TBR Research Findings on Student Success

Tennessee Board of Regents Quarterly Board Meeting

December 2019
• New Projects on the Pipeline from K-12 to College and the Workforce
  • Course Outcomes for Dual Enrollment Students
  • High School Pipeline Dashboard
  • Meeting Students Learning Support Needs
  • Programs in High-Demand Fields
  • Cumulative Graduation Rates by Race and Ethnicity

• New Tools for Sharing Data with Colleges

• Expanding Research Capacity with External Funding
Dual Enrollment at TBR Colleges
Last year, students from all 95 counties participated in dual enrollment at a community college or TCAT.

Over the last decade, the proportion of dual enrolled students at community colleges grew from 8% to 19% of the total student population.

Dual enrollment comprised more than a quarter of the total student headcount at four community colleges—Cleveland, Columbia, Dyersburg, and Jackson.

From 2015-16 to 2017-18, the number of dual enrolled students more than doubled at Motlow State.
General Education Coursework

- At community colleges in 2017-18, three-quarters of all courses taken by dual enrolled students were in general education courses, including 37% in English.

High Rates of Success

- From 2015 to 2018, more than 90% of courses taken by dual enrolled students resulted in a passing grade.

New Methods of Instruction

- In 2017-18, nearly a quarter of dual enrolled courses were offered online or through other non-conventional methods.
- But overall pass rates in online courses were 5 points lower than conventional courses. This gap was even wider in key courses for STEM programs, like Medical Terminology and Computer Applications.
The K-12 to College Pipeline
New dashboards about the pipeline from high school to college.

Data from TBR and TDOE about current students & historical trends.

Data tool can be used by colleges for projections & planning.

What kinds of questions can these dashboards answer?

- How many students in my service area will graduate from high school this year or next year?
- Which high schools have the strongest pipeline to my college, and are there gaps?
- At which colleges do students from a certain high school enroll? Are students from high schools in my service area enrolling at another college?
Meeting Students Learning Support Needs

ACT Math Scores in 2018
Among First-Time, Full-Time Freshmen at Community Colleges

- **Research Question:**
  Which students need learning support? Are we placing too many or too few students in learning support?

- In 2018, 62% of first-time, full-time freshman had ACT Math scores below 19, the cut score for placement into learning support.

- Students with learning support needs in math are served by programs like SAILS and co-requisite remediation.

- Most students are placed into learning support based on their ACT score. New TBR research is examining how we might use additional data to more accurately place students.

Note: Includes ACT Math scores for first-time, full-time freshmen enrolled in the fall term at community colleges. Students without an ACT score on record are excluded. Approximately 12% of first-time, full-time freshmen in fall 2018 had no ACT score on record.
Programs that Lead to High-Demand Jobs

• **Research Question:** How do we strengthen the pipeline to high demand jobs in Tennessee?

• Over the last decade, awards have declined slightly in high-demand STEM fields, like Nursing and IT.

• New TBR research is focusing on the pipeline from K-12 to programs that lead to jobs in high-demand STEM fields.

Note: Applied STEM programs are non-transfer programs that prepare students for occupations in STEM fields, as classified by the U.S. Department of Labor.
Cumulative Graduation Rate for 2013 FTFT Freshmen Cohort: 13,502 students
Sharing Data with Colleges
White Papers on TBR’s Website

Dual Enrollment
Student Success and Course Outcomes at TBR Colleges

BACKGROUND
As an open access system of higher education, TBR colleges serve students regardless of their level of academic preparation. In 2013, nearly three-fifths of all students were enrolled in at least one of their college-level coursework either at a TBR college or at a non-TBR college, in spring 2013. Prior to 2013, to prepare for college-level coursework, students required remediation. These students were assessed using ACT or ACCUPLACER, allowing students to place into the lowest level of the college-level coursework they wished to participate in. This resulted in students spending time and money on remedial coursework that did not count towards their degree. This remedial coursework was considered a barrier to students entering the workforce or furthering their education.

CO-REQUISITE REMEDIAL PILOT
To explore co-requisite remediation’s possible impact on Tennessee, TBR implemented a pilot for co-requisite remediation in 2016-17. In the co-requisite model, students are enrolled in college-level coursework in their first semester alongside a remedial learning support lab designed to provide just-in-time support, allowing students to make stronger connections between remedial and college-level material.

SYSTEM-WIDE SCALE-UP AND RESULTS
After the successful implementation at pilot sites, the co-requisite model was expanded system-wide over two years. Results from the system-wide expansion showed that students who completed the co-requisite remediation pathways had increased dual enrollment in their second semester by 23.5%. This increase in dual enrollment translates to increased student performance in their second semester by 5.0%.

LEARNING SUPPORT PLACEMENT POLICY
TBR also implemented a new policy that allowed a new standard for course placement. This policy required students to take an ACT test before enrolling in a college-level course, allowing students to enroll in courses that align with their skills and knowledge.

Approved Co-Requisite Courses Placement Into College-Level Courses

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High-Demand and STEM Programs at TBR

BACKGROUND
TBR open access colleges welcome students at all levels of academic preparedness across the state, and financial aid programs like the Tennessee Promise have made college affordable to thousands of students of all abilities and backgrounds. However, many of these students need to complete courses that may not align with their skill level and interests. TBR’s Co-Requisite Remediation model is designed to help students align their skill level and interests with their education goals.

COMMUNITY COLLEGE ENROLLMENT
In fall 2020, there were 1.685 TBR community college students. Within these students, 7 out of 10 enrolled in a program aligned to the Tennessee Promise. In 2020, 77% of students successfully completed their program, which was considered an academic success. TBR’s Co-Requisite Remediation model is designed to help students align their skill level and interests with their education goals.

TCAT ENROLLMENT
In fall 2020, there were 3,224 TCAT students. Within these students, 7 out of 10 enrolled in a program aligned to the Tennessee Promise. In 2020, 77% of students successfully completed their program, which was considered an academic success. TBR’s Co-Requisite Remediation model is designed to help students align their skill level and interests with their education goals.

RESEARCH QUESTIONS
Using TBR’s remediation information system and other data resources, we hope to answer some of the following questions:

- What are the barriers to students enrolling in TBR’s Co-Requisite Remediation model?
- How does remediation in college program vary by gender and student characteristics?
- How effective are TBR’s Co-Requisite Remediation programs in increasing student success?
- What factors influence student success?
- How can TBR’s Co-Requisite Remediation model be improved to better meet students’ needs?

This summary provides an initial look at some data points that will inform future research.

White papers available online at tbr.edu/policy-strategy/presentations-and-papers
Sharing Detailed Data on Enrollment, Student Success, & Course Performance

Publicly Accessible Data Tools and a New Platform for College-Specific Data

Closing the Data Feedback Loop with Colleges