

APRIL 2022

EXECUTIVE SUMMARY

Improving College Success for Students in Corequisite Reading

AUTHORS

Florence Xiaotao Ran
University of Delaware

Susan Bickerstaff
Community College Research Center

Nikki Edgecombe
Community College Research Center



Executive Summary



In this report, we examine early college outcomes for students placed into corequisite reading courses at the 13 community colleges in the Tennessee Board of Regents (TBR) system. In a corequisite approach to developmental education, students enroll in a college-level course paired concurrently with a support course designed to address student learning needs in a given subject. We investigate how outcomes have changed since TBR colleges adopted a corequisite approach in reading and look at differences in outcomes by college-level course pairings and course features, including delivery format (i.e., online, hybrid and face to face). Drawing on these findings, we offer recommendations to institutions seeking to improve supports for students needing learning support in reading.

Research has shown that the traditional approach to developmental education, which typically consists of one or a sequence of noncredit courses prior to entering college-level classes, has limited benefits or even detrimental effects on student progression and persistence in college.¹ In addition, traditional developmental education may widen outcome differences in college success by demographic background, since Black, Hispanic and students from families with low incomes are disproportionately more likely to be required to take these courses.² In response, a growing number of states are encouraging or mandating the use of corequisite courses.³ Studies have found that corequisite support increases the number of students who complete college-level math and English,⁴ but corequisite reading has not been a focus of this emerging body of research.⁵

Using detailed administrative data for students entering TBR colleges between 2010 and 2020, we explore three research questions:

1. How have early college outcomes changed for students referred to developmental reading since TBR adopted corequisite approaches in 2015?
2. What were the course outcomes of corequisite reading and its paired college-level courses for students placed into corequisite reading?
3. Which college-level pairings for corequisite reading were associated with higher success rates for corequisite reading students?

1 Boatman & Long, 2018; Martorell & McFarlin; Xu & Dadgar, 2018

2 Chen et al., 2020

3 Education Commission of the States, 2021

4 Logue et al., 2016; Ran & Lin, 2019 ; Miller et al., 2021

Key Findings



Finding 1: Corequisite developmental education substantially reduced the differences in one-year gateway English completion rates across placement test scores and racial groups.

Since TBR colleges adopted a corequisite approach to reading in 2015, students experienced substantial improvements in outcomes overall. In addition, differences in gateway English completion rates between college-level students and those with the lowest ACT scores reduced by half. First-year gateway English completion rates improved by 17 percentage points for Black students and by 14 percentage points for Hispanic students.

Finding 2: Students who did not pass corequisite reading and its college-level pairing also failed almost all other courses they enrolled in that term; the majority of these students dropped out from college by the end of year one.

Around one quarter (24%) of students enrolled in corequisite reading did not pass either the learning support section or its paired college-level course. Students who failed both corequisite reading and college-level pairing courses also failed more than 90% of all courses they enrolled in during the first term; only 17% of them continued to enroll in the next academic year.

Finding 3: Performance in corequisite reading and its college-level pairing are predictive of other early college success outcomes.

Even after adjusting for students' demographic and academic characteristics, passing both corequisite reading and its paired college-level course were still associated with significantly better outcomes in terms of gateway completion and enrollment persistence. Students who passed both courses were more likely to persist to the second academic year by 48 percentage points, compared to those who failed the two courses.

Finding 4: Students who took a College Success course as the college-level pairing with corequisite reading had the highest course passing rates, compared with those who took it with other types of pairings.

TBR colleges paired corequisite learning support in reading with a diverse set of college-level courses, including College Composition, College Success, and courses

in the humanities, fine arts and social sciences. Students who took corequisite reading with College Success had the highest pass rates. Taking College Success with corequisite reading did not lead to higher enrollment persistence rates, compared with taking corequisite reading with other types of college-level courses.

Finding 5: Taking corequisite reading and a college-level pairing online is associated with significantly lower success rates.

During the period of analysis, which does not include the pandemic, taking the corequisite reading in an online format reduced pass rates by 12 percentage points, and taking the college-level section online reduced the likelihood of passing by 10 percentage points. Other structural components that appeared to be positively associated with some outcomes include taking corequisite reading during the first term, taking the college-level paired course with more “on-level” students, and taking a three-credit-hour corequisite section.

Recommendations



These findings point to a number of recommendations for systems and colleges to support the success of students needing academic support in reading.

1. Institutions should enroll all students deemed underprepared in reading in corequisite courses in their first term, keeping in mind that high school GPA is a stronger predictor of college success than standardized tests.
2. Given that a nontrivial proportion of students referred to corequisite reading did not pass any courses they enrolled in, institutions should consider embedded supports to address a range of academic and non-academic challenges hindering student success.
3. To address racial disparities in placement into developmental education and course outcomes, institutions should adopt race-conscious frameworks to plan and implement corequisite reading policies and practices.
4. Institutions should look to strengthen the design and delivery of online corequisite reading models.

References



- Boatman, A., & Long, 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.
- Chen, X., Caves, L. R., Pretlow, J., Caperton, S. A., Bryan, M., & Cooney, D. (2020). Courses taken, credits earned, and time to degree: A first look at the postsecondary transcripts of 2011–12 beginning postsecondary students. *First Look*. NCES 2020–501. National Center for Education Statistics.
- Education Commission of the States. (2021). 50-State Comparison: Developmental Education Policies. Retrieved from: <https://www.ecs.org/50-state-comparison-developmental-education-policies/>
- 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.
- Miller, T., Daugherty, L., Martorell, P., & Gerber, R. (2021). Assessing the effect of corequisite English instruction using a randomized controlled trial. *Journal of Research on Educational Effectiveness*. DOI: [10.1080/19345747.2021.1932000](https://doi.org/10.1080/19345747.2021.1932000)
- Ran, F. X., & Lin, Y. (2019). The effects of corequisite remediation: Evidence from a statewide reform in Tennessee (CCRC Working Paper No. 115). Community College Research Center, Teachers College, Columbia University.
- Xu, D., & Dadgar, M. (2018). How effective are community college remedial math courses for students with the lowest math skills? *Community College Review*, 46(1), 62–81.

