Examining Perceived Barriers to Access and Success in Higher Education
Issue Brief 1: Ability to Pass Basic Math Placement Exam and Remedial Math Classes

Background

The T.E.A.C.H. Early Childhood (T.E.A.C.H.) initiative, operating in more than 20 states, provides comprehensive scholarship support to help the incumbent early childhood workforce take courses leading to two- and four-year degrees in early childhood education. Scholarship recipients are early childhood educators working with children from birth through 5 years of age, often making poverty-level wages, who represent the diversity of young children in our nation, may be the first in their family to go to college and work full time while going to college part time. Each T.E.A.C.H. recipient is supported by a T.E.A.C.H. counselor who helps them navigate college, work and family commitments and helps them meet the expectations of the T.E.A.C.H. scholarship.

In fall 2018, the T.E.A.C.H. Early Childhood® National Center (National Center) began a three-part study to examine what T.E.A.C.H. counselors, T.E.A.C.H. associate and bachelor’s degree scholarship recipients and their faculty in community colleges and universities believe are the biggest barriers to access and success. Respondents include 61 counselors, 2,071 scholarship recipients and 170 faculty members. Surveys were offered in Spanish and English to scholarship recipients. Participants were asked to rate the degree to which 49 different items were perceived as difficult. These items covered six basic categories: College Application and Admission Processes; T.E.A.C.H. Scholarship Application Processes; Meeting College Expectations for Coursework and Degree Completion; Services for English Language Learners; Special College Requirements or Accessibility Issues; and Work/Life/School Balance. Questions about college affordability were not included on this survey, because recipients are all receiving scholarship support that allows for graduation from college with no debt.

Issue: Ability to Pass Basic Math Placement Exam and Remedial Math Classes

Across the country community colleges and some universities require incoming students to take and pass a basic math placement exam. Typically, the exams assess the student’s level of proficiency and those results dictate the level of math they are eligible to take, including the remedial classes they may need to take before their required college math course. Nationally, passing these placement tests and any necessary remedial classes have become a major issue in student success, leading to drop-outs and/or very slow progression. The average age of the T.E.A.C.H. recipient is 36. They have been out of school for a number of years and have forgotten many of the math skills they learned in high school because teaching in early childhood education often does not require them to use math in their daily work. If they do not do well on these exams, remedial classes are often required before students can take their early childhood courses.

Findings

Across all three survey populations, passing the basic math placement exams and passing remedial math classes were in the top 10 barriers facing T.E.A.C.H. recipients. A high percentage of T.E.A.C.H. counselors (81%), T.E.A.C.H. scholarship recipients (41%) and college faculty (78%) rated passing the basic math placement exams as very difficult or difficult. Similarly, an equally high percentage of T.E.A.C.H. counselors (75%), T.E.A.C.H. scholarship recipients (39%) and college faculty (66%) rated passing remedial math classes as very difficult or difficult.

“The course, Elementary Math for Teachers, has caused me to apply to yet another college. This makes three schools for one degree thus far.”
Nebraska T.E.A.C.H. Recipient
Promising Practices

Higher education faculty also identified promising practices for overcoming barriers faced by T.E.A.C.H. recipients. This issue brief identifies three such strategies.

**Strategy #1: Delay general education studies until later in college career.** According to Elisha Hicks at Edison Community College in Ohio, general education courses often tend to be the most difficult for students to pass, so she encourages waiting to take these courses until further in their college career. Waiting would prevent students from dropping out earlier, losing confidence due to failing courses and having to retake courses (i.e., waste time and money). T.E.A.C.H. counselors often advise T.E.A.C.H. scholarship recipients to take a few early childhood courses first, if possible, to build their confidence as beginning college students.

**Strategy #2: Offer a co-req model, where students take remedial courses simultaneously with college-level courses.** Co-requisite courses are taken alongside college-level courses instead of the traditional model that requires students below college-readiness to take one or more remedial courses as a prerequisite before enrolling in college-level courses. Data reports show that co-requisite models are effective at raising the percentage of students that complete college courses compared to traditional remediation models, and they are also more cost effective. Community colleges such as Ivy Tech in Indiana and Pikes Peak in Colorado have begun implementing them.

**Strategy #3: Offer innovative approaches to increase student success.** The RISE model (Reinforced Instruction for Student Excellence), which the NC Community College System is implementing currently, places students into college level courses, with or without corequisite courses, or into remedial courses based on their high school GPA (or test scores if GPA is unavailable or if they haven’t completed high school within the last 10 years). Students with a GPA of 2.8 or higher are not required to do any remedial or co-requisite classes. Students with a GPA between 2.2 and 2.799 are required to enroll in a college course AND a mandatory corequisite course. Students with below a 2.2 GPA are required to take one semester of a traditional remedial education course.

The National Center is creating an expanding list of additional resources that address specific barriers in higher education.