

TN Corequisite Placement Pilot

October 2021

Refining Corequisite Learning Support



Over the last decade, community colleges in Tennessee have reimagined remediation.

Corequisite learning support made it possible for each student to access college-level courses in their first year, regardless of their level of prior academic preparation.

As part of the *Strong Start to Finish* network, TBR set out to learn more about the impact of corequisite learning support:

- Surveys of academic administrators and faculty, followed by one-one-one discussions.
- One-on-one interviews with students and faculty.
- In-depth analyses of data on implementation and outcomes.

Core Principles in this Work



Improving Gateway Course Completion



Promoting Accuracy in Placement



Supporting Institutional Innovation & Autonomy



Closing Equity Gaps in Retention and Graduation Rates

TN Corequisite Placement Pilot

Before 2020, **standardized test scores** were used to determine which students would be placed into learning support.

In Spring 2020, the Tennessee Board of Regents approved a pilot effort to add **high school GPA** as a method for learning support placement.

- COVID-19 posed challenges to students' access to tests.
- Plus, previous research found that high school GPA helps improve the accuracy of learning support placement, alongside test scores.
- In March 2021, the Tennessee Board of Regents extended the placement pilot through the 2021-22 academic year.



Adds high school GPA as a method for placement alongside traditional measures for placement. This does not change placement for students with test scores above the traditional metrics.



At all community colleges, students with high school GPAs of 3.6 or higher can **bypass corequisite learning support** regardless of their test scores.



Three colleges extend the pilot so that students can also bypass corequisite learning support if their high school GPA was between 2.8 and 3.6.

How will we know if high school GPA is an effective placement metric?



Identify pilot students based on test scores and high school GPA.

Pilot participants are students whose test scores would have placed them into learning support but whose **GPAs allowed them to bypass learning support**.



Compare outcomes
between pilot
students versus similar
students who received
learning support.

To understand the impact of placing out of learning support, we compared outcomes for similar students over time and across colleges.



Consider multiple outcomes including course success, retention, and equity.

At what point does a student become as likely to succeed without learning support as they are with learning support?



Summary of Findings

Over 2,900 first-time-freshmen had ACT scores *below* and high school GPAs *above* the cut score. These students were able to bypass learning support.

- 1,431 bypassed learning support in one subject
- 605 bypassed learning support in two subjects
- 937 bypassed learning support in three subjects

Pilot students with high school GPAs of **3.6 and** above succeeded at high rates, both in gateway course outcomes and retention.

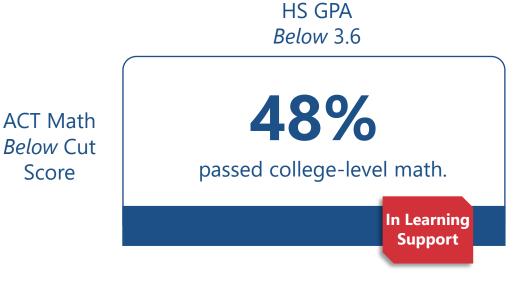
Pilot students with GPAs **below 3.0 succeeded at lower rates.** Refining the corequisite model may improve outcomes for these students.

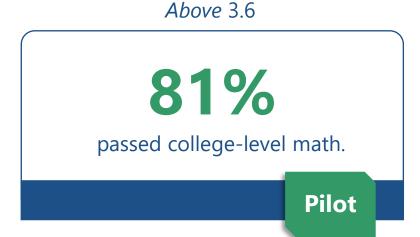
Results were mixed for pilot students with GPAs between 3.0-3.5. These students may benefit from refinements to learning support or other support strategies.



Success in College-Level Math in Fall 2020 & Spring 2021 for First-Time Freshmen

Pilot students with high **GPAs** succeeded at high rates.





HS GPA

ACT Math Above Cut Score

Score

61% passed college-level math. Not In Learning Support

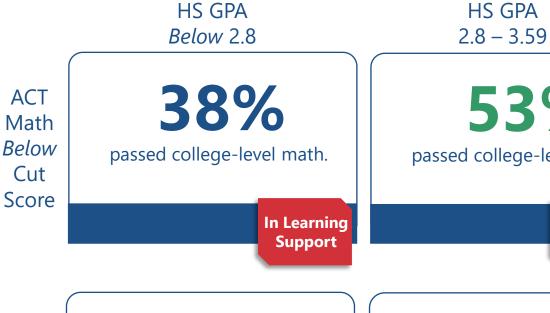
86% passed college-level math. Not In Learning Support

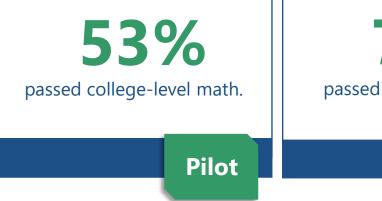
^{*}Pass rates reflect the number of students enrolled in a college-level math course who earned a grade of A, B, or C, or D at the 10 colleges who were a part of the 3.6+ pilot. An additional 142 first-time freshmen had high school GPAs above 3.6 but no ACT score. Of these, 77% passed math.

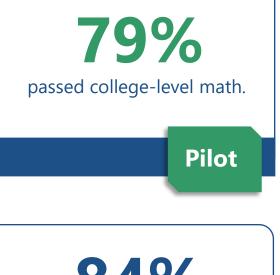
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Success in College-Level Math in Fall 2020 & Spring 2021 for First-Time Freshmen at Three Colleges with Extended Pilot

Pilot students with lower **GPAs** had lower success rates.







HS GPA

Above 3.6

ACT Math Above Cut Score Passed college-level math.

Not In Learning Support

63%
passed college-level math.

Not In
Learning
Support

84%
passed college-level math.

Not In
Learning
Support

^{*}Pass rates reflect the number of students enrolled in a college-level math course who earned a grade of A, B, or C, or D at the 3 colleges who were a part of the 2.8+ pilot. An additional 145 first-time freshmen had high school GPAs between 2.8-3.59 but no ACT score. Of these, 56% passed math. 41 first-time-freshmen had high school GPAs above 3.6 but no ACT score. Of these, 63% passed math.

Retention rates were high for 3.6+ pilot students but lower for those with a 2.8-3.59 GPA.

• 3.6+ Pilot

- Pilot students had higher retention rates than their peers in learning support.
- Retention rates were second only to peers with the highest placement metrics (ACT & GPA above the cut scores).

• 2.8-3.59 Pilot

- Pilot students had higher retention rates than peers in learning support, but pilot students had lower retention rates than peers who were a part of the pilot with a 3.6+ high school GPA.
- Retention rates were similar to students with the same high school GPAs, but who had ACTs above the cut score.

Additional Analysis of Pilot Outcomes



We used additional techniques to compare outcomes for pilot students and account for other factors that might shape success.

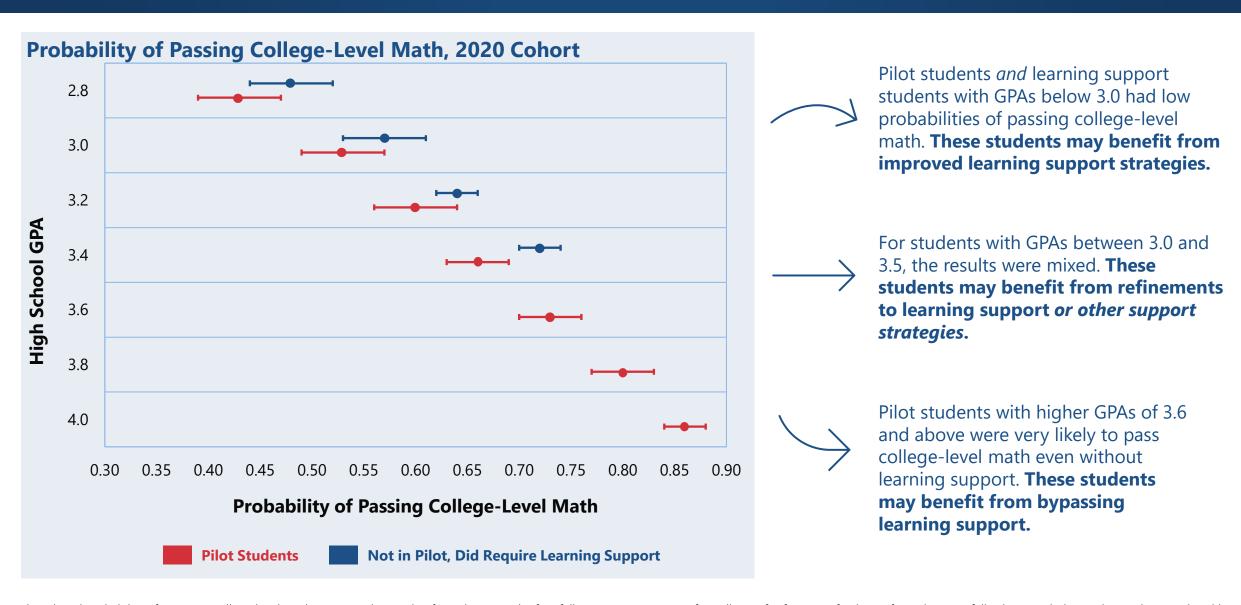
- Were pilot students in 2020 (who bypassed learning support) more or less likely to succeed than similar peers who received learning support?
- Were pilot students in 2020 more or less likely to succeed than students in prior years who received learning support?
- How do student outcomes change when we account for other factors that are connected to success, like students' prior standardized test scores, demographic characteristics, firstsemester enrollment patterns, or college of enrollment?

Key Findings from this Analysis

- Pilot students were more likely to persist than their peers in learning support.
- 2 Students with GPAs of 3.6+ had a high probability of success.
- Pilot students with GPAs between 2.8 and 3.5 had a mixed probability of success.

Outcomes in College-Level Math



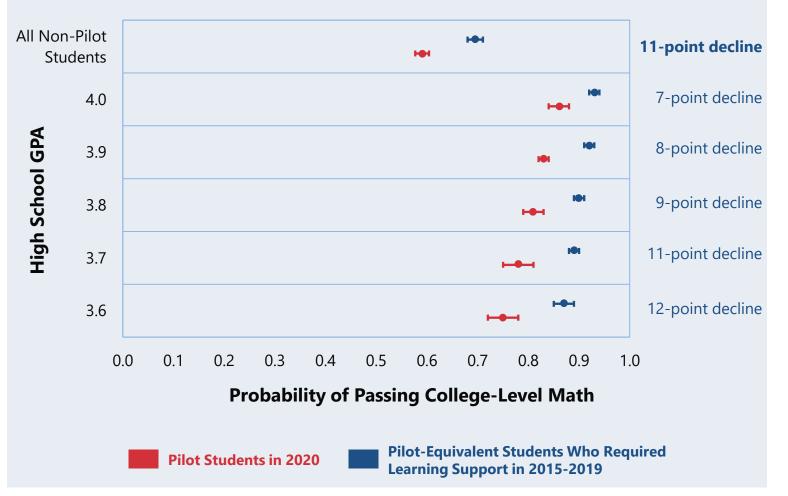


^{*}Predicted probability of passing a college-level math course with a grade of D or better in the first fall or spring semesters of enrollment for first-time freshmen from the 2020 fall cohort. Excludes students who completed learning support requirements through SAILS. Estimates are based on logit models that account for ACT scores, high school GPA, college of enrollment, number of credit hours attempted, and demographic characteristics. Predicted probabilities are calculated with all other variables set at their mean value. Circles represent predicted probabilities and error bars represent 95% confidence intervals. N=7,528

Outcomes in College-Level Math



Probability of Passing College-Level Math, 2020 Cohort Compared to Prior Years





The probability of passing college-level gateway courses declined for all students in 2020.

For students who were not part of the pilot, the probability of passing gateway math fell 11 percentage points, from 70% in 2015-2019 to 59% in 2020.



For pilot students with high school GPAs above 3.6, the 2020 declines in the probability of math success were somewhat less severe.

These students still succeeded at high rates compared to other students.

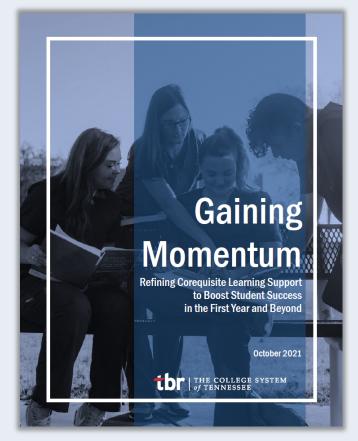
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Next Steps

- Additional analysis of pilot using data from students who began in fall 2021 and dual enrollment data.
 - Preliminary analysis from fall 2020 is available at <u>tbr.edu/data</u>
- Discussion of the implementation and impact of corequisite learning support.
 - Detailed report from qualitative and quantitative analyses.
 - Data toolkit for colleges to explore data about corequisite outcomes.







Coming Soon