

**Planning Council Review**  
**Student Success Rate in College-Level Math Courses Performance Measure**  
**2024 Performance Measures for Student Success Report**  
**2021-2024 Action Item Results and 2025-2028 Action Items Identified**

**Performance Measure:** Student Success Rate in College-Level Math Courses (PM3)

**Purpose:** To ensure students are successfully completing credit-bearing Math courses within their first three academic years.

**Description:** Index score based on the percentage of first-time fall associate degree seeking and transfer pathway students passing a credit-bearing Math course with a “C” or better within three years.

**Calculation:**

***Success Rate***

Denominator: First-time fall associate degree and transfer pathway students (i.e., students with a curriculum code that begins with an A or P) during their first fall.

Numerator: Of those in the denominator, the number earning a standard letter grade of A, B, C, or P in at least one credit-bearing (course number  $\geq 100$ ) Math course within three years (by the end of the third summer term).

Note: See appendix for new first-time fall cohort definition

***Index Score***

Pell and Underserved Race/Ethnicity (URE) Index Score: College success rate among cohort students receiving Pell whose race/ethnicity is identified as historically underserved divided by the statewide success rate among cohort students receiving Pell whose race/ethnicity is identified as historically underserved.

Pell and Non-Underserved Race/Ethnicity (Non-URE) Index Score: College success rate among cohort students receiving Pell whose race/ethnicity is not identified as historically underserved divided by the statewide success rate among cohort students receiving Pell whose race/ethnicity is not identified as historically underserved.

Non-Pell and Underserved Race/Ethnicity (URE) Index Score: College success rate among cohort students not receiving Pell whose race/ethnicity is identified as historically underserved divided by the statewide success rate among cohort students not receiving Pell whose race/ethnicity is identified as historically underserved.

Non-Pell and Non-Underserved Race/Ethnicity (Non-URE) Index Score: College success rate among cohort students not receiving Pell whose race/ethnicity is not identified as historically underserved divided by the statewide success rate among cohort students receiving not Pell whose race/ethnicity is not identified as historically underserved.

Pell and URE Denominator: Number of cohort students receiving Pell whose race/ethnicity is identified as historically underserved.

Pell and Non-URE Denominator: Number of cohort students receiving Pell whose race/ethnicity is not identified as historically underserved.

Non-Pell and URE Index Denominator: Number of cohort students not receiving Pell whose race/ethnicity is identified as historically underserved.

Non-Pell and Non-URE Index Denominator: Number of cohort students not receiving Pell whose race/ethnicity is not identified as historically underserved.

Total Numerator: (Pell and URE Index Score × Pell and URE Denominator) + (Pell and Non-URE Index Score × Pell and Non-URE Denominator) + (Non-Pell and URE Index Score × Non-Pell and Non-URE Denominator) + (Non-Pell and Non-URE Index Score × Non-Pell and Non-URE Denominator)

Total Denominator: Pell and URE Denominator + Pell and Non-URE Denominator + Non-Pell and URE Denominator + Non-Pell and Non-URE Denominator

Total Index Score: Total Numerator divided by Total Denominator

Excellence: 1.204

Avg Band Max: 1.114

Avg Band Min: 0.934

Baseline: 0.665

*(2024 NCCCS Performance Measures for Student Success Report)*

**2021-2024 Action / Strategy Item Results:**

| <b>Item</b> | <b>Action item identified in the 2021-2024 performance measures year-end reports</b>  | <b>Results / Use of Results:</b> <i>(Provide results of the action item identified. Was the action item successful? If not, did you want to continue this action item going forward? If so, please include this action item in the 2025-2028 action items table below.)</i>  |
|-------------|---|--|
| 1           | Continue to offer one-on-one tutoring for all math courses                            | <p>The mathematics department facilitated one-on-one tutoring sessions with students in addition to regularly scheduled office hours. These sessions were held on the following dates:</p> <ul style="list-style-type: none"><li>• Spring 2022: April 1<sup>st</sup>, April 8<sup>th</sup>, and April 29<sup>th</sup> in preparation for exams.</li><li>• Fall 2023: October 6<sup>th</sup> in preparation for MAT 171 Midterms</li><li>• Fall 2023: December 1<sup>st</sup> and December 8<sup>th</sup> in preparation for exams.</li><li>• Fall 2024: October 4<sup>th</sup> in preparation for MAT 171 Midterms</li><li>• Fall 2024: December 1<sup>st</sup> – December 5<sup>th</sup></li></ul> <p>This one-on-one tutoring allowed any student the opportunity to come and get extra help to prepare for major exams. This will also be ongoing in the future.<br/>(I have flyers from these sessions for documentation, if needed.)</p> <p>Students also could visit Academic Skills Center and sign up for a peer tutor, virtual tutor, or a drop-in session.</p> |
| 2           | Offering MAT 071 for students needing additional time to improve their skills in math | We scheduled MAT 071 offerings for each semester Fall 2021 to Spring 2024. New Developmental Education Alignment Project will begin to offer new courses MAT 025 and MAT 035 beginning Fall 2025.  |
| 3           | Enrolling students in math for programs requiring math                                | We reviewed program requirements with advisees and enrolled them in appropriate math courses early in their program. We met with the College Transfer Advising Center as well as Lorie Waller, College and Career Program Director, to encourage students to take the required math early in their program of study. This will be ongoing in the future.   |

|   |   |  |
|---|---|--|
| 4 | Focus on MAT 143 and MAT 171 offerings                                    | <p>We researched MAT 143 and MAT 171 offerings and offered them in several different modalities to encourage student success.</p> <ul style="list-style-type: none"> <li>• MAT 143: 2 hours 2 days a week, 1 hour 4 days a week, 8-week evening as well as 16-week 1 night a week on WCC campus, and online options.</li> <li>• MAT 171: 1 hour 4 days a week, one section per hour from 8am until 3pm, online, and late start online options.</li> </ul> <p>Some sections of MAT 143 are offered in a global format for students.<br/>Therefore, we offer the highest enrolled classes various modalities for their course selection.</p> |
| 5 | Instructor's use of creative activities to engage student online learning | <p>We provided professional development training to math faculty on how to add creative activities to engage student learning.</p> <ul style="list-style-type: none"> <li>• Basic Quizizz Training</li> <li>• AI Quizizz Training</li> <li>• Harmonize Training</li> <li>• Moodle Training</li> <li>• AI Training</li> </ul> <p>Using these trainings, the math faculty have updated their classes with various activities to make them more engaging.</p>   |

### Student Success Rate in College-Level Math Courses – Performance Data

| Year                                  | Cohort | Enrolled | Enrolled & Successful | % College-Level MAT Enrollment | % Enrolled and Successful |
|---------------------------------------|--------|----------|-----------------------|--------------------------------|---------------------------|
| Fall 2015 Cohort<br>2019 NCCCS Report | 716    | 439      | 343                   | 61%                            | 47.9%                     |
| Fall 2016 Cohort<br>2020 NCCCS Report | 705    | 411      | 322                   | 58%                            | 45.7%                     |
| Fall 2017 Cohort<br>2021 NCCCS Report | 700    | 433      | 338                   | 62%                            | 48.3%                     |

*Source: NCCCS Performance Measures for Student Success Report*

| Year | Fall Cohort |          |       | Success Rate |          |       | Index Score |          | Total Index Score |
|------|-------------|----------|-------|--------------|----------|-------|-------------|----------|-------------------|
|      | Pell        | Non-Pell | Total | Pell         | Non-Pell | Total | Pell        | Non-Pell |                   |
| 2018 | 211         | 452      | 663   | 33%          | 53%      | 46%   | 0.948       | 1.022    | 0.998             |

*Source: NCCCS Performance Measures for Student Success Report*

| Year      | Fall Cohort |              |              |                  |       | Success Rate |              |              |                  |       | Index Score |              |              |                  | Total Index |
|-----------|-------------|--------------|--------------|------------------|-------|--------------|--------------|--------------|------------------|-------|-------------|--------------|--------------|------------------|-------------|
|           | Pell/URE    | Pell/Non-URE | Non-Pell/URE | Non-Pell/Non-URE | Total | Pell/URE     | Pell/Non-URE | Non-Pell/URE | Non-Pell/Non-URE | Total | Pell/URE    | Pell/Non-URE | Non-Pell/URE | Non-Pell/Non-URE |             |
| Fall 2019 | 109         | 77           | 195          | 326              | 707   | 30%          | 49%          | 36%          | 57%              | 46%   | 1.077       | 1.204        | 0.914        | 1.132            | 1.071       |
| Fall 2020 | 111         | 60           | 189          | 261              | 621   | 26%          | 43%          | 35%          | 45%              | 38%   | 0.878       | 1.041        | 0.891        | 0.902            | 0.908       |

*Source: NCCCS Performance Measures for Student Success Report*

**Overall assessment of Performance Measure:** *(Based on the performance measure data, provide a narrative of your analysis of the results. State any changes you plan to make for continuous improvement.)*

WCC is currently 41<sup>st</sup> out of 58 colleges in this measure, with an index score of 0.908 (color indicator, red;  $\geq$ Baseline,  $<$ Avg. Band Min). WCC's Fall 2020 cohort totaled 621 which resulted in 61.5% of students were non-successful versus 38.5% of student successful in meeting the math performance measure.

**2025-2028 Action / Strategy Items:**

*(Identify and address measure assessments resulting from the review of the data. Targets are established on a three-year cycle to provide ample time to address the action and achieve measurable results.)*

| <b>Item</b> | <b>Action / Strategy Items</b> <i>(Identify action items as a result of measure assessment.)</i>          | <b>Assessment of Action Items</b> <i>(How will you assess the results of action items?)</i>  |
|-------------|---|--|
| 1           | Continue to offer one-on-one tutoring for all math classes.   | Provide dates of tutoring sessions.  |
| 2           | Enroll students in required math course(s) within their program of study early in their academic journey. | Provide the total numbers of fall cohorts and how many students out of the cohort signed up for math classes.  |
| 3           | Begin a targeted marketing campaign to promote early enrollment into curriculum math classes.             | Develop informational materials on the importance of taking math early in programs. Highlight success stories from students that did take math early in their program. "Meet our Instructors" -- Include biographies of current math instructors. Include positive student comments about current instructors. <ul style="list-style-type: none"><li>• Ideas: Brochures, Flyers, Posts on the Arts &amp; Sciences and WCC Facebook pages, and other types of social media.</li><li>• Distribute to DevEd students, CTAC, post flyers around campus, etc.</li></ul> |