerated Learning Program (ALP) (CCRC Working Paper No. 53). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Cullinan, D., Barnett, E., Ratledge, A., Welbeck, R., Belfield, C., & Lopez, A. (2018, July). Toward better college course placement: A guide to launching a multiple measures assessment system. MDRC & Community College Research Center.

 https://ccrc.tc.columbia.edu/media/k2/attachments/2018_Multiple_ Measures_Guide_1.pdf
- Dadgar, M. (2012). Essays on the economics of community college students' academic and labor market success (Doctoral dissertation). Teachers College, Columbia University, New York, NY.
- Goldrick-Rab, S. (2007). Promoting academic momentum at community colleges: Challenges and opportunities (CCRC Working Paper No. 5). New York, NY: Community College Research Center.
- Hern, K., & Snell, M. (2014). The California acceleration project: Reforming developmental education to increase student completion of college-level math and English. *New Directions for Community Colleges*, *167*, 27–39.
- Hodara, M., Cox, M., & Education Northwest. (2016, May). Developmental education and college readiness at the University of Alaska (REL 2016-123). U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Northwest. https://files.eric.ed.gov/fulltext/ED565798.pdf

- Jaggars, S. S., & Stacey, G. W. (2014). What we know about developmental education outcomes. New York, NY: Columbia University, Teachers College, Community College Research Center.
- Jenkins, D., Speroni, C., Belfield, C., Jaggars, S. S., & Edgecombe, N. (2010). A model for accelerating academic success of community college remedial English students: Is the Accelerated Learning Program (ALP) effective and affordable? (CCRC Working Paper No. 21). New York, NY: Community College Research Center, Teachers College, Columbia University.
- Kadlec, A. & Dadgar, M. (2020, March). Core Principles for Transforming Remediation within a Comprehensive Student Success Strategy: A Statement from the Field. Strong Start to Finish, Education Commission of the States. https://www.ecs.org/wpcontent/uploads/Core-Principles-for-Transforming-Remediation-Within-a-Comprehensive-Student-Success-Strategy.pdf
- Logue, A. W., Douglas, D., & Watanabe-Rose, M. (2019). Corequisite mathematics remediation: Results over time and in different contexts. *Educational Evaluation and Policy Analysis*, *41*(3), 294–315.
- Logue, A. W., Watanabe-Rose, M., & Douglas, D. (2016). Should students assessed as needing remedial mathematics take college-level quantitative courses instead? A randomized controlled trial. *Educational Evaluation and Policy Analysis*, *38*(3), 578–598.
- Martorell, P., & McFarlin, Jr., I. (2011). Help or hindrance? The effects of college remediation on academic and labor market outcomes. *The Review of Economics and Statistics*, 93(2), 436–454.
- Ngo, F., & Kwon, W. W. (2015). Using multiple measures to make math placement decisions: Implications for access and success in community colleges. Research in Higher Education, 56(5), 442-470. https://doi.org/10.1007/s11162-014-9352-9
- Ran, F. X., & Lin, Y. (2019). The Effects of Corequisite Remediation: Evidence From a Statewide Reform in Tennessee. (CCRC Working Paper No. 115). New York, NY: Columbia University, Teachers College, Community College Research Center.
- Research for Action, Multiple Measures (RAMM). (2020). Evidence of impact Multiple measures for student placement: A review of the research and evidence from the field. https://www.rfamultiplemeasures.org/evidence-of-impact/
- Scott-Clayton, J. (2012, February). Do high-stakes placement exams predict college success? (CCRC Working Paper No. 41). Community College Research Center, Teachers College, Columbia University. https://ccrc.tc.columbia.edu/media/k2/attachments/high-stakes-predict-success.pdf

- Scott-Clayton, J., & Rodriguez, O. (2015). Development, discouragement, or diversion? New evidence on the effects of college remediation policy. *Education Finance and Policy, 10*(1), 4–45.
- Wang X. (2017). Toward a holistic theoretical model of momentum for community college student success. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research*. Cham, Switzerland: Springer.
- Woods, C. S., Park, T., Hu, S., & Jones, T. B. (2019). Reading, writing, and English course pathways when developmental education is optional: Course enrollment and success for underprepared first-time-in-college students. Community College Journal of Research and Practice, 43(1), 5-25. https://doi.org/10.1080/10668926.2017.1391144
- Xu, D. (2016). Assistance or obstacle? The impact of different levels of English developmental education on underprepared students in community colleges. *Educational Researcher*, *45*(9), 496–507.

Board of Regents Policy: Alignment and Timely Completion of Mathematics and English Implementation at Connecticut State Community College in fall 2023 DRAFT

Equity Statement

This policy commits Ct State Community College to assuring that all policies, practices, and procedures related to placement and student success in gateway English and mathematics courses are designed to be anti-racist, eliminate structural inequities, identify, and address implicit biases, and promote equitable course completion. All components of the policy and its implementation will be rigorously assessed annually to maintain transparency, policy efficacy, institutional accountability, and advance the Board of Regents twin goals of improving student success and eliminating achievement disparities among different racial/ethnic, economic, and gender groups.

Glossary of Terms:

TERM DEFINITION Corequisite Academic Support Support Directed learning activities Directed learning activities DEFINITION Students enter directly into college-level courses while also accessing additional academic and related supports through a "co-requisite," such as a concurrent course, lab, or tutoring program. Supports aligned to the college-level course and delivered as a "just-in-time teaching" practice. Directed learning students to gain more practice on a concept or skill introduced in class. A DLA differs from a homework assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following session with a tutor after completion.
Academicsupports through a "co-requisite," such as a concurrent course, lab, or tutoring program. SupportsSupportaligned to the college-level course and delivered as a "just-in-time teaching" practice.Directed learningExercises developed by discipline faculty that students complete in a tutoring center. A DLA allows to students to gain more practice on a concept or skill introduced in class. A DLA differs from a homework assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a follow
Support aligned to the college-level course and delivered as a "just-in-time teaching" practice. Directed learning activities Exercises developed by discipline faculty that students complete in a tutoring center. A DLA allows to students to gain more practice on a concept or skill introduced in class. A DLA differs from a homew assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following the college-level course and delivered as a "just-in-time teaching" practice.
Directed learning activities Exercises developed by discipline faculty that students complete in a tutoring center. A DLA allows to students to gain more practice on a concept or skill introduced in class. A DLA differs from a homew assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following the students of the content of the conte
activities students to gain more practice on a concept or skill introduced in class. A DLA differs from a homew assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following the students of the concept or skill introduced in class. A DLA differs from a homew assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following the concept or skill introduced in class.
assignment in that a DLA 1) usually has a short time limit – 30 to 45 minutes, and 2) requires a following
up session with a tutor after completion.
Gateway. Gateway: The first college-level or foundation course, for the purposes of this policy, in English and
College-Level, mathematics, in a program of study. Gateway courses are for college credit and apply to the
Transferable requirements of a degree.
Course
College-Level: Credit-bearing course that is not designated as remedial or developmental.
Transferable: A course taken at a CSCU college campus that can be used for unit credit and is
applicable to major and general education requirements at all CSUs and Charter Oak. No prerequisi
to these courses will be deemed necessary for course transferability by any CSCU institution.
Guided Pathways Guided Pathways is a set of student success initiatives focused on providing students with clear
program maps, improving the student experience, and closing equity gaps.
Guided Self A locally developed tool or process that allows students, in consultation with counselors or other
Placement (GSP) faculty, to determine suitable coursework and level of supports in the appropriate mathematics,
English, and English Learner (EL) gateway, college-level, transferable course.
Holistic Case A model of academic advising whereby students are assigned an advisor for their entire time in coll
Management who helps them create a personalized academic and career plan, monitors their academic progress
Advising and coordinates the supports necessary to keep them on track to completion, including resources a
services related to their academic, career, financial, and other individual needs.
Just-in-Time Teaching provided to support students in college-level courses that is fully aligned and carefully
Teaching coordinated with the delivery of the college-level course so that the course and its supports cover t
same topics in the same order and at the same time.
Mathematics Appropriate gateway, college-level, transferable mathematics courses that are aligned with the skil
Pathways students need for their chosen career pathway and program of study. For careers and programs th
do not require algebra based math, algebra is no longer a required prerequisite for the gateway,
college-level, transferable course. Transferability of mathematics pathways courses is based on cou
outcomes, and not on a required prerequisite.

Multiple	Combining high school GPA with other measures — including state graduation tests, SAT or ACT	
Measures	scores, writing assessments, high school transcript information, years since high school graduation and	
Placement	non-cognitive assessments – to yield more accurate placement into a level of support that increases a	
	student's likelihood of success.	
Supplemental	A nontraditional form of tutoring that focuses on collaboration, group study, and interaction for	
Instruction (SI)	assisting students in undertaking "traditionally difficult" courses.	
Waiver system	tem A system whereby students are exempt from the placement process once completed. Within CSCU,	
	this system includes completion of a GSP, consultation with a Guided Pathways Advisor, and	
	submission of a written waiver submitted to their Guided Pathways Advisor.	

- I. Guided Pathways context: The policy should be viewed within the context of the full set of Guided Pathways reforms that are being built into Connecticut State Community College, such as removing barriers to admission by eliminating the application fee and improving student supports by implementing holistic case management advising. Colleges across the country are implementing similar reforms with dramatic success in improving student retention and completion and reducing equity gaps in attainment when those reforms are adopted at scale and as a comprehensive package affecting all aspects of the student experience.
- II. **Policy premises:** Research shows that traditional prerequisite courses hinder students' progress and raise, rather than lower, barriers to gateway, college-level, transferable course completion. Therefore, increasing numbers of institutions are transitioning from a prerequisite paradigm of remediation to a default approach of placing students directly into credit-bearing courses with enhanced and integrated support. Research also shows that for all student cohorts, a higher percentage of students complete gateway, collegelevel, transferable mathematics and English with an additional support design than with a sequenced developmental design. Increases in completion of first-year, college-level mathematics courses are linked both to a model that pairs college-level courses with support and to the implementation of mathematics pathways - requiring students to complete mathematics courses that are appropriate for their programs of study. For programs that do not require algebra based math, algebra is no longer a required prerequisite in order for the college-level mathematics courses to be accepted and applied at four-year schools to which students transfer. Transfer is based on the outcomes of the college-level courses, and not on prerequisite requirements.
- III. **Goals:** To maximize the probability that each student will enter and complete gateway, college-level, transferable coursework in English and mathematics within one-year, or 24 credits, of initial enrollment, with exceptions possible based on sequencing recommendations from Program Coordinators/Discipline faculty, for timely completion of programs. To minimize the disproportionate impact on students created through inaccurate placement processes. To eliminate the completion gap in gateway, college-level, transferable coursework in English and mathematics, specifically the gap that exists for Black and Latinx students when compared to White students. To assure that all policies, practices, and procedures related to placement and student success in gateway English and mathematics courses are designed to be anti-racist, eliminate structural inequities, identify, and address implicit biases, and promote equitable course completion.
- IV. Administration: Connecticut State Community College will develop and implement an administrative structure to support the ongoing maintenance and improvement of the implementation and practice of this policy in conjunction with other Guided Pathways elements and policies, such as CCS 101 and Maps and Plans, to support student success.

V. Support Principles:

- A. Structured supports must be provided concurrently with the gateway, collegelevel, transferable course rather than prior to enrollment in the gateway, collegelevel, transferable course.
- B. All English and mathematics gateway, college-level, transferable courses will be offered in versions with levels of support as determined by the guidelines provided below. This support will be structured to provide just-in-time teaching fully aligned and carefully coordinated with the delivery of the gateway, college-level, transferable course so that the course and its supports cover the same topics in the same order and at the same time.
- C. No support elements will contribute to the grade earned in the gateway, college-level, transferable course. The grade in the gateway, college-level, transferable course, based only on the outcomes of that course, will determine if the student has completed the requirement.

Depending on VII:

1. If the support is developed as a separate CRN section, a student may choose to withdraw from the structured support CRN section and remain in the gateway, college-level transferable course. However, a student who chooses to withdraw from the gateway, college-level, transferable course must also withdraw from the structured support section.

	Pass college-level course	Fail college-level course
Pass support course	Requirement is met	Repeat course; support is optional
Fail support course	Requirement is met	Repeat both course and supports

- If the structured supports are not developed as a separate CRN section, then the student will receive a grade based only on the outcomes of the gateway, college-level, transferable course. A student who chooses to withdraw will withdraw from the both the gateway, college-level, transferable course and the structured supports.
- VI. **Timely Completion:** Students must register for their required gateway, college-level, transferable English and mathematics courses to complete both within the first 24 credits after initial enrollment, with exceptions possible based on sequencing recommendations from Program Coordinators/Discipline faculty, for timely completion of programs.
- VII. Alternative Methods of Course Completion: Students may complete their gateway, college-level, transferable English 101 and appropriate pathway mathematics course via advanced placement credit, dual enrollment course completion (where college credit was awarded), credit transfer, and other similarly approved methods.
- VIII. **Cost to Students:** Similar to the cost structure for many examples of other programming in academic and student affairs that are available to students (e.g., tutoring, advising, career services, counseling), the cost of all supports for the gateway, college-level, transferable English and mathematics courses will be absorbed into the general community college budget, noting that tuition/fees for all students may be affected by the need to cover the cost of these supports.
- IX. **Faculty Professional Development:** A Teaching and Learning Group, under the leadership of the Connecticut State Community College Associate Vice President of Teaching and Learning, will be charged to research and develop a sustainable plan for professional development for teaching gateway, college-level, transferable English and

mathematics courses and accompanying structured supports. The content and delivery of this professional development will include best practices of effective pedagogy, including strategies to ensure alignment of the course and accompanying supports and for promoting equity in student learning for diverse student groups. After a date to be determined by the CSCU Provost, the CSC Provost, and the Connecticut State Community College AVP of Teaching and Learning, all faculty will be required to complete professional development in order to teach gateway, college-level, transferable English and mathematics courses and supports. The professional development will be offered on an ongoing basis to continually improve student success.

X. Mathematics

A. By default, the first mathematics course a community college student will take will be a gateway, college-level, transferable course aligned with the student's area or program of study, and therefore aligned to the student's academic and career goals. Mathematics faculty across the college, primarily managed by CMAC in consultation with faculty from disciplines in each of the Connecticut State Community College Areas of Study, will determine the number and types of pathway math courses available, subject to the final approval of the college president under the authority of the Board of Regents. The following list provides examples of possible options for students within the Connecticut State Community College Areas of Study:

Area of Study	Mathematics Pathway Course	
Social and Behavioral Sciences,	Mathematics for Elementary Education	
Education, and Public Service	Statistics	
STEM	Algebra	
Manufacturing, Industry, and	Algebra	
Technical Careers	Applied Mathematics	
Health Careers	Algebra	
	Quantitative Literacy	
	Statistics	
Humanities and Creative Arts	Quantitative Literacy	
Business and Hospitality	Applied Mathematics	
	Statistics	

- B. All mathematics pathway courses will be fully transferable among CSCU institutions to meet general education and/or major requirements at all receiving institutions. No prerequisite to these mathematics pathway courses will be deemed necessary for course transferability and applicability by any CSCU institution.
- C. The CSCU Provost and the Connecticut State Community College Provost, along with their designees and in consultation with CMAC, will form a team of experts for each mathematics pathway. Each team will be charged with designing and maintaining a single statewide community college gateway, college-level, transferable mathematics pathway course with supports to promote student success. The CSCU Provost, the Connecticut State Community College Provost, and Associate Vice President of Teaching and Learning, along with their designees and in consultation with CMAC, will develop and implement a plan to provide professional development to these teams.
 - The design for each pathway course will include course number, name, a single set of outcomes, expected course content, and recommended practices for delivery, incorporating evidence-based curriculum and pedagogy.

- 2. The team will make data and research informed recommendations to the Connecticut State Community College Provost regarding maximum class size for each version of the course.
- 3. The annual maintenance will include review of course outcomes, success rates including disaggregation, ongoing applicability of content, continued alignment to program needs, and continuous refinement of delivery recommendations, including class size, based on national and local best practices and research.
- 4. The team will provide an annual review update to the CSCU and Connecticut State Community College Provosts
- D. All mathematics pathway courses will be three (3) credit hours, with exceptions as determined by the Connecticut State Community College Provost.
- E. The number of additional contact hours for structured support may be differentiated by student need based upon the placement procedure described below in section XII, but may not exceed three (3) hours. Each discipline team will determine the number of differentiated levels of support to offer.
 - 1. Students will be placed into mathematics pathway courses with structured supports by default.
 - 2. Students can instead take the mathematics pathway course without structured support based on placement or on student choice following the completion of a Guided Self Placement (GSP) process (see section XII).
 - The aforementioned teams of experts charged by the CSCU Provost and the Connecticut State Community College Provost, along with their designees, will be responsible for the design and maintenance of structured supports as well as recommending student placement in those structured supports.

XI. English

- A. By default, the first English course a community college student will take is English 101 College Composition.
- B. English 101 will be fully transferable among CSCU institutions to meet general education and/or major requirements at all receiving institutions. No prerequisite to English 101 will be deemed necessary for course transferability applicability by any CSCU institution.
- C. The CSCU Provost and the Connecticut State Community College Provost, along with their designees and in consultation with CCET, will form a team of experts charged with designing and maintaining English 101 and supports to promote student success. The CSCU Provost, the Connecticut State Community College Provost and Associate Vice President of Teaching and Learning, along with their designees and in consultation with CCET, will develop and implement a plan to provide professional development to this team.
 - The design will include a single set of outcomes, expected course content, and recommended practices for delivery, incorporating evidence-based curriculum and pedagogy.
 - 2. The team will make data and research informed recommendations to the Connecticut State Community College Provost regarding maximum class size for each version of the course.
 - 3. The annual maintenance will include review of course outcomes, success rates including disaggregation, ongoing applicability of content, continued alignment to program needs, and continuous refinement of delivery recommendations, including class size, based on national and local best practices and research.

- 4. The team will provide an annual review update to the CSCU and Connecticut State Community College Provosts.
- D. English 101 is a 3 credit hour course.
- E. The number of additional contact hours for structured support may be differentiated by student need based upon the placement procedure described below in section XII, but may not exceed three (3) hours. The English discipline team will determine the number of differentiated levels of support to offer.
 - 1. Students will be placed into English 101 courses with structured supports by default.
 - 2. Students can instead take the English 101 course without structured support based on placement on student choice following the completion of a Guided Self Placement (GSP) process (see section XII).
 - The aforementioned team of experts charged by the CSCU Provost and the Connecticut State Community College Provost, along with their designees, will be responsible for the design and maintenance of structured supports as well as recommending student placement in those structured supports.

XII. Placement Levels and Support

The goal of placement is to remove arbitrary barriers to students enrolling directly into the highest level course in which they can be successful. The goal of support is to increase the likelihood of students succeeding in that course.

A. Course Placement

 All degree-seeking students will be placed by default into gateway, collegelevel, transferable English and mathematics courses, namely English 101 and the appropriate pathway mathematics course for their program or area of study.

B. Support Placement

- Placement thresholds, as well as the Guided Self Placement process (GSP), referenced below, will be determined by the Connecticut State Community College Provost and the CSCU Provost of Academic and Student Affairs through data analysis and research into best practices, and in consultation with the mathematics and English curriculum teams, discipline leads, and relevant CSCU system bodies such as CMAC, CCET, and the PA 12-40 council.
- All degree-seeking students will also be placed by default into a course with the maximum available embedded supports. Students are entitled to remain in the maximum available embedded supports regardless of placement measures if they so choose.
- Placement into fewer supports or out of supports entirely will be determined primarily by high school Grade Point Average (GPA). Students may opt to self-report their high school GPA. Students may also elect to provide an official record of their high school GPA. Where possible, high school GPA will be transmitted from the secondary institution to the postsecondary institution as part of the admissions process.
- All U.S. accredited high schools and high school courses will be considered equal/equivalent for placement purposes.
- All degree-seeking students will be presented with the option to place into fewer supports or out of supports entirely for English and mathematics using multiple measures that may include, but are not limited to:
 - SAT scores
 - ACT scores

- Completed high school courses, especially in mathematics
- Challenge exams
- Military transcripts
- Prior learning assessment or credit
- Degree-seeking students whose high school GPA is unavailable or older than 10 years will be placed into college-level, transferable mathematics and English courses with structured supports for their pathway using a Guided Self-placement (GSP) process.
- Students may elect to disregard the presented placement recommendation(s) and opt to attempt the gateway, college-level, transferable English and/or mathematics courses (i.e., English 101 and/or the appropriate pathway mathematics course) with fewer supports or without supports entirely, but only after completion of a GSP process, an information session with their Guided Pathways Advisor trained to support student decision-making, and the submission of a written waiver (signed solely by the student) submitted to their Guided Pathways Advisor.
- C. Higher-Level Course Placement in Mathematics
 - Students may place directly into advanced college-level, transferable mathematics courses (e.g. Calculus) based on high school GPA and/or additional measures. Students may opt to enroll in a course that is of a higher level in a mathematics pathways sequence than determined by the placement measures, but only after completion of a mathematics-specific GSP process, an information session with their Guided Pathways Advisor trained to support student decision-making, and the submission of a written waiver (signed solely by the student) submitted to their Guided Pathways Advisor.
 - Self-reported high school GPA will be the primary measure used to determine placement into higher-level mathematics courses. Multiple measures described above may be used as supplements to selfreported high school GPA.
 - O Higher-level course placement thresholds and the pathways-specific GSP process will be determined by the Connecticut State Community College Provost and the CSCU Provost of Academic and Student Affairs through data analysis and research into best practices, and in consultation with the mathematics curriculum teams, program coordinators and discipline leads, and relevant CSCU system bodies such as CMAC and the PA 12-40 council.
 - The Connecticut State Community College Provost will direct a work group to develop a Guided Self Placement process; this work group will comprise faculty from English and Mathematics, the Associate Vice President of Student Success Management, the Transitional Program Coordinators, as well as representatives from other CSCU groups, including CCET, CMAC, and the PA 12-40 Council.
- D. Some students who are placed into the maximum level of supports as identified in sections X.E and XI.E may be identified as in need of further services to maximize their ability to meet the outcomes for course completion of the gateway, college-level, transferable course. The CSCU and Connecticut State Community College Provosts will charge Transitional Program Coordinators, in consultation with CMAC, CCET, and the design teams described earlier in this document (See X.C and XI.C), to develop a protocol to identify students with additional needs and to design, maintain, and deliver additional services to meet these needs. These services will be delivered, in most cases, concurrently with the gateway, college-level, transferable course with structured supports.

Examples of these additional offerings include, but are not limited to:

- Supplemental Instruction
- Directed Learning Activities
- o Self-paced learning modules
- Academic and/or Process Tutoring
- o Academic Workshops
- Study Groups
- o Wrap-Around Services

These supports must be provided to students free of charge.

- E. English Learners (EL, or similar designations like English language learners, English for speakers of other languages, etc.)
 - o For students who have self-identified as English Learners (EL) all of the above applies, and additionally:
 - In situations where only non-U.S. high school (or other foreign institution) GPA or coursework is available, students will be placed into college-level, transferable mathematics and English courses with structured supports using a an EL-specific GSP process.
 - The EL-specific GSP process will be determined by the Connecticut State Community College Provost and the CSCU Provost of Academic and Student Affairs through data analysis and research into best practices, and in consultation with the mathematics, English, and ESL curriculum teams, with program coordinators and discipline leads, and with relevant CSCU system bodies such as CMAC, CCET, and the PA 12-40 council.
 - Students who opt to take EL courses will be supported by ESL Program Coordinators and their Guided Pathways Advisor to identify the appropriate EL course path based on the students' academic goals.

XIII. Partnership with K-12

It is incumbent on both CSCU institutions and CT secondary districts to work collaboratively to make sure that high schools programs of study align with college-entrance expectations. Secondary and postsecondary school curricula must be aligned for a seamless transition from high school to college.

Once in place, the high school and postsecondary curricula must be reviewed periodically by an appropriate body (to be determined) to ensure fidelity of the alignment.

XIV. Implementation

- Fall 2020: Development of the policy
- Spring 2021: BOR consideration and possible adoption of the policy;
- Pending approval:
- Spring 2021: implementation teams formed
- Spring/Fall 2021: Faculty design the curriculum for gateway, college-level, transferable courses, supports, and recommend placement criteria
- Fall 2021/Spring 2022: Creation of professional development and training for faculty
- Spring 2022: Curriculum submitted to CT State Community College curriculum governance process

- Fall 2022/Spring 2023: Professional development and training for faculty
- Fall 2023: Full implementation of new curriculum and supports
- Spring 2023: Initial report to the BOR
- Spring 2024 and following: Annual reports to the BOR

XV. Data Collection and Annual Report to the Board of Regents

- A. All Connecticut State Community College campuses will collect and analyze placement data to ensure current procedures are working as intended and as outlined in the policy goals. Campuses will collect and compare developmental and college-level placement, enrollment, and pass rates under the historical system and compare support-level placement and college-level placement, enrollment, and pass rates under the new system. Additionally, Connecticut State Community College will disaggregate the data by race/ethnicity, gender, age, Pell eligibility, and zip code to ensure adopted practices support equitable course completion for all Connecticut State Community College students.
- B. Connecticut State Community College administration will provide an annual report to the Board of Regents in the fall of 2023 and each subsequent fall that includes, at a minimum.
 - 1. Student Success Key Performance Indicators 4, 5, and 6 (English and mathematics completion of C or better in first year), disaggregated, with any other applicable data
 - 2. A summary of the designed curriculum for gateway, college-level, transferable English and mathematics courses and supports, including any changes in the past year with supporting rationale
 - 3. A summary of English and mathematics placement procedures and outcomes with specific attention to disaggregation and including any changes in the past year with supporting rationale
 - 4. Throughput data, including performance in subsequent courses for which the gateway, college-level, transferable courses serve as prerequisites as well as credential completion and transfer out
 - 5. Acceptance and application to degree requirements for transfer
 - 6. Update on applicability to PA 12-40
- C. The annual report is recommended to be presented in the context of other annual leading and lagging indicator reports (e.g. Student Success Key Performance Indicators reporting, program completion reporting, transfer reporting), and may ideally be presented concurrently with such other reports to the Board of Regents.