



Office of Research and Education Accountability

JUSTIN P. WILSON, COMPTROLLER

## Tennessee's Educator Preparation Providers



Jack Powers  
Legislative Research Analyst

March 2019

## Key Points

- Educator Preparation Providers (EPPs) are the institutions of higher education or other organizations that recruit, train, and produce licensed teachers. There are three types of EPPs: public EPPs like the University of Tennessee-Knoxville, private EPPs like Vanderbilt University, and education-related organizations (EROs) like Teach for America.
- From 2013 through 2017, the years captured in OREA’s analysis, about 53 percent of new teachers – called completers in this report – were trained by public EPPs, about 39 percent were trained by private EPPs, and about 8 percent were trained by EROs.
- EPPs offer prospective teachers – called teacher candidates – three different pathways that lead to program completion and educator licensure: traditional student teaching, internships, and job-embedded programs. Each pathway has unique programmatic characteristics. From 2013 through 2016, about 67 percent of new teachers in Tennessee completed student teaching, about 25 percent completed a job-embedded program, and about 8 percent completed an internship.<sup>A</sup>
- EROs currently take a different approach to the recruitment, training, and production of licensed teachers compared with many public and private EPPs. EROs recruit individuals who already possess a bachelor’s degree and provide them with specialized coursework to prepare them to teach in high-poverty schools. ERO completers commit to teaching in high-poverty schools from one to three years in exchange for financial support in the form of monthly stipends or loan forgiveness. EROs are also based in certain cities, and only train teachers in the same types of schools where they will teach full time.
- On average, completers from EROs earned higher TVAAS (based on growth measures) scores. All three types of EPPs exhibited the same average level of effectiveness (LOE) scores and observation scores for completers. Public and private EPPs produced a higher percentage of teachers who received an LOE score of 3 or 4 (on a scale from 1 to 5, with 5 representing most effective) than EROs produced.
- Several recent studies suggest that the location of teacher training and the quality of mentor teachers can influence the effectiveness of new teachers. OREA found several ways that EROs train teachers in line with the research on what makes new teachers more effective, and this alignment may partially explain why, on average, EROs produce more effective teachers. The programmatic and structural characteristics that allow EROs to align training with research, such as requiring candidates to teach in certain types of schools and focusing efforts in certain cities, also make these characteristics impractical for most EPPs to replicate on a large scale.
- The Tennessee Department of Education (TDOE) and the Tennessee State Board of Education (SBE) have made several recent policy changes designed to improve the state of teacher preparation. TDOE’s Primary Partnership Initiative requires districts and EPPs to partner in the training of new teachers, and EPPs of all types expressed to OREA that the initiative has helped them improve. Additionally, the TDOE Annual Reports for Tennessee EPPs and the SBE Educator Preparation Report Card show detailed data on completers’ performance to support EPPs programmatic improvement.

---

<sup>A</sup> Information on licensure type was available for only about 63 percent of completers between 2013 and 2016.

- The state also holds EPPs accountable for their performance through the State Board’s Educator Preparation Rule 0520-02-04. The rule governs the approval process for educator licensure programs and outlines how EPPs are reviewed and held accountable for their performance. According to this rule, poor performance on the TDOE Annual Reports for Tennessee EPPs, or at other points in the approval process, can trigger corrective action against EPPs by the state, including revoking the ability of EPPs to accept and train new teachers.
- TDOE is currently in partnership with researchers from the University of Michigan to identify teacher training practices that lead to more effective teachers so these practices may be applied in Tennessee. This partnership has led to changes in state policy: in 2019, SBE began requiring that all clinical mentors – those who provide teacher candidates with guidance and support during training – must earn a 4 or 5 overall level of effectiveness score on the state’s teacher evaluation system.
- As of 2018, EPP outcomes are reflected in the outcomes-based funding formula through the Weighted Outcomes component, and two different components of the Quality Assurance Funding program – Major Field Assessments and Academic Programs. To date, EPP performance on these components contributes to, but does not significantly affect, the level of funding that institutions receive through the outcomes-based funding formula or the Quality Assurance Funding program.
- EPPs can use this report to borrow promising practices from research and, where possible, adopt programmatic characteristics from EROs to improve teacher preparation. OREA offers three policy considerations: (1) public EPPs should consider surveying program completers to inform programmatic improvement, (2) Tennessee’s public EPPs could calculate the cost per completer for each of the licensure pathways offered, (3) public EPPs should consider studying the feasibility of creating job-embedded programs and teacher residencies that function similarly to those operated by EROs. Should public EPPs wish to create such programs, OREA outlines several options for funding, including the use of public-private partnerships.

# Table of Contents

<b>1</b>	<b>Introduction</b>
<b>2</b>	<b>Methodology</b>
<b>3</b>	<b>Section 1: Tennessee’s Educator Preparation Providers</b>
<b>5</b>	<b>Section 2: The Educator Preparation Process</b>
<b>15</b>	<b>Section 3: Accountability</b>
<b>24</b>	<b>Section 4: EPP Performance on Multiple Measures</b>
<b>30</b>	<b>Section 5: What Makes Some EPPs More Effective?</b>
<b>33</b>	<b>Section 6: EPP Performance in the Outcomes-Based Funding Formula</b>
<b>37</b>	<b>Section 7: Policy Considerations</b>
<b>39</b>	<b>Endnotes</b>

## Introduction

Research shows that teachers have a larger influence on student achievement than any other in-school factor.<sup>1</sup> Performance data from Tennessee shows that some new teachers are more effective than others during their first three years in the classroom. Inconsistencies in the effectiveness of early-career teachers have consequences for Tennessee students. The difference between having an effective or ineffective teacher may equal as much as a year's worth of academic growth.

Although school districts provide training and support to new teachers, a growing body of research suggests that some differences in the effectiveness of new teachers can be traced back to **Educator Preparation Providers** (EPPs) – the organizations or institutions of higher education that recruit, train, and produce licensed teachers. Research on the characteristics within EPPs that influence teacher effectiveness is in the early stages. Several studies have shown that the location of teacher training, and the quality of mentor teachers can influence the effectiveness of new teachers.

Recognizing the role that EPPs play in producing effective teachers, Tennessee has started to evaluate and hold EPPs accountable for the teachers they produce. In 2007, the General Assembly passed legislation requiring the state to track and publicly report on the performance of EPPs.<sup>A</sup> That law led to the creation of the Educator Preparation Report Card, which has been produced by the Tennessee State Board of Education since 2016.<sup>B</sup> The Tennessee Department of Education also produces an Annual Report that is used to evaluate each EPP, and to drive program improvement.

The growing attention paid to EPP effectiveness led House Speaker Pro Tempore Bill Dunn and Senator Dolores Gresham to request the Comptroller's Office of Research and Education Accountability (OREA) for an analysis of the performance of Tennessee's EPPs. OREA was asked to examine factors that may lead to differences in performance, as measured by Tennessee's Value-Added Assessment System (TVAAS), between graduates of EPPs housed in public institutions of higher education and other providers of teacher preparation, such as EPPs housed in private institutions of higher education or EPPs operated by other organizations. OREA was also asked to examine how EPPs are accounted for in Tennessee's outcomes-based funding formula, and how quality assurance funding may be revised for the 2020-25 cycle to better reward positive outcomes.

This report explains the process EPPs follow to train teachers, analyzes EPP performance on multiple measures of effectiveness, and assesses the characteristics of EPPs that may produce more effective teachers. Additionally, this report explains how EPP outcomes are accounted for in the outcomes-based funding formula. Finally, the report also offers policy considerations.

---

<sup>A</sup> *Tennessee Code Annotated* 49-5-108(f)(1).

<sup>B</sup> The report card was originally produced annually by the Tennessee Higher Education Commission beginning in 2008. In 2016, the State Board of Education redesigned the report and has issued it annually since then.

## Methodology

OREA used a mixed methods (quantitative and qualitative) approach to examine the performance of Tennessee's EPPs. To learn more about the factors at the EPP level that may lead to differences in the effectiveness of completers, OREA:

- grouped EPPs into three categories: education-related organizations (EROs), public EPPs, and private EPPs. Data on the performance of EPP completers is aggregated and reported for each of the three categories of EPPs.
- described the educator preparation process in three stages – Inputs, Preparation, and Outputs.
- interviewed faculty and administrators at six EPPs operated by public institutions, eight operated by private institutions, and three operated by EROs.
- interviewed education officials at the Tennessee Department of Education (TDOE), Tennessee State Board of Education (SBE), and Tennessee Higher Education Commission (THEC).
- consulted SBE's Educator Preparation rule 0520-02-04 and Educator Preparation Policy 5.504 (created in 2014, revised in 2019).
- reviewed research on EPPs and teacher effectiveness.
- compared the performance of EPP completers using the following measures of effectiveness:
  - ◊ TVAAS growth scores
  - ◊ observation scores
  - ◊ overall level of effectiveness (LOE) scores
  - ◊ SBE Teacher Preparation Report Card scores
- conducted its analysis on three cohorts of EPP completers in Tennessee:
  - ◊ **Cohort 1** – Individuals who completed preparation between September 1, 2013, and August 31, 2014.<sup>c</sup> (Effectiveness data reported beginning in 2015.)
  - ◊ **Cohort 2** – Individuals who completed preparation and those who were candidates in job-embedded preparation programs between September 1, 2014, and August 31, 2015. (Effectiveness data reported beginning in 2016.)
  - ◊ **Cohort 3** – Individuals who completed preparation and those who were candidates in job-embedded preparation programs between September 1, 2015, and August 31, 2016. (Effectiveness data reported beginning in 2017.)

---

<sup>c</sup>OREA used the same data set used in the State Board of Education's Educator Preparation Report Card for its analysis. According to the State Board, the addition of the job-embedded enrolled candidate reporting requirement for Cohort 2 was made so that more accurate data on those candidates could be presented on the report card.

## Section I: Tennessee’s Educator Preparation Providers

**Educator Preparation Providers (EPPs)** are the institutions of higher education or private organizations that recruit, train, and produce licensed teachers. In Tennessee, EPPs are most often schools of education located in private or public colleges and universities, but education-related organizations (EROs), such as Teach for America (TFA), may also offer educator licensure programs. As of 2018, at least 40 EPPs in Tennessee currently train and produce classroom teachers.<sup>D</sup>

**Exhibit I: EPPs operating In Tennessee, 2018**

Public EPPs (9)	Private EPPs (27)	Education-related organizations (4)
Austin Peay State University East Tennessee State University University of Memphis Middle Tennessee State University Tennessee State University Tennessee Tech University UT Chattanooga UT Knoxville UT Martin	Aquinas College Belmont University Bryan College Carson-Newman University Christian Brothers University Cumberland University Fisk University Freed-Hardeman University Johnson University King University Lee University LeMoyne-Owen Lincoln Memorial University Lipscomb University Martin Methodist College Maryville College Milligan College Rhodes College South College Southern Adventist University Tennessee Wesleyan University Trevecca Nazarene University Tusculum College Union University Vanderbilt University Welch College Western Governors University	Memphis Teacher Residency Nashville Teacher Residency* Teach for America – Memphis Teach for America – Nashville

- Notes: 1. \*Nashville Teacher Residency is too new to generate data for OREA analysis.  
 2. The New Teacher Project Nashville and Memphis College of Art produced teachers during the years captured in OREA’s analysis, but these EPPs do not currently operate in Tennessee.  
 3. Bethel University is not currently approved to operate as an EPP and is pursuing ongoing litigation against the state regarding the institution’s approval status. Bethel was approved and produced teachers during the time period captured in OREA’s analysis.

<sup>D</sup> These are the EPPs for which OREA acquired performance data or interview data. OREA recognizes that there may be other organizations that train teachers in the state of Tennessee.



**Education-related organizations (EROs)** provide teacher training independent from, or in partnership with, four-year higher education institutions. In Tennessee, there are currently four EROs: Teach for America Nashville, Teach for America Memphis, Nashville Teacher Residency, and Memphis Teacher Residency.<sup>E</sup> ERO is a Tennessee-specific term. Nationally, EROs are referred to as “alternative certification” programs because these organizations provide individuals who did not major or minor in education an alternative route to teacher licensure.

EROs share several characteristics that differentiate them from the majority of EPPs operated by four-year higher education institutions. EROs employ rigorous selection criteria and recruit candidates from across the country who already possess a bachelor’s degree in the subject-area they teach. EROs also require teachers to teach in high-poverty schools for between one and three years.

EROs are also focused on a single school district or city, using formal agreements with school or district administrations to place teacher candidates in classrooms for training and employment. EROs continue to provide support, including coaching, professional development, and alumni events, to teachers once they begin teaching full time, and even after they complete the program. EROs provide specialized training and coursework to help candidates succeed as teachers in challenging high-poverty schools. All four of Tennessee’s EROs provide teachers with some type of financial compensation in exchange for a commitment to teach in a high-poverty school for a designated period of time (i.e., between one and three years).

Between 2013 and 2016, EROs trained around 8 percent (n=916) of new teachers in Tennessee. More on the specific features of Tennessee’s EROs, including teacher residencies, programmatic features, and specialized training, can be found throughout this report.

---

<sup>E</sup> Teach for America Memphis and Nashville Teacher Residency operate independently from a four-year higher education institution. Teach for America Nashville partners with Lipscomb University and Memphis Teacher Residency partners with Union University.

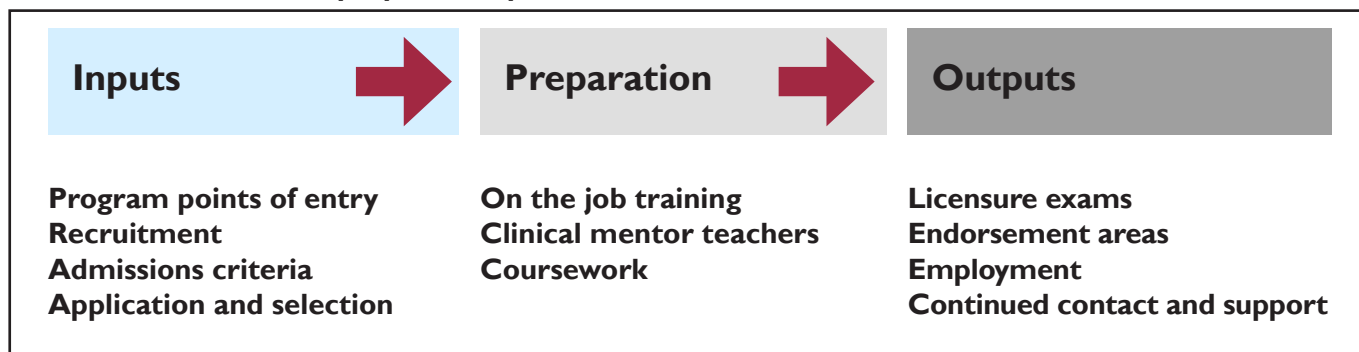


## Section 2: The Educator Preparation Process

To understand why some EPPs may produce more effective teachers, it is helpful to understand the educator preparation process – how EPPs recruit, train, and produce licensed teachers. OREA divided the educator preparation process into three stages: inputs, preparation, and outputs. **Inputs** are the individuals, referred to as “teacher candidates,” who seek admission, training, and licensure recommendation through EPPs. **Preparation** refers to the training that teachers receive through an EPP. **Outputs** are the teacher candidates who have completed program requirements and have been recommended for licensure by an EPP. Individuals who finish EPP training and begin teaching full time are referred to as “completers” in this report.

The following section describes the educator preparation process and explains how EPPs differ based on inputs, preparation, and outputs. At the end of this section, Exhibits 4, 5, and 6 provide a review of the main differences between EROs and public and private EPPs.

**Exhibit 2: The educator preparation process**



**Inputs** are the individuals, referred to as “teacher candidates,” who seek admission, training, and licensure recommendation through EPPs.

**Program points of entry** – Teacher candidates have two options for entering an EPP: as undergraduates seeking a bachelor’s degree and teaching license, or as college graduates who already possess a bachelor’s degree and wish to acquire either a teaching license or a post-baccalaureate degree in conjunction with a teaching license. Most four-year public and private EPPs offer both points of entry. Unlike public and private EPPs, EROs offer one point of entry: candidates must possess a bachelor’s degree before gaining admission.

**Recruitment** – All EPPs make some effort to recruit individuals to seek teacher licensure, but recruitment strategies vary among EPPs. In general, public and private EPPs either recruit prospective teachers once they are enrolled in college or recruit from local school districts. For example, the University of Tennessee-Knoxville has a one credit hour exploratory course for students who express interest in the teaching profession. EPPs also target recruitment efforts at local high schools. For example, Austin Peay State University recruits candidates from the local Teaching as a Profession program – a course taught in high school designed to introduce students to the profession of teaching. Some EPPs have also adopted notable recruitment approaches targeting certain demographic groups. The University of Tennessee-Martin recently implemented Call Me MISTER®, a Clemson University-based program designed to recruit male teachers of color. The University of Memphis, Shelby County Schools, and the Achievement School District have created the River City Partnership, an initiative that aims to strengthen the pipeline of teachers who are well prepared to teach in some of the highest-need schools in the city.

Several public and private EPPs interviewed by OREA explained that enrollment in their educator licensure programs was historically driven mostly by undergraduate students with previous plans of becoming a teacher. In interviews with OREA, these EPPs cited the need to reexamine and improve their recruitment strategies to address teacher shortages and the declining number of students interested in pursuing a teaching license. Multiple public and private EPPs interviewed by OREA have recently hired or are working to hire full-time recruitment staff to recruit more teacher candidates to their programs.

EROs recruit candidates from across the United States. Memphis Teacher Residency hires recruiters who are assigned to specific college campuses in different regions of the country. TFA recruits through partnerships with student organizations at over 300 universities across the nation. Tennessee's EROs emphasize the recruitment of a diverse pool of teacher candidates, targeting recruitment efforts at numerous Hispanic-serving institutions and historically black colleges and universities.

Nashville Teacher Residency defers the cost of training to candidates until after they have secured a full-time teaching position, at which point they are required to pay a \$5,000 training fee to the program. According to the organization, delaying the cost of training helps to recruit teacher candidates from low income backgrounds because they can begin teacher training with no up-front cost, and are paid a \$25,000 salary during the year of training.

**Admissions criteria** – Teacher candidates enrolling in a bachelor's program must have a minimum GPA of 2.75, and have either an ACT score of 21, an SAT score of 1080, or a qualifying score on all three subtests (reading, writing, math) of the Praxis Core exam. Candidates applying to post-baccalaureate level licensure programs must also present evidence of a bachelor's degree from a regionally accredited institution of higher education. In some cases, EPPs set admissions criteria that are higher than those required by the state. For example, some EPPs require an ACT score of 22 instead of 21. Prospective teacher candidates seeking entry into Vanderbilt's EPP as undergraduates do so as incoming freshmen, thus they are held to the same GPA and ACT/SAT requirements as all other students seeking admission to Vanderbilt.



#### **Do higher admissions criteria lead to more effective teachers?**

National research has not demonstrated a conclusive link between the admissions criteria used by an EPP program, such as a certain minimum GPA or standardized test score, and EPP graduate effectiveness. One meta-analysis of 123 separate studies examined whether teachers' test scores and GPAs predicted performance and found that test scores were "at best modestly related to teaching competence and that performance in preparation programs was a significantly better predictor of teaching skill."<sup>2</sup> Another study similarly found that teacher candidates' performance while enrolled in an EPP program was positively linked to their effectiveness as teachers (based on students' math score gains) while candidates' scores on standardized tests were not predictive.<sup>3</sup>

Memphis Teacher Residency analyzed data on program completers and found that candidates who were accepted to the program with undergraduate GPAs below 3.0 were just as likely to be rated ineffective as effective. This conclusion led the organization to raise the required GPA for admission from the 2.75 state minimum to a 3.0.

**Application and selection** – EROs in Tennessee generally conduct a more rigorous application and selection process than public and private four-year EPPs. EROs require prospective candidates to complete in-person interviews, write essays, and teach model lessons in front of students and program staff. For example, Memphis Teacher Residency requires candidates to participate in Selection Weekend as the final step before gaining admission. The organization uses Selection Weekend to judge prospective candidates' presence in front of peers, planning process, and lesson delivery. As part of the weekend,

prospective candidates choose a subject area from which they plan and teach a lesson to faculty and peers. TFA uses interviews and essays to screen applicants to better understand how they have responded to adversity, their demonstrated leadership abilities, and their respect for diversity and other cultures. Nashville Teacher Residency assigns candidates a social justice-oriented reading before the interview stage and uses candidates' responses to assess how serious students are about teaching in high-poverty schools, which is where they will teach for at least one year as part of their residency commitment. Nashville Teacher Residency also requires candidates to complete a sample lesson during the interview phase, after which they are given feedback, which they are asked to incorporate in a sample lesson they must deliver later.

Vanderbilt University and Lipscomb University conduct similar application and selection processes. Lipscomb University conducts interviews with candidates to assess personal demeanor and the impressions that candidates have of the teaching profession. With the help of teachers and administrators from local school districts, Vanderbilt University conducts interviews in which prospective candidates are posed certain difficult situations to which they may have to react as teachers. For example, applicants may be asked what they would do if they caught a student stealing, or how they would handle another teacher who teaches the same subject being unwilling to collaborate. These short role-plays are designed to judge prospective candidates' viewpoints and professional demeanor.

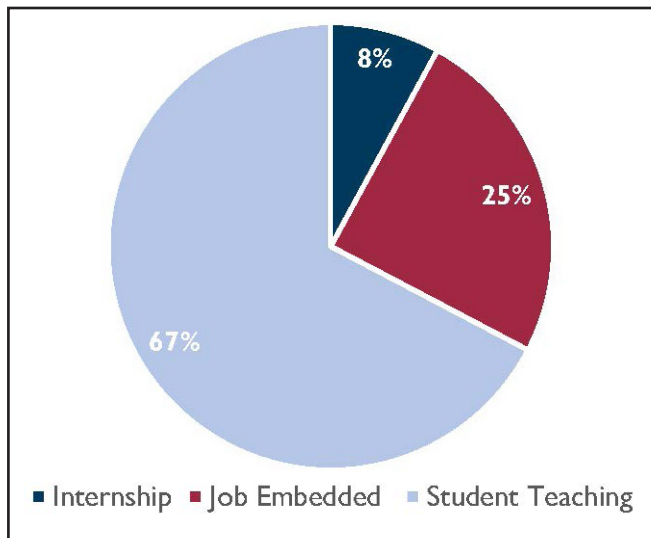
Some public EPPs require prospective teachers to submit applications that include essay questions and interviews to gain admission to educator preparation programs. At the University of Tennessee-Knoxville, most candidates select a faculty advisor to help guide them through the multiphase application process. After submitting an initial application containing basic identifying information, candidates complete a form where they are asked to self-identify how well they exhibit several professional competencies essential to the teaching profession. Next, candidates must respond to several essay questions and, finally, candidates are required to complete an in-person interview. Tennessee Tech University requires candidates to submit three disposition assessments completed by faculty, answer essay questions, and complete an interview. Middle Tennessee State University (MTSU) requires candidates to write an explanation of why the candidate wants to become a teacher, complete an interview, and obtain a recommendation from an MTSU faculty member, or a teacher or administrator in a public school.

EROs are generally more selective than other types of EPPs. Memphis Teacher Residency and Nashville Teacher Residency accept about 31 percent and 40 percent of applicants, respectively. TFA accepts about 15 percent of applicants nationally. By comparison, several public EPPs interviewed by OREA cited acceptance rates above 80 percent.

**Preparation** refers to the training that teacher candidates receive while seeking licensure through an EPP.

**On-the-job training** – The state requires all teacher candidates seeking educator licensure to successfully complete **clinical experiences** and sets a minimum requirement for such experiences. Clinical experiences are opportunities for teacher candidates to receive on-the-job training in which they observe experienced classroom teachers, plan lessons, and teach students in a K-12 school. Candidates engage in clinical teaching experiences through field experiences and clinical practice. **Field experiences** are opportunities for teacher candidates to observe classrooms and job-shadow teachers in a K-12 school, and are generally the first on-the-job training that teacher candidates receive.

**Exhibit 3: Percent of completers by licensure pathway type, 2013-2016**



After completing the required field experiences, teacher candidates generally complete a **clinical practice**. Clinical practice is made up of classroom-based responsibilities and assignments that help candidates learn the basics of teaching, and demonstrate they are prepared to be effective classroom teachers. According to state policy, each clinical practice must provide candidates with direct teaching experiences with a variety of student populations, including students who have diverse learning needs and who are from diverse backgrounds, in at least two settings. Clinical practice includes teacher candidates planning and teaching lessons in a K-12 classroom for a designated amount of time.

Although clinical practice is often referred to as student teaching, student teaching is only one type of clinical practice. The state specifies three types of clinical practice: student teaching, job-embedded, and internships. Clinical practice types are also referred to as “licensure pathways” in this report.<sup>F</sup>

**Student teaching** is a planned semester of at least 15 weeks that includes full-day teaching and observation activities under the guidance of a cooperating mentor teacher. Student teaching candidates gain classroom experience while earning course credit toward a degree or certification. All public and private EPPs offer the student teaching licensure pathway, and about 67 percent of teachers who completed training between 2013 and 2016 did so through the student teaching licensure pathway. (See Exhibit 3.) EROs do not offer the student teaching pathway.

The **job-embedded** pathway is a year-long clinical practice completed by candidates who already possess a bachelor’s degree. Candidates receive a teaching license and serve as a full-time teacher of record while they are enrolled in and receiving training through an approved EPP. Job-embedded licensure programs provide teachers with a more immediate path to licensure, often as a way for school districts to fill subject-area teacher shortages. According to the 2018 version of the Educator Preparation Report Card, job-embedded candidates are more than twice as likely to be endorsed to teach a high-needs subject area as candidates who complete student teaching or internships. About 25 percent of new teachers who completed training between 2013 and 2016 completed the job-embedded licensure pathway. (See Exhibit 3.)

All three types of EPPs offer the job-embedded licensure pathway, though the structure differs by EPP type. Teach for America Nashville and Memphis are job-embedded programs that provide teacher candidates with the bulk of their clinical teaching experiences over the summer, before they begin teaching full time. This intensive summer training session is called *Summer Institute* and is designed to thoroughly prepare candidates to be successful teachers in the high-poverty schools in which they are required to teach. In addition to Summer Institute, TFA also provides coaching and mentoring support to teachers throughout their two-year teaching commitment. See TFA Nashville’s Summer Institute for more information.

<sup>F</sup>In this report, types of clinical practice are also referred to as “licensure pathways” because clinical practice is often one of the last requirements that candidates must complete before being recommended for licensure.



### TFA Nashville's Summer Institute

A seven-week on-the-job orientation and training session co-managed by TFA and the local school district, during which TFA teacher candidates, called *corps members*, complete the bulk of their clinical teaching experiences before beginning their first year of teaching full time. Summer Institute is held in schools in the same city or region where corps members will complete their two-year teaching commitment.

On a typical school day during Summer Institute, corps members engage in direct teaching or observation activities from 7:00 a.m.-12:30 p.m. Summer school classrooms are staffed by mentor teachers who spend each day teaching lessons or observing and coaching corps members as they teach. TFA also employs instructional coaches who are responsible for providing tailored coaching and feedback to between five and 10 corps members, and corps members also have access to a subject-area coach and a classroom culture specialist. In the afternoons, corps members complete additional training sessions on topics like classroom management or lesson planning.

Candidates who enroll in a job-embedded program operated by a public or private EPP are typically not recruited by the EPP, as is done by EROs. Instead, local school districts typically recommend that such individuals enroll in a job-embedded program. These individuals may already be working in some capacity with the local school district, such as serving as a substitute teacher, or may be considering a career change to become a teacher. The local school district stands to directly benefit, as these candidates can help address teacher shortages in certain subject areas in the district. These candidates receive training and coursework as they teach full time. In some cases, job-embedded candidates complete the necessary coursework to earn their teaching license online, or through a mixture of online coursework and in-person seminars. According to interviews with administrators at EPPs that serve large numbers of these candidates, many job-embedded candidates trained by public and private EPPs teach in high-poverty schools.

The **internship** is a full school year of clinical practice completed under the guidance of a mentor teacher. Internship candidates are required to spend at least 100 school days engaged in “direct teaching experiences” in a K-12 school setting. Direct activities may consist of classroom teaching, observation, coursework, seminars, and lesson planning. About 8 percent of new teachers who completed training between 2013 and 2016 completed the internship licensure pathway. (See Exhibit 3.) All three types of EPPs offer the internship pathway but, like the job-embedded pathway, the structure and programmatic requirements differ according to EPP type.

UT Knoxville currently trains over 65 percent of its teacher candidates through a five-year master's program that ends in a one-year internship. Students apply to the program in their freshmen year, and major in the subject area in which they plan to teach while minoring in education. During the fifth year of the program, after receiving a bachelor's degree, candidates complete a year-long internship in a public school where they plan lessons and teach alongside a mentor teacher five days a week. During the year-long internship, candidates return to the university to take coursework toward a Master of Science in Teaching. While some candidates who complete the internship licensure pathway may teach in the same school or district in which they completed their internship, candidates do not agree to a teaching commitment for a time period or in a certain type of school, and not all candidates are provided with financial compensation during the internship year.



### The Teacher Residency Model

A type of internship pathway that focuses on recruiting and training teachers to fill subject-area shortages in high-poverty schools. Currently, there are at least two residency programs operating in Tennessee – Nashville Teacher Residency (NTR) and Memphis Teacher Residency (MTR) – and both are operated by EROs.<sup>6</sup> Like other internship programs, residencies provide candidates with an alternative path to educator licensure through the completion of a year-long apprenticeship alongside a mentor teacher. Although some EPPs may use the term *residency* synonymously with *internship*, national literature suggests that residencies have several programmatic features that set the model apart from an internship program. Teacher residencies provide specialized coursework and training to help candidates succeed in the high-poverty schools where they are required to teach for a designated time period following completion of the program, and candidates usually complete their year-long internship in the same school or district where they will teach after program completion. Most residencies, including the two that operate in Tennessee, also provide candidates with financial compensation in exchange for a commitment to teach for a designated time period. Nashville Teacher Residency candidates are paid a \$25,000 salary as a teaching assistant during the year of residency training, and Memphis Teacher Residency pays candidates a monthly stipend of \$1,200 during the year of residency training. Like Teach for America, these organizations also provide coaching and mentoring support to teachers throughout their teaching commitment. A recent Learning Policy Institute report on residencies notes that strong residency programs also foster relationships with local school districts, recruit candidates to meet specific district hiring needs, and provide continued mentoring and support for completers.

**Training location** – Tennessee’s EROs are focused on single cities for training and placement, typically either Nashville or Memphis, and require candidates to complete clinical teaching experiences in the same schools and districts where they are required to teach upon program completion. Although public and private EPPs attempt to place candidates in nearby schools or districts for clinical teaching experiences, candidates are not required to complete training in the same city or county as the EPP.

**Clinical mentor teachers** are the educators who provide on-the-job coaching and training to teacher candidates during their clinical teaching experiences. State policy requires that all teacher candidates have a clinical mentor who is licensed and endorsed in the subject area in which they supervise candidates. The length of time that candidates spend with mentor teachers differs according to licensure pathway. Candidates who choose the student teaching pathway spend at least 15 weeks with their mentor teachers. Candidates who complete the internship licensure pathway spend an entire school year under the guidance of their mentor teacher. Candidates who complete the job-embedded licensure pathway are required to have a mentor teacher, but there is no required time period that candidates must spend under their guidance.

EPPs must ensure that all teacher candidates have a clinical mentor while they complete their clinical teaching experience, but, in some cases, there are differences between EROs and public or private EPPs. EROs are generally more involved in the mentor selection process. For example, at least two EROs require mentor teachers to submit applications to serve as mentors, and these organizations often select teachers who are program alumni. Teach for America assign multiple mentors, each of whom specialize in a certain aspect of teaching, to each candidate. EROs are also more likely than public and private EPPs to provide continued mentoring and support to candidates after they begin teaching in the classroom full time. For more information about how Tennessee’s EROs provide continued mentoring to candidates, see Section 5.

<sup>6</sup> There are at least two other teacher residency programs that share some programmatic characteristics with MTR and NTR: Lee University’s Project Inspire and Belmont University’s Metro Nashville Urban Teacher Residency.

There were mixed opinions about the clinical mentor process among public and private EPPs interviewed by OREA. Some EPPs indicated satisfaction with their level of involvement in the selection of mentor teachers and with the quality of the mentors provided by their K-12 school district partners. For example, UT Knoxville and UT Martin have developed a co-selection process with local school districts where the EPP grades the performance of mentor teachers and indicates their preference whether certain mentors should be used in the future. Freed-Hardeman has a teacher selection committee made up of teachers, principals, and faculty who set mentoring criteria. Other EPPs identified difficulties in this area, such as their limited involvement in the mentor selection process and the challenges associated with ensuring that all candidates receive a high-quality mentoring experience.

Research conducted in Tennessee by Matthew Ronfeldt, a professor at the University of Michigan, suggests that the effectiveness of mentor teachers influences the effectiveness of new teachers once they enter the classroom, as measured by TVAAS and observation scores. His research found that new teachers were more effective when mentored by more effective teachers.<sup>4</sup> Completers whose mentor teacher had a level of effectiveness score of 5 (the highest LOE score) performed better on their evaluation than completers whose mentor teacher had a level of effectiveness score of 3. Dr. Ronfeldt's research in Tennessee is ongoing. Through partnerships with Tennessee Tech, Freed-Hardeman, Carson-Newman, Union, and UT Martin, he is currently exploring ways to identify the most effective mentor teachers, and how to provide mentor teachers with training to improve their effectiveness.



#### **TDOE's Primary Partnership Initiative**

The Tennessee Department of Education began the Primary Partnership Initiative in 2016 in order to strengthen communication and collaboration between EPPs and the school districts where the majority of EPP candidates complete clinical teaching experiences. Specific goals of the Primary Partnership Initiative include helping districts become more involved in the educator preparation process, aligning training at the EPP level with unique district needs, and increasing the level of collaboration between EPPs and school districts in the selection of clinical mentor teachers.

As part of the Primary Partnership Initiative, EPPs and school districts enter into a formal agreement that includes documentation of mutually agreed upon activities, strategies, and expectations associated with strengthening the clinical experience for teacher candidates. Specifically, EPPs and districts are required to specify plans for the co-selection of mentor teachers. Initial partnership agreements were collected by TDOE on February 15, 2019.

EPPs interviewed by OREA indicated the initiative has helped EPPs and districts improve several aspects of the educator preparation process, including the identification and selection of clinical mentor teachers. For example, Austin Peay State University has revised the mentor selection process to allow only teachers who achieved a level of effectiveness score of 4 or 5 to serve as mentor teachers before the change in state policy. Tennessee Technological University heard from one of its Primary Partners that mentor teachers needed more training on how to serve as effective mentors, so the EPP funded 10 trainings on effective mentoring.

The state has made changes to the existing teacher preparation rule to improve the quality and effectiveness of mentor teachers. SBE's Educator Preparation Rule 0520-02-04 governs many aspects of teacher preparation, including clinical teaching and clinical mentor criteria. The rule was revised and became effective January 28, 2019, on an emergency basis and is scheduled to become permanent on April 28, 2019. Part of the revision included more concrete requirements for the effectiveness of mentor teachers. Moving forward, clinical mentor teachers must have an overall level of effectiveness (LOE) score of "above expectations" (4) or "significantly above expectations" (5) for the prior school year. For more on LOE scores, see Section 4.

**Coursework** – State Board rule requires EPPs to align programming to subject-area and literacy standards. In 2017, the SBE approved new literacy standards for EPPs. The standards are aligned to other literacy initiatives in the state, including Read to be Ready and the Response to Instruction and Intervention model. Literacy standards require candidates to incorporate research-based practices that enable students to be proficient, motivated, and independent readers and writers. The Tennessee Department of Education required EPPs to submit a one-time literacy proposal outlining how they aligned instruction with the new literacy standards. In 2018, the Tennessee Department of Education also launched an EPP literacy network, made up of members from each EPP in the state, to identify needs and goals related to effective literacy teacher preparation.

OREA did not analyze the differences across each EPP’s specific curriculum but did note that the coursework in EROs focuses on teaching students in high-poverty schools. Because EROs place all their teacher candidates in high-poverty schools, they can more easily design coursework tailored to help educators in such schools. For example, Memphis Teacher Residency (MTR) provides candidates with a Master’s in Urban Education. TFA provides coursework in cultural competency and culturally relevant teaching strategies to help candidates who come from different cultures and backgrounds. For an in-depth discussion on the specialized coursework and training offered by EROs, including definitions and examples of cultural competency and culturally relevant teaching, see Section 4.



#### **Memphis Teacher Residency’s Master’s in Urban Education**

When Memphis Teacher Residency (MTR) was founded in 2009, the organization provided teacher candidates with a general Master’s in Instruction and Curriculum through its partnership with Union University. The degree was designed to prepare teachers to teach in any school across and outside of Tennessee, but MTR administrators noticed that the degree was not as helpful for residents who were going to teach in high-poverty schools.

To make the preparation and coursework specifically tailored to Memphis students and communities, MTR and Union University together developed a Master’s in Urban Education that all MTR teachers now earn over the course of the year-long internship portion of the program. Coursework for the Master’s in Urban Education is specifically tailored to Memphis students and communities: a cultural foundations course examines the origins of the achievement gap, and how the achievement gap, race, and poverty play a role in education in Memphis. Candidates also take content area courses, including courses on how to make content accessible for students who are struggling readers.

**Outputs** are the teacher candidates who have completed program requirements and have been recommended for licensure by an EPP. These teachers are referred to as “completers” in this report.

All teacher candidates are required to submit qualifying scores on a **licensure exam** that measures professional knowledge. Student teaching or internship candidates must submit qualifying scores on the licensure exam before applying for a teaching license. Job-embedded candidates receive a teaching license at the beginning of their preparation program and are not required to submit qualifying scores on a licensure exam until after completing their program.

Historically, teacher candidates in Tennessee could submit qualifying scores on either the Praxis Principles of Learning and Teaching (PLT) or edTPA assessment. In 2019, the state replaced the Praxis PLT and began requiring all candidates seeking licensure to submit a qualifying score on the appropriate edTPA performance-based assessment.<sup>H</sup>

<sup>H</sup> For the limited endorsement areas that do not have an appropriate edTPA exam, candidates must still submit a qualifying score on the appropriate Praxis PLT assessment. All candidates must also pass the relevant Praxis II content area licensure exam.





## EdTPA

A performance-based, subject-specific assessment developed by Stanford University faculty and staff and used by EPPs throughout the United States to measure the skills that teachers need to be successful from their first days in the classroom. On January 21, 2019, Tennessee began requiring all teacher candidates to pass the appropriate edTPA assessment before receiving a Tennessee teaching license.

EdTPA requires teachers to prepare and submit a portfolio of materials during their clinical teaching experience to demonstrate they are ready to be effective educators. The materials in the portfolio must demonstrate that candidates can design effective lesson plans, engage with real students and set ambitious learning goals, and analyze whether their students are learning and then adjust their instruction to become more effective. Teacher candidates also submit unedited video recordings of themselves at work in a real classroom as part of a portfolio that is scored by highly trained educators.

In a preliminary analysis, the SBE found a positive relationship between edTPA scores and teachers' classroom performance, as assessed by the state's teacher evaluation system. Research in California on PACT – the state's performance assessment on which edTPA was based – has shown it to be an effective predictor of teaching effectiveness, as measured by student achievement gains.<sup>5</sup>

**Employment** – Upon successful completion of an educator licensure program, completers from public and private EPPs are generally free to seek employment in schools across the country – not just in Tennessee. Completers from EROs, however, are placed in specific schools or districts within Tennessee by their organizations, usually through a formal agreement with school districts. For example, MTR examines school feeder patterns and places teachers in six Memphis neighborhoods where the organization has built relationships with principals. Candidates apply to the national TFA organization and indicate regions of the country where they would like to teach. Candidates are then placed in a region according to their academic qualifications and regional subject-area needs. After being placed in districts, candidates enrolled in EROs are required to teach for a designated time period between one and three years: one year for Nashville Teacher Residency, two years for TFA Nashville and Memphis, and three years for Memphis Teacher Residency.

**Continuing support and contact** – EROs are notable among EPP types for the level of ongoing mentoring and other support, such as professional development, provided to candidates after they begin teaching full time. For example, Memphis Teacher Residency offers “MTR University,” a biannual professional development opportunity for alumni that includes mini-courses, book clubs, and professional development focused on curriculum changes and new initiatives in Shelby County. TFA hires Managers of Teacher Leadership and Development, who continue to provide coaching and mentoring to candidates throughout their two-year teaching commitment. Some private EPPs also have continued contact with program completers after they begin teaching full time. For example, Lincoln Memorial University hosts a dinner for first- and second-year teachers during which they ask completers to reflect on what they wish they had been taught during their EPP program. For more information on continued support and coaching, see Section 5.

Several EPPs also survey program completers and note the importance of surveys in helping to drive programmatic change. For example, TFA surveys teachers three times a year and adjusts programming based on survey results. Several private EPPs also conduct surveys of completers. Lincoln Memorial University surveys completers, school leaders, and school districts about the strengths and weaknesses of teachers who have completed the program, and how the university's EPP program could improve the effectiveness of new teachers. Vanderbilt University administers a satisfaction survey to completers and employers one, three, and five years after program completion. The survey includes broad questions

about how well candidates felt they were prepared to teach, as well as more specific questions about how well-prepared candidates felt to teach individual subjects. Vanderbilt has used survey results to make a variety of programmatic changes. For example, after consistent findings across program completers and employers that new teachers were not prepared enough for school politics and that candidates did not feel ready to deal with students’ families, Vanderbilt made changes to coursework and curriculum to ensure that future candidates would be better prepared to handle these issues.

In addition to surveys that some EPPs administer to program completers, the Tennessee Department of Education surveys new teachers as part of its annual Educator Survey. Teachers with between one and two years of prior teaching experience are prompted to answer general questions about the preparation they received. Previous years’ surveys included questions asking EPP completers to reflect on the quality of their clinical mentor teacher, or how well their program prepared them for teaching in their current school setting. While these questions are helpful for the state to gain a broad picture of how well completers feel they are prepared to teach, these questions may be too vague to allow EPPs to make specific programmatic improvements. More on TDOE’s annual Educator Survey, and options for policymakers regarding surveys, can be found in Section 7.



**Cost: How much do EPPs spend per teacher candidate?**

Cost comparisons for EPPs are difficult because most programs are housed within colleges and universities and some costs are difficult to isolate for teacher candidates. Expenditures for EPPs housed within the school of education at four-year public and private colleges and universities are difficult to disentangle from the larger school of education and costs associated with services offered to all students – not just those who are teacher candidates. For example, professors who teach EPP coursework may also teach other courses to non-education majors. EPP coursework and training is offered in buildings that house courses for other programs, and EPP candidates receive services from the school of education and the larger institution over the course of their enrollment that are not associated with teacher training. See section 7 for a policy consideration on calculating costs per teacher candidate for public EPPs.

Because EROs are stand-alone programs, all costs are solely related to teacher candidates. ERO expenditures reported in the table include staff salary and costs associated with recruitment, training, mentoring, lodging, and other supports provided to candidates during enrollment in the program, and continued mentoring and support provided after program completion.

**Annual and total expenditures per teacher candidate for Tennessee’s EROs**

Education-related organization	Annual expenditure per teacher candidate	Total expenditure per teacher candidate over length of program
Teach for America Nashville/ Memphis	\$16,000	\$N/A
Memphis Teacher Residency	\$N/A	\$38,692

## Section 3: Current Approval, Accountability, and Evaluation Measures

### ***Educator licensure program approval***

The State Board of Education's (SBE's) Educator Preparation Rule 0520-02-04 governs how EPPs are approved, and outlines how EPPs are reviewed and held accountable for their performance. The rule was revised in 2019, changing some of the procedures relating to the approval and evaluation of educator licensure programs.

According to state rule, EPPs are required to be approved by the SBE before being authorized to offer educator licensure programs. The purpose of the approval process is to set a minimum standard for EPP performance, and to provide EPPs with data and other feedback to make programmatic improvements. There are two phases to SBE approval:

**Initial approval** is for new EPPs seeking program approval for the first time.<sup>1</sup> EPPs seeking initial approval must submit a proposal to the Tennessee Department of Education (TDOE) containing a variety of information, including evidence for how the proposed EPP will address SBE's educator preparation standards, the geographic area to be served, evidence of at least one Primary Partnership with a local school district, a description of admissions procedures, and evidence of organizational and financial stability. Once an EPP is awarded initial approval from SBE, the program may begin enrolling, training, and recommending teacher candidates for Tennessee teaching licenses. The initial approval period last for a minimum of three years and a maximum of five years. Initial approval expires when an EPP receives full approval or after five years, whichever occurs first.

**Full approval** – After operating with initial approval for a minimum of three years, an EPP may seek full approval by requesting a TDOE-managed full-approval review. All EPPs with initial approval must pursue full approval through a state-managed full approval review. If an EPP has not received full approval within five years, initial approval is revoked, and the EPP may no longer enroll or recommend candidates for licensure. EPPs must also maintain ongoing approval through further comprehensive reviews conducted every seven years.

All reviews are conducted by a TDOE-selected and trained review team. As part of the full-approval review, EPPs must host an on-site visit from the review team to evaluate EPP performance. Prior to the visit, each EPP must submit documentation demonstrating alignment to and implementation of Council for the Accreditation of Educator Preparation (CAEP) standards, as well as adherence to Tennessee-specific provider and program requirements. The on-site visit includes activities such as interviews with stakeholders, leadership, and district partners, as well as classroom observations. Following the visit, the review team prepares a report and presents findings to the TDOE-appointed Advisory Committee on Educator Preparation (ACEP). ACEP reviews the report and makes preliminary recommendations for approval status to TDOE. The department makes the final approval status recommendation to SBE, which decides whether to grant program approval and is responsible for determining program approval status.

According to SBE rule, there are five possible options for SBE action based on the full-approval review and recommendations from TDOE: full approval with exemplary status, full approval, full approval with minor stipulations, probationary approval with major stipulations, and denial of approval. The State Board has final authority on all decisions related to the approval of EPPs.

---

<sup>1</sup> As of 2018, two EPPs have only initial approval: Nashville Teacher Residency and Rhodes College. Both EPPs have received initial approval because they are new.

**Exhibit 4: A recap of the differences in inputs between EROs and public/private EPPs**

		<b>ERO</b>	<b>Private and Public</b>
<b>Inputs</b>	<b>Program points of entry</b>	EROs require prospective candidates to have a bachelor's degree before being admitted, so candidates are generally older than those enrolled in student teaching licensure programs at the undergraduate level.	Most candidates enter EPPs as undergraduates seeking a bachelor's degree and educator licensure. Job-embedded candidates and candidates seeking a post-baccalaureate degree in the course of licensure are required to possess a bachelor's degree.
	<b>Recruitment</b>	EROs devote significant time and resources to recruit diverse candidates from across the country. EROs also target recruitment efforts to many HBCUs and Hispanic-serving institutions to attract candidates who share backgrounds with the students they will teach in high-poverty schools.	In general public and private EPPs either recruit prospective teachers once they are enrolled in college or recruit from local school districts.  Historically, most public and private EPPs have engaged in little recruitment, although some have indicated the need to change recruitment strategies recently to address geographic and subject-area shortages. Enrollment is mostly driven by students with previous aspirations of becoming teachers.
	<b>Admissions criteria</b>	Generally, admissions criteria are in line with the state requirements. Teacher candidates enrolling in a bachelor's program must have a minimum GPA of 2.75, and have either an ACT score of 21, an SAT score of 1080, or a qualifying score on all three subtests (reading, writing, math) of the Praxis Core exam. EROs do not consider ACT as heavily in the admissions process as do public and private EPPs in most cases. Memphis Teacher Residency requires candidates to have a 3.0 undergraduate GPA.	Admissions criteria are generally in line with the state mandated 2.75 GPA and 21 score on the ACT, although some EPPs require an ACT score of 22 instead of 21.
	<b>Application and selection</b>	EROs employ a rigorous application and selection process. EROs use video and in person interviews, essays, and model lessons to judge an applicant's personal demeanor and teaching ability. EROs generally have low acceptance rates. Memphis Teacher Residency accepts about 31% of total applicants, while nationally, TFA accepts about 15% of applicants. Nashville Teacher Residency accepts about 40% of applicants.	Generally, public and private EPPs employ less rigorous application and selection processes, although some public and private EPPs do require prospective candidates to complete essay questions and interviews. Acceptance rates at some public and private institutions are above 80%.

**Exhibit 5: A recap of the differences in preparation between EROs and public/private EPPs**

		<b>ERO</b>	<b>Private and Public</b>
<b>Preparation</b>	<b>On-the-job training</b>	Candidates enrolled in EROs complete on-the-job training either through the job-embedded or internship licensure pathway and are required to do so in high-poverty schools. Candidates enrolled in EROs generally begin training immediately over the summer and begin teaching full time or receiving more training the following fall. Unlike public and private EPPs, there is often not a definitive stopping point between when an ERO candidate completes teacher training and begins teaching full time. Rather, candidates complete on-the-job training early and often, and continue to receive support from EROs even after they begin teaching full time.	Public and private EPPs offer all three types of licensure pathways, but about 79 percent of completers from public and private institutions complete hands-on training through the student teaching licensure pathway. Although public and private EPPs attempt to place candidates in nearby schools or districts for on-the-job training, candidates are not required to complete training in the same city as the EPP, and candidates are sometimes required to travel to complete hands-on training.
	<b>Mentor teachers</b>	EROs are generally more involved in the mentoring process, from selection to continued involvement with candidates after they begin teaching. EROs also tend to provide more personalized mentoring to candidates over longer time periods.	There were mixed opinions about this aspect of the preparation process among the public and private EPPs interviewed by OREA. Some EPPs indicated satisfaction with the quality of the mentors received from their K-12 school district partners. Other EPPs identified difficulties in this area, such as their limited involvement in the mentor selection process and the challenges associated with ensuring that all candidates receive a high-quality mentoring experience.
	<b>Coursework</b>	By placing all teachers in high-poverty schools, EROs can offer specialized coursework and training. MTR provides candidates with a Master's in Urban Education designed to help residents succeed in critical needs schools in Memphis. TFA provides coursework in cultural competency and culturally relevant teaching to help teachers be successful in high-poverty schools.	Many public and private EPPs embed culturally competent teaching strategies into their curriculum to ensure that their completers are prepared to teach many types of students. It is not practical for public and private EPPs to offer extensive training tailored to one type of school, since completers from these EPPs may seek employment anywhere they choose.

**Exhibit 6: A recap of the differences in outputs between EROs and public/private EPPs**

		<b>ERO</b>	<b>Private and Public</b>
<b>Outputs</b>	<b>Employment</b>	<p>Tennessee’s EROs require their completers to teach in high-poverty schools in the same city in which they are trained, and place teachers in those schools through formal agreements with district administrators. EROs also require candidates to commit to teaching for a designated amount of time: one year for Nashville Teacher Residency, two years for TFA Nashville and Memphis, and three years for Memphis Teacher Residency.</p> <p>In exchange for their teaching commitment, ERO candidates are provided financial incentives. Nashville Teacher Residency candidates are paid a \$25,000 salary as a teaching assistant during the year of residency training, and Memphis Teacher Residency pays candidates a monthly stipend of \$1,200 during the year of residency training. Teach for America candidates are eligible for annual loan forgiveness between \$5,300 and \$6,100 through AmeriCorps.</p>	<p>Currently, candidates are mostly free to explore employment in any school, district, or state. Some public and private EPPs communicate with district partners to learn about district needs.</p> <p>TDOE is working to improve how EPPs supply district partners with new teachers.</p> <p>As part of the Primary Partnership Initiative, EPPs and school districts enter into a formal agreement that includes establishing processes for supplying districts with teachers to fill teacher shortages.</p>
	<b>Continuing support and contact</b>	<p>EROs engage in extensive contact and continued mentoring once teachers enter the classroom via instructional coaching and alumni support.</p> <p>Additionally, some EROs survey program completers and school districts, and use survey results to make programmatic changes.</p>	<p>Public and most private EPPs generally have little contact and offer little support to completers once they begin teaching. The exception is job-embedded candidates, who make up about 25 percent of teacher candidates in public or private EPPs. These candidates take coursework through their EPP as they teach full time.</p> <p>Several private EPPs survey program completers and school districts, and use survey results to make programmatic changes.</p>



### The denial of approval for Bethel University's EPP

In 2016, SBE denied approval of Bethel University's EPP. While Bethel University continues its court challenge of the SBE action, the institution is not currently allowed, to recommend teacher candidates for licensure.

In November 2013, a review team from TDOE determined that Bethel did not meet two CAEP standards and recommended that Bethel receive "approval with stipulations," which was an approval option under the existing version of State Board Policy 5.504. In April 2015, TDOE assessed Bethel's progress on addressing the areas of deficiency and concluded that Bethel now met the two standards, though some areas of weakness remained. TDOE planned to recommend that SBE grant Bethel "approval without stipulations," but, on learning that Bethel was pursuing CAEP accreditation, former Tennessee Commissioner of Education Candice McQueen decided that TDOE would "let the [CAEP] process play out" before making an approval recommendation.

In May 2016, Bethel was granted national accreditation by CAEP for two years but, based on CAEP's findings that two of its standards were not fully met, given until the fall of 2017 to demonstrate progress toward addressing those standards. In addition to the two standards that Bethel did not fully meet, the CAEP review also found the university had additional areas for improvement in three other standards.

After learning of the findings of Bethel's CAEP review, Commissioner McQueen recommended to SBE that Bethel's EPP be denied approval. SBE voted to deny Bethel's EPP approval on July 22, 2016. Bethel challenged the denial of approval in court, and the case is ongoing. As of February 2019, Bethel's EPP is not approved by SBE to recommend teacher candidates for licensure.

TDOE will conduct a **focused review** for EPPs that receive probationary approval with major stipulations. The focused review will be conducted by a TDOE-appointed team of trained reviewers, including TDOE staff, K-12 teachers, EPP personnel, and content experts. The review team will assess progress made by the EPP in addressing major stipulations and meeting the standards identified as falling below expectations during the full-approval review. The review team will prepare a report and present findings to the TDOE-appointed Advisory Committee on Educator Preparation (ACEP), which reviews the report and makes preliminary recommendations to TDOE. TDOE will review information from the focused review and ACEP recommendations, and may make approval status changes, including denial of approval, to the State Board, which determines program approval status.



### CAEP standards

The Council for the Accreditation of Educator Preparation (CAEP) is the national accrediting group for EPPs that have programs leading to certification and licensure, as well as bachelor's, master's, post-baccalaureate, and doctoral degrees. CAEP standards and their components flow from two guiding principles: evidence that an EPP's graduates are competent and caring, and evidence that the EPP's staff have the capacity to create a culture of evidence and use it to maintain and enhance program quality. Expressed in broad terms, the five standards used by CAEP are

- Standard 1 - Content and pedagogical knowledge
- Standard 2 - Clinical partnerships and practice
- Standard 3 - Candidate quality, recruitment, and selectivity
- Standard 4 - Program impact
- Standard 5 - Provider quality and continuous improvement

In addition to the educator preparation program approval and review processes, state officials use two main tools to evaluate the performance of EPPs – the **TDOE Annual Report** and **SBE's Educator**

**Preparation Report Card.** Both tools rely on the performance of EPP completers in the classroom, as measured by Tennessee’s teacher evaluation system.

**TDOE Annual Reports for Tennessee Educator Preparation Providers**

In accordance with SBE’s Educator Preparation Policy 5.504, TDOE submits **Annual Reports for Tennessee Educator Preparation Providers** to EPPs with approved educator licensure programs. These reports provide information to EPPs on program characteristics, including the performance of program completers. The Annual Reports serve a dual purpose: to provide EPPs with detailed information to support continuous programmatic improvement and to hold all EPPs accountable for the performance of the teachers they produce.

**Exhibit 7: Annual Report performance domains**

<b>Domain 1: Candidate Recruitment and Selection</b>	Admissions assessment, race and ethnicity, gender, and high-needs endorsement areas.
<b>Domain 2: Employment and Retention</b>	Overall employment rate, first-year employment rate, and two-year employment rate.
<b>Domain 3: Candidate Assessment</b>	Pedagogical assessment, literacy assessment, and specialty area assessment.
<b>Domain 4: Completer, Partner, and Employer Satisfaction</b>	LEA partner satisfaction and completer satisfaction. (Employer satisfaction is not currently scored).
<b>Domain 5: Completer Effectiveness and Impact</b>	Overall evaluation ratings, TVAAS ratings, observation ratings.

Note: As of 2018, employer satisfaction in Domain 4 was not scored on the Performance Report. TDOE plans to develop, validate, and deploy surveys that will ultimately be used to measure employer satisfaction for Domain 4 by 2020.

According to SBE’s Educator Preparation Rule 0520-02-04 , the TDOE will conduct an **interim review** for EPPs that perform below expectations on the annual report for two consecutive years. Additionally, the department may conduct an interim review for EPPs that receive full approval with minor stipulations or EPPs with initial approval that perform below expectations as reported on the annual report at any point during the initial approval period.

During the interim review, the EPP must submit an improvement plan to the TDOE, which monitors the EPP’s progress. If an EPP does not make sufficient progress on implementation of the improvement plan, TDOE may recommend a change in approval status, including denial of approval, to the SBE, which determines program approval status. March 2019 marked the first time that EPPs could be subject to interim reviews.



**Denial of approval**

If an EPP that is currently training teachers were to be denied approval as the result of a comprehensive review, it is likely that some students with previous plans of becoming teachers would forego enrollment in that institution in favor of another that is approved, which could result in the loss of tuition revenue.

THEC performed an analysis for OREA to show the potential loss in tuition revenue should approval be revoked for one year as the result of the comprehensive review process for an EPP that is currently training teachers. THEC constructed a hypothetical scenario in its analysis that examined the potential loss in tuition revenue should a single class of students choose to attend a different institution because their intended EPP could no longer train them to receive a teaching license. THEC projected that revocation of approval for a single class would result in losses in revenue of between \$351,585 and \$1,841,740 in a single year, depending on the institution, and losses in revenue between \$1,458,847 and \$7,493,846 over four years these students would have been enrolled, depending on the institution.



## SBE Educator Preparation Report Card<sup>1</sup>

In 2007, the Tennessee General Assembly passed legislation requiring the publication of a report on the performance of EPPs throughout the state. In response, the Tennessee Higher Education Commission produced a report card on the effectiveness of EPPs beginning in 2008. The current Educator Preparation Report Card has been produced annually by SBE since 2016. According to SBE, the purpose of the report card is to provide a user-friendly tool with focused information about providers and the performance of completers, and to promote stakeholder conversations about continuous improvement.

The report card contains four domains encompassing multiple metrics. (See Exhibit 8.) EPPs are awarded a performance category from 1 to 4 based on the percentage of points earned across all domains and metrics. EPPs awarded a score of 1 are the lowest performing, while EPPs awarded a score of 4 are the highest performing. Exhibit 20 in Section 4 shows the average report card score for each type of EPP.

### Exhibit 8: SBE's Educator Preparation Report Card domains and metrics

Domain: Candidate Profile	Metrics	Total points: 20
Evaluates the provider's ability to recruit a strong, diverse cohort of candidates and prepare them to teach in the content areas of greatest need.	Percentage of completers with an ACT score of 21+ or an SAT score above 1020	Points: 3
	Percentage of racially and ethnically diverse completers	Points: 7
	Percentage of high-demand endorsements	Points: 10
Domain: Employment	Metrics	Total points: 15
Evaluates the provider's performance in preparing educators to begin and remain teaching in Tennessee public schools.	First-year placement rate	Points: 6
	Beyond year-one retention rate	Points: 9
Domain: Provider Impact	Metrics	Total points: 40
Reports on the effectiveness of a provider's completers in Tennessee public school classrooms.	Percentage of completers with an observation score of 3+	Points: 6
	Percent of completers with an observation score of 4-5	Points: 9
	Percentage of completers with a TVAAS score of 3+	Points: 10
	Percentage of completers with a TVAAS score of 4-5	Points: 15
Domain: Satisfaction	Metrics	Total points: 25
Not currently measured.	N/A	

Note: As of 2018, the satisfaction domain was not scored on the Educator Preparation Report Card. TDOE plans to develop, validate, and deploy surveys that will ultimately be used to measure the satisfaction domain by 2020.

Source: Tennessee State Board of Education, 2017 Teacher Preparation Report Card Technical Report, <https://www.tn.gov/content/dam/tn/stateboardofeducation/documents/teacherprep/2017/Technical%20Report%202017.pdf>.

<sup>1</sup> SBE's 2018 Educator Preparation Report Card included 41 EPPs and data on three cohorts of completers (2013-14, 2014-15, and 2015-16). Some EPPs that receive annual reports from TDOE do not receive report cards because those programs do not have at least 10 program completers or lack enough data to generate a score on at least one-half of the metrics in each domain.

### **Teacher evaluation in Tennessee**

The TDOE Annual Report and SBE Educator Preparation Report Card both rely to varying degrees on the Tennessee Value-Added Assessment System (TVAAS) and teacher observation scores to determine the effectiveness of EPPs. TVAAS and observation scores are also used in the Tennessee Educator Acceleration Model (TEAM) – the primary model used to evaluate Tennessee public school educators. The TEAM evaluation model combines TVAAS results, observation scores, and another achievement measure to provide each teacher with an overall level of effectiveness (LOE) score. For this report, OREA used TVAAS, observation scores, and LOE scores to analyze EPP performance.

**The Tennessee Value Added Assessment System (TVAAS)** – TVAAS is a statistical model that uses student learning growth on academic assessments to measure teaching effectiveness. Using past testing data from other similar students across the state as a comparison group, TVAAS predicts how well a student should perform on future standardized tests. A teacher’s TVAAS score, then, is based on whether his or her students, on average, make less, the same, or more progress on state standardized tests as similar students across the state. In Tennessee, teachers receive a TVAAS score of 1 through 5, with level 1 representing “least effective,” level 3 representing “average effectiveness,” and level 5 representing “most effective.”

**Observation scores** – State policy requires that all classroom teachers be observed during instruction by an administrator between one and six times, depending on licensure status and previous LOE score, as part of the annual teacher evaluation process. At least half of all observations must be unannounced and administrators must provide teachers with written feedback within one week of each observation visit. Administrators compile all their observations into one score at the end of the year to be used in teacher evaluations.

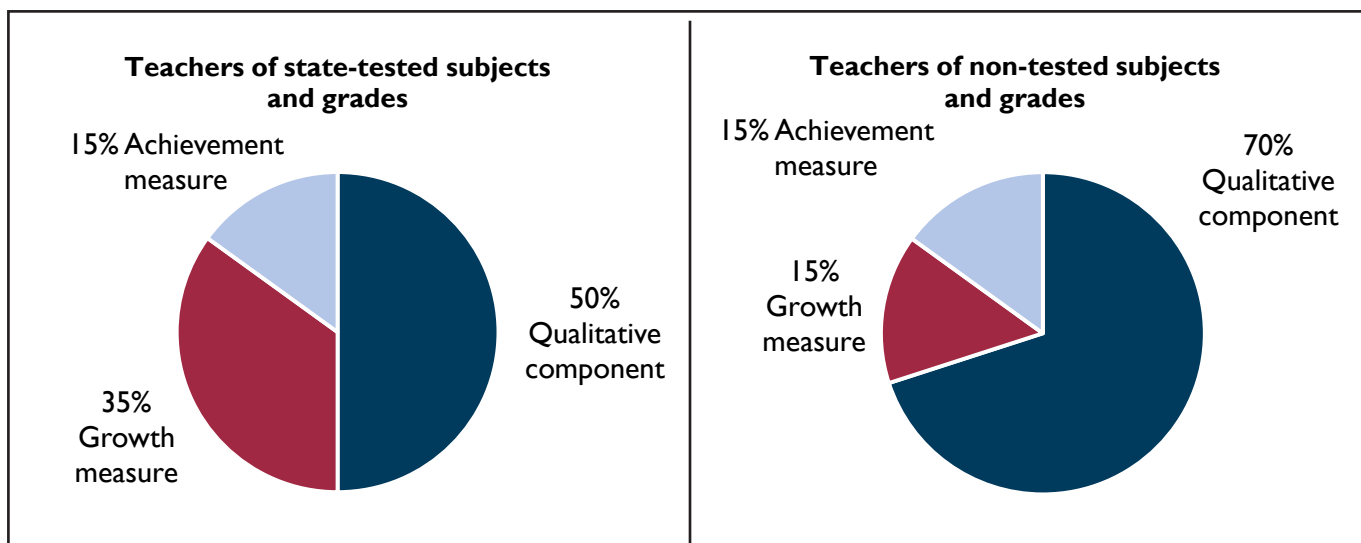
In Tennessee, the Teacher Education Acceleration Model (TEAM) observation is the most widely used observation model, although state policy allows for districts to select an alternate observation model from an SBE-approved list. Under TEAM, teachers receive an observation score from 1 to 5.

**Overall LOE scores** – A teacher’s LOE score includes three parts:

- **Growth measure** – For state-tested teachers, the growth measure is their individual TVAAS score (based on TN Ready); for teachers who are not state-tested, the growth measure is generated from an approved growth portfolio model or from the schoolwide average TVAAS score if there is no portfolio for the subject or grade.
- **Qualitative measure** – Observation scores.
- **Achievement Measure** – TN Ready scores, state assessments, schoolwide average TVAAS score for teachers who are not state-tested, ACT/SAT, AP/IB exams, or graduation rate.

As Exhibit 9 shows, the weights assigned to each part of the model are different for teachers of state-tested subject areas and grades. State-tested subject areas and grades are those in which students take a TN Ready exam. According to TDOE, under Tennessee’s federal Every Student Succeeds Act (ESSA) plan, for the 2018-19 school year, students will take TN Ready exams in English/language arts, math, science, and social studies in grades 3-8. High school students will take TN Ready exams for English in grades 9 and 10, for math in three of their high school years, and for U.S. History and Geography, and Biology.

### Exhibit 9: Tennessee’s three-part teacher evaluation model



As Exhibit 9 shows, the growth measure accounts for a higher percentage of the overall LOE score for teachers of state-tested subjects or grades (35 percent compared to 15 percent). Teachers of non-tested subject areas still receive a TVAAS score, but the growth measure is based on the schoolwide average TVAAS score for the entire school where they teach.<sup>K</sup>

### Exhibit 10: Educator performance level of effectiveness (LOE) descriptions

Performance Level Descriptions	
1	<b>Significantly Below Expectations:</b> A teacher at this level has limited knowledge of the instructional skills, knowledge, and responsibilities described in the rubric and struggles to implement them. He/she makes little attempt to use data to set and reach appropriate teaching and learning goals and has little to no impact on student achievement.
2	<b>Below Expectations:</b> A teacher at this level demonstrates some knowledge of the instructional skills, knowledge, and responsibilities described in the rubric but implements them inconsistently. He/she may struggle to use data to set and reach appropriate teaching and learning goals. His/her impact on student achievement is less than expected.
3	<b>At Expectations:</b> A teacher at this level understands and implements most of the instructional skills, knowledge, and responsibilities described in the rubric. He/she uses data to set and reach teaching and learning goals and makes the expected impact on student achievement.
4	<b>Above Expectations:</b> A teacher at this level comprehends the instructional skills, knowledge, and responsibilities described in the rubric and implements them consistently. He/she is skilled at using data to set and reach appropriate teaching and learning goals and makes a strong impact on student achievement.
5	<b>Significantly Above Expectations:</b> A teacher at this level exemplifies the instructional skills, knowledge, and responsibilities described in the rubric and implements them without fail. He/she is adept at using data to set and reach ambitious teaching and learning goals. He/she makes a significant impact on student achievement and should be considered a model of exemplary teaching.

Source: Tennessee Department of Education, Team Educator Acceleration Model, Evaluation Guidance, <https://team-tn.org/evaluation/evaluation-guidance/#loescale>.

<sup>K</sup> As the result of the challenges that occurred with TN Ready online administration, as well as the legislation passed by the General Assembly during the 2018 legislative session, educators who have 2017-18 TN Ready data included in their score will have the ability to nullify their entire LOE score if they choose. For more information on how teacher evaluation has temporarily changed as a result, see the Tennessee Department of Education’s Detailed Teacher Evaluation Guidance for 2017-18.

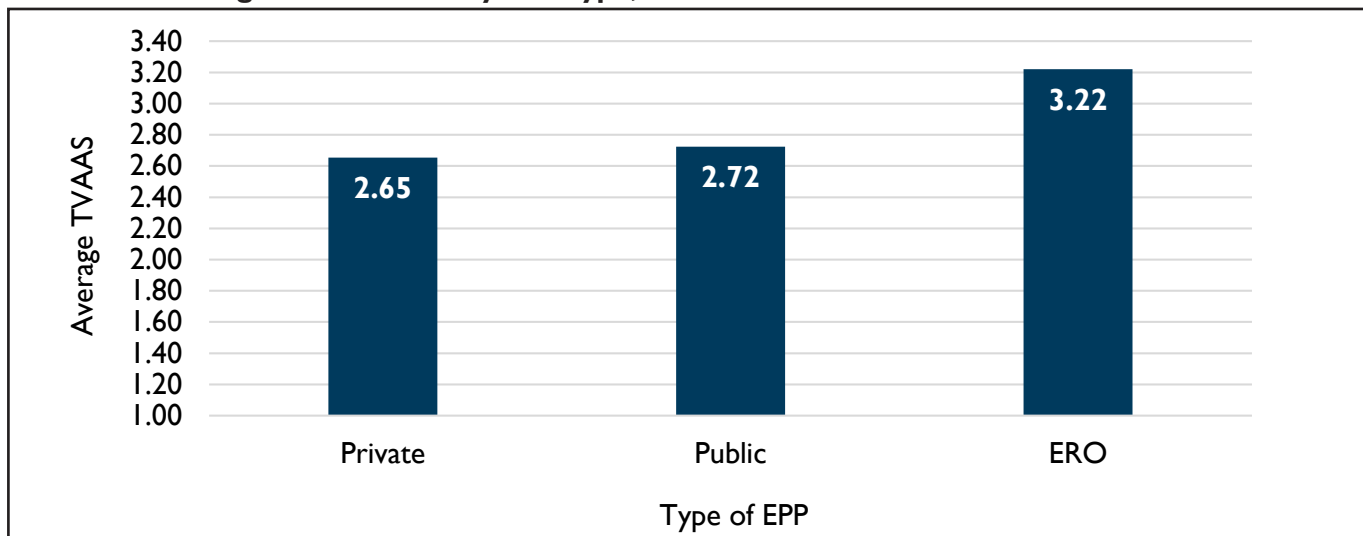
## Section 4: EPP Performance

OREA analyzed EPP performance using teacher effectiveness data collected from 2015 through 2017 and found that EROs outperformed public and private colleges and universities based on the TVAAS scores of completers.

### TVAAS growth scores

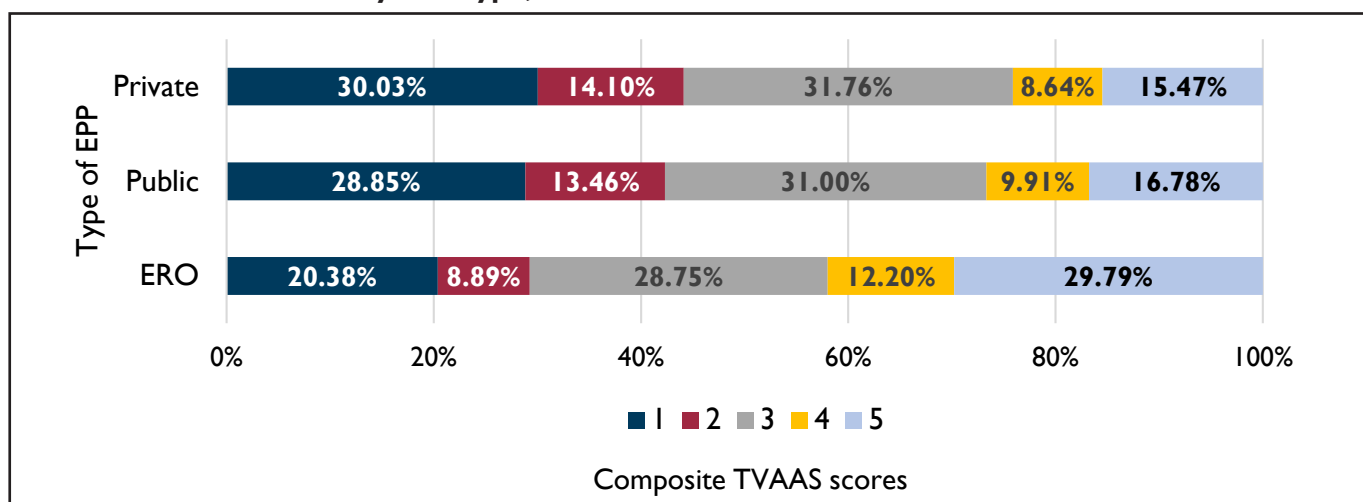
OREA’s analysis of the average TVAAS score for completers from Tennessee’s private EPPs, public EPPs, and EROs shows that completers from the EROs had higher average TVAAS scores than completers from public or private EPPs. (See Exhibit 11.) The EROs included in this analysis are Teach for America Nashville, Teach for America Memphis, the New Teacher Project Nashville, and Memphis Teacher Residency.

**Exhibit 11: Average TVAAS score by EPP type, 2015-2017**



Using the same three years of data, 2015 through 2017, Exhibit 12 shows the percentage of completers from each type of EPP and their average TVAAS score. As the exhibit shows, completers from Tennessee’s EROs are almost twice as likely as completers from public or private EPPs to receive a TVAAS score of 5. New teachers trained by EROs are also less likely to receive a TVAAS score of 1 or 2 – the lowest possible scores. Completers from all three EPP types are almost equally as likely to receive a TVAAS score of 3.

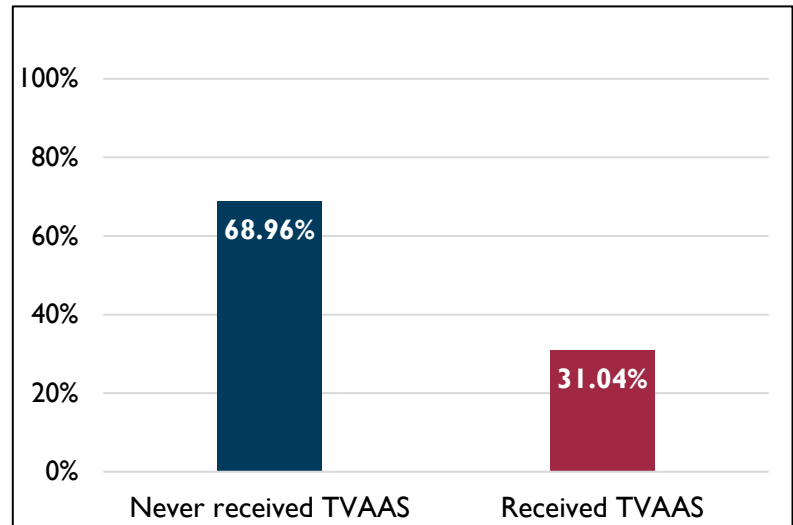
**Exhibit 12: TVAAS scores by EPP type, 2015-2017**



### TVAAS limitations

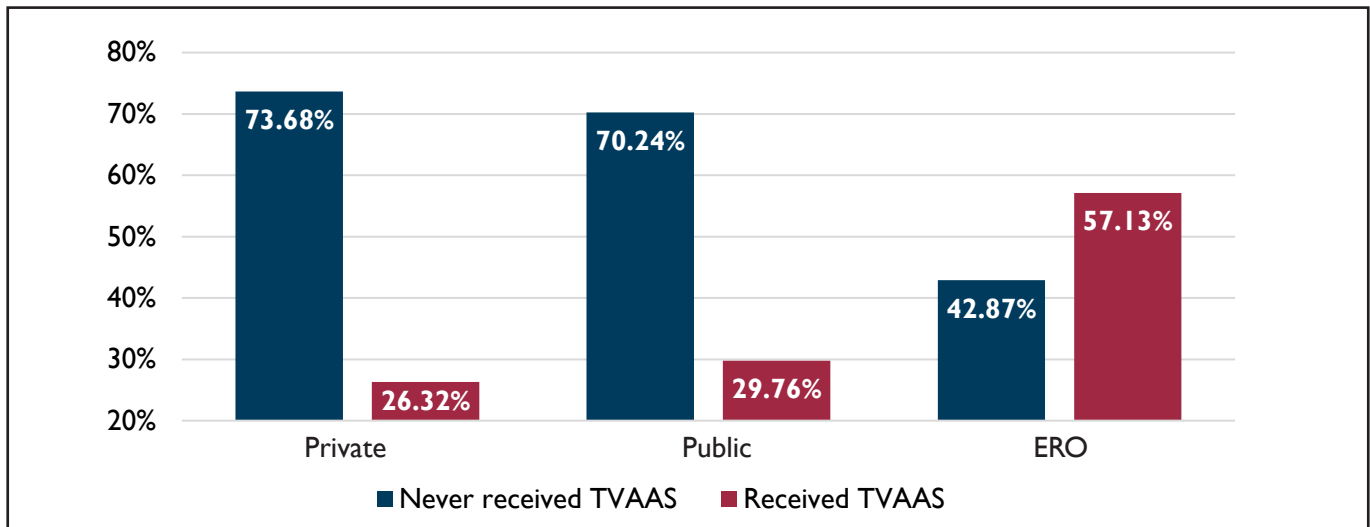
There are several limitations to using TVAAS as a measure of EPP effectiveness. Less than one-third of EPP completers received an individual TVAAS score between 2015 and 2017 because TVAAS scores are assigned only to teachers who teach in Tennessee public schools and teach in grade and subject areas that generate state test scores. For state-tested teachers, the growth measure portion of their teacher evaluation is their individual TVAAS score. (See Exhibit 9.) The roughly 69 percent of completers who did not receive a TVAAS score during the three years reviewed either taught in grades or subject areas that are not state-tested, taught in private schools, or left the state of Tennessee upon graduation and are not included in any EPP performance and accountability measures.

**Exhibit 13: Percent of completers who did and did not receive an individual TVAAS score between 2015 and 2017**



As Exhibit 14 shows, the percentage of completers who receive TVAAS scores differs by EPP type. Approximately one-third of completers from public and private EPPs receive a TVAAS score, while over half of the completers from EROs receive TVAAS scores.

**Exhibit 14: Percent of completers from 2013 through 2016 who received a TVAAS score, by EPP type**



### Observation scores

Tennessee uses observation scores as another measure to evaluate the effectiveness of teachers and the EPPs they attend. Since all educators who teach in a Tennessee public school receive an observation score, more teachers receive observation scores than TVAAS score. As Exhibit 15 demonstrates, average observation scores for first-year teachers were similar across all three types of EPPs during the years analyzed by OREA.

**Exhibit 15: Average observation score by EPP type for first-year teachers, 2015-2017**

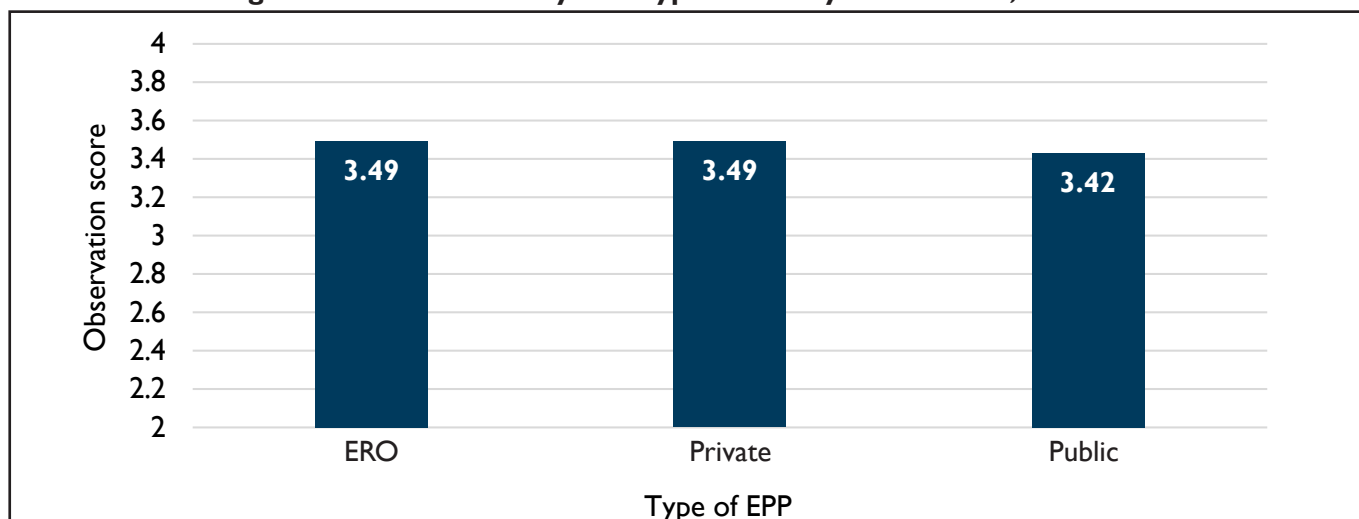
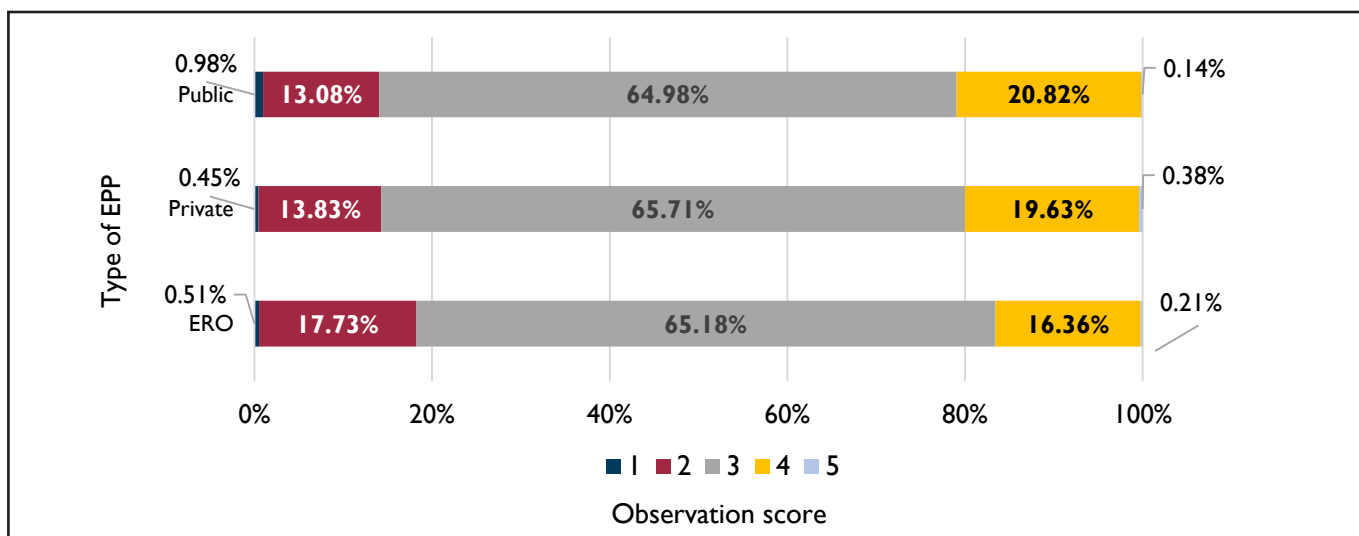


Exhibit 16 shows the percent of first-year teachers who receive each observation score by EPP type from 2015 through 2017. First-year teachers from public and private EPPs were slightly more likely to receive an observation score of 4 than first-year teachers from EROs. First-year teachers from all three types of EPPs were almost equally as likely to receive an observation score of 3, while first-year teachers from EROs were the most likely to receive an observation score of 2.

**Exhibit 16: Percent of first year teachers with each observation score by EPP Type, 2015-2017**



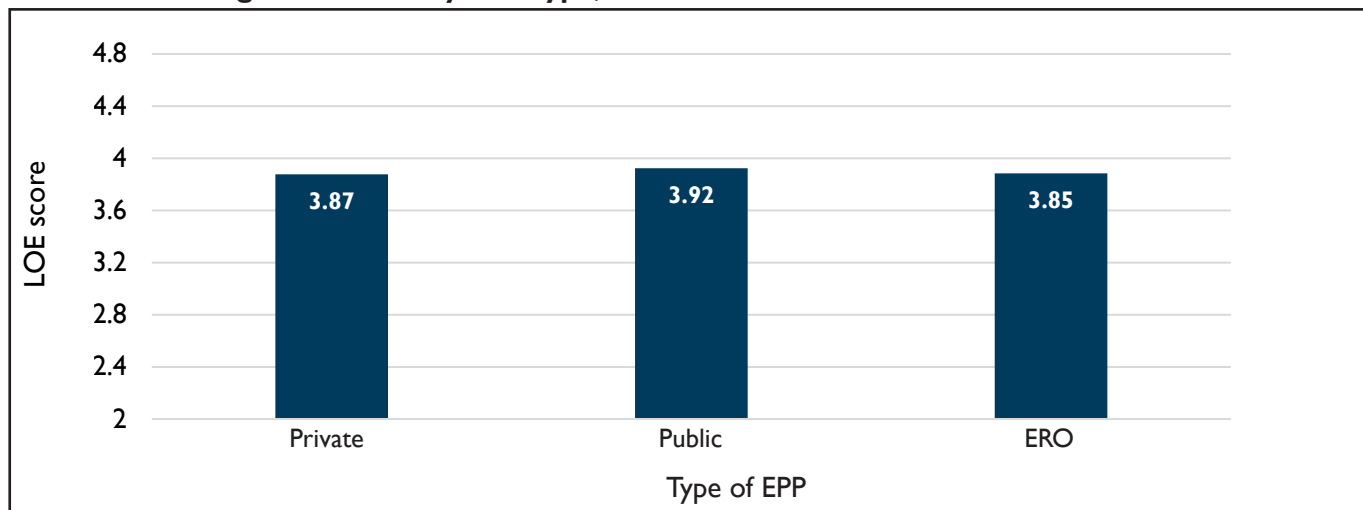
**Observation score limitations**

There are limitations to using observation scores of completers to determine the effectiveness of EPPs. As Exhibit 16 shows, although there are small differences in scores, most teachers receive a score of 3. Using the same data, OREA determined that 84 percent of all teachers who completed preparation between 2013 and 2016 received an observation score of 3 or more from 2015 through 2017. With most completers receiving a 3 on average, and few completers receiving a 1, 2, or 5, there is less differentiation among EPPs based on observation scores than there is based on TVAAS scores. Finally, examining observation scores after the first year of teaching may be a disadvantage for EPPs with high percentages of job-embedded candidates. For job-embedded candidates, the first year of teaching is the same year in which they receive training through an EPP. Candidates enrolled in internship or student teaching programs have undergone training before their first year of teaching, thus, these candidates may perform better during classroom observation in their first year.

### Overall level of effectiveness (LOE scores)

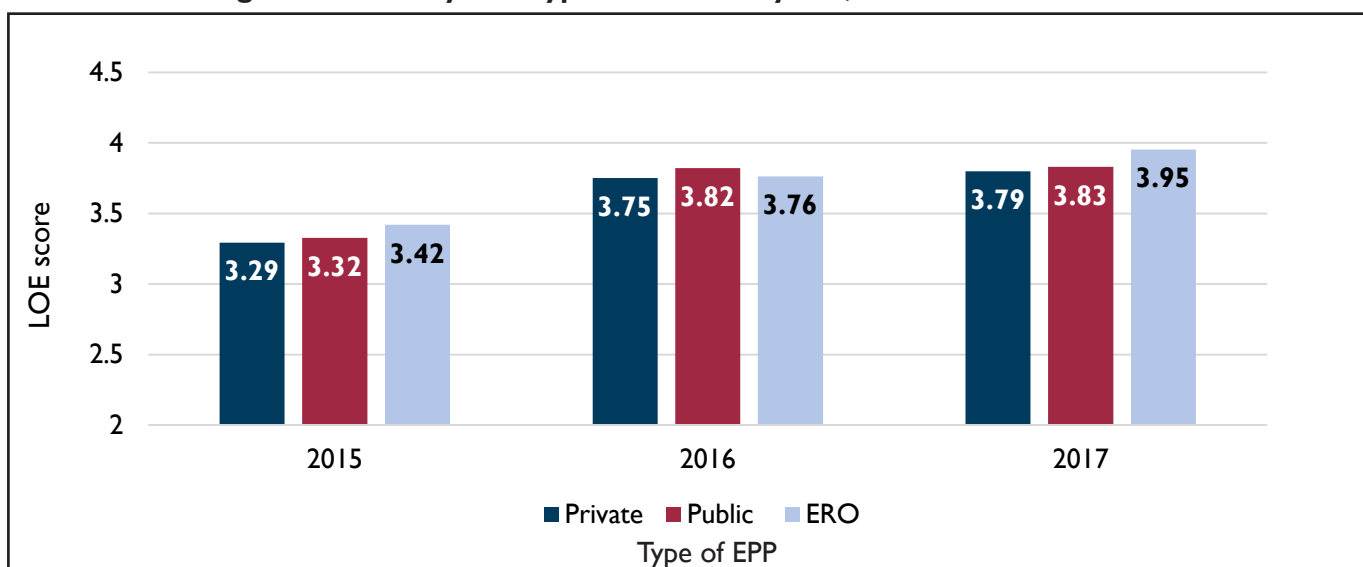
Tennessee’s teacher evaluation model uses multiple measures – TVAAS scores, observation scores, and an achievement measure chosen by each teacher – to assign an overall level of effectiveness (LOE) score to all public school teachers.<sup>1</sup> Like observation scores, LOE scores capture the performance for all EPP completers. OREA found few differences between EPPs based on completers’ LOE scores. As Exhibit 17 shows, average LOE scores are similar across all three EPP types.

**Exhibit 17: Average LOE score by EPP type, 2015-2017**



Differences emerge between the three types of EPPs when examining average LOE scores for each of the three years analyzed by OREA. As Exhibit 18 shows, completers from EROs had the highest average LOE scores in 2015 and 2017, while completers from public EPPs had the highest average LOE scores in 2016.

**Exhibit 18: Average LOE score by EPP type in individual years, 2015-2017**

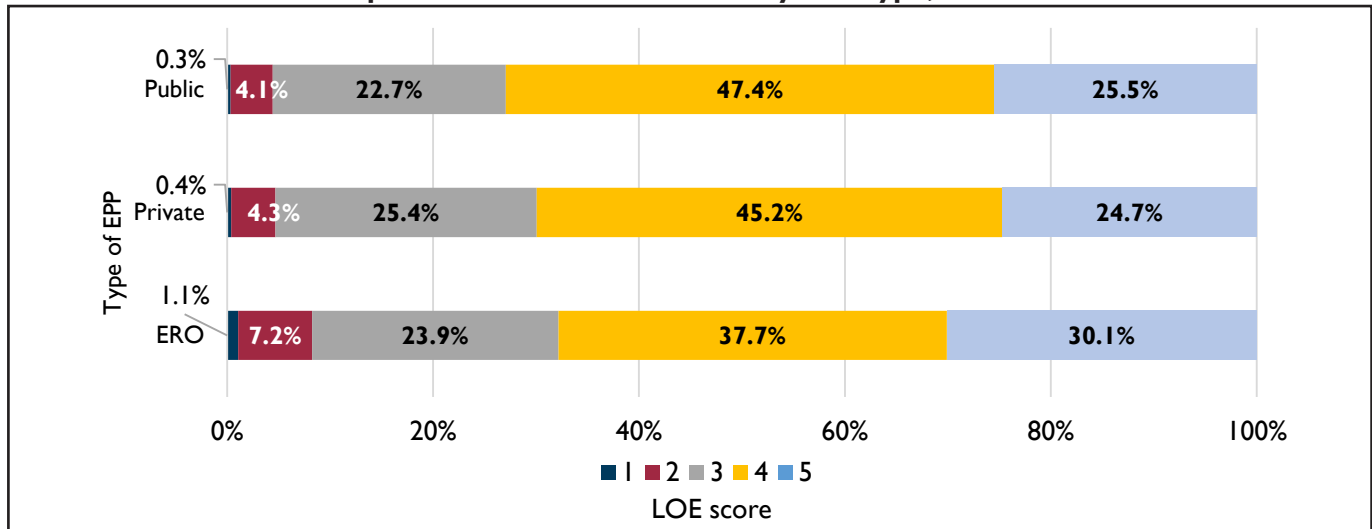


Differences are also apparent between the three types of EPPs when examining the percentage of completers who receive individual LOE scores. Exhibit 19 shows the percentage of completers for each type of EPP by LOE score. As with TVAAS scores, completers from EROs were more likely to be rated a level 5 – the highest level of effectiveness – than completers from public and private EPPs. Completers

<sup>1</sup>A teacher who does not have an individual TVAAS score must use the average TVAAS score for the school in which they teach to calculate LOE.

from EROs were less likely to be rated a level 3 and more likely to be rated a level 1 – the lowest level of effectiveness – than other EPPs. Taken together, Exhibits 17-19 suggest that when using LOE scores to evaluate effectiveness, the three types of EPPs in Tennessee do not differ as much as when only TVAAS scores are used.

**Exhibit 19: Percent of completers with each LOE score by EPP type, 2015-2017**



Note: Analysis excludes Memphis Teacher Residency and Union University completers for 2017. The highest LOE score was used for each teacher in the dataset so that no teacher is double counted.

**LOE score limitations**

Although there are small differences among the three types of EPPs in the percent of completers with each LOE score (Exhibit 19), average LOE scores are very similar across all three EPP types. (See Exhibits 17 and 18.) Like observation scores, LOE scores are limited in their usefulness to determine EPP effectiveness because of the similarity of LOE scores across EPP types. There are also limitations to evaluating EPPs using the LOE scores for teachers of non-tested subjects and grades. If there is no growth portfolio for a non-tested teacher, the 15 percent growth measure for that teacher is generated from a schoolwide average TVAAS score. Thus, when using the LOE score of non-tested teachers to evaluate EPPs, a portion of those scores are derived from teachers whom the EPP may not have prepared.

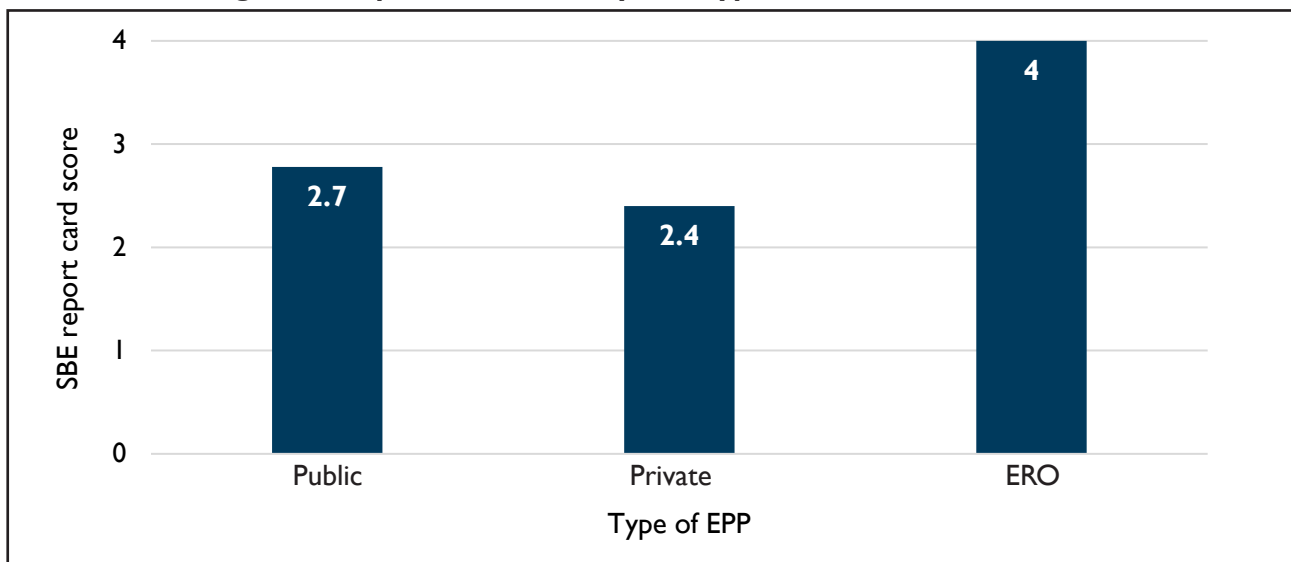
**The SBE Educator Preparation Report Card**

The Educator Preparation Report Card is a public report produced annually by SBE. The purpose of the report card is to provide a user-friendly tool with focused information about providers and the performance of completers, and to promote stakeholder conversations about continuous improvement. EPPs are awarded a score from 1 to 4 calculated using the percentage of points earned across all domains and metrics. EPPs awarded a score of 1 are the lowest performing, while EPPs awarded a score of 4 are the highest performing. The report card combines multiple measures of EPP performance to produce a comprehensive rating of each EPP’s quality and effectiveness.

As Exhibit 20 shows, Tennessee’s EROs outperform both public and private EPPs on the state report card. Specifically, Tennessee’s three EROs included in the report card performed well due to the percentage of racially and ethnically diverse completers, the percentage of high-demand endorsements offered, first-year placement rates, and the high TVAAS scores of completers.



**Exhibit 20: Average SBE Report Card score by EPP type, 2017**



Source: Tennessee State Board of Education, <http://teacherprepreportcard.tn.gov/>.

Tennessee’s EROs outperform both public and private EPPs on multiple measures of effectiveness, although the degree to which EROs outperform other EPPs differs based on the measure of effectiveness. In the case of overall LOE scores, performance was virtually identical across all EPP types. The following section draws on research and observations from Tennessee’s EROs to explain what makes some EPPs more effective.

## Section 5: What Makes Some EPPs More Effective?

National research has found that some EROs produce teachers who are more effective than those produced by EPPs at four-year institutions. One study conducted on Teach For America (TFA) found that the organization produced teachers who, on average, were as effective, as measured by student growth, in their first year of teaching as traditionally prepared teachers were during their second year of teaching.<sup>6</sup> A University of Memphis study of Tennessee EPPs found that EROs produced teachers who were more effective than teachers from public and private EPPs.<sup>7</sup>

Research results have been less conclusive on how EPPs specifically influence teacher effectiveness. Little is known about how EPP characteristics like selectivity, the coursework offered, or specific skills taught are related to the later effectiveness of teachers.<sup>8</sup> Researchers continue to study to what extent EPPs are responsible for differences in teacher effectiveness relative to other influential factors, such as the academic ability or qualifications of teacher candidates and the characteristics of the schools and districts where new graduates begin teaching after completing their EPP.<sup>9</sup>

One factor that research has found to influence teacher effectiveness is the on-the-job training – called clinical teaching experiences – that teacher candidates receive before teaching full time.<sup>10</sup> Clinical teaching experiences are opportunities for teacher candidates to observe and learn from experienced classroom teachers, plan lessons, and teach to students in a K-12 school. Several recent studies suggest that the location of clinical teaching experiences and the quality of mentor teachers can influence the effectiveness of new teachers. The programmatic structure and training methods used by EROs closely align with these two elements and this may explain why EROs generally outperformed public and private EPPs for the years analyzed by OREA.

Additionally, because EROs place teachers only in high-poverty schools, they can focus their programming exclusively on providing specialized coursework and training designed to help candidates succeed in such schools. The specialized training and coursework offered by Tennessee's EROs may also explain why these programs produce more effective teachers.

The programmatic and structural characteristics of EROs, such as requiring candidates to teach in certain types of schools in specific cities, make these programs impractical for most EPPs to create on a large scale. Public and private EPPs do not require candidates to teach in certain schools and districts as a condition of acceptance in the EPP program. Completers from these EPPs are free to find employment as a teacher anywhere in the state, including in private schools, or in another state. Given that all completers will not be teaching in high-poverty schools, public and private EPPs do not offer the same specialized coursework and training to all completers as is the practice for EROs.

The following section describes how EROs provide clinical teaching experiences in line with research on what makes new teachers more effective and describes some of the specialized coursework and training that EROs provide to candidates.

**Location of on-the-job training** – One study conducted in Washington found that new teachers were more effective if they complete on-the-job training in schools with students who share socioeconomic and demographic similarities with the students in schools where the new teachers were employed after graduation.<sup>11</sup> EROs align with this research finding by training candidates in high-poverty schools and requiring completers to teach in such schools for a designated period of time between one and three years.

A study conducted in New York found that teachers who, as part of their training program, studied the curriculum used in the district where they would go on to teach after graduation were more effective.<sup>12</sup> Both TFA and Memphis Teacher Residency (MTR) incorporate the district curriculum and literacy initiatives used in Metro Nashville Public Schools and Shelby County Schools into their teacher training programs. Since candidates enrolled in EROs complete clinical teaching experiences in the same city in which the organization is located, it may be easier for EROs to incorporate new district initiatives into training and adapt to changes in curriculum.

**Quality of clinical mentoring** – Research shows that mentor teachers – the educators who provide most of the on-the-job mentoring and training to teacher candidates during their clinical teaching experiences – play an important role in teacher effectiveness.<sup>13</sup> Research conducted in Tennessee by Matthew Ronfeldt, a professor at the University of Michigan, found new teachers were more effective when instructed by clinical mentor teachers who were themselves rated as more effective, as measured by observation scores and TVAAS.<sup>14</sup> Additionally, researchers found that teachers placed with more effective clinical mentor teachers reported being more prepared to teach.<sup>15</sup> Dr. Ronfeldt’s research in Tennessee is ongoing. Through partnerships with TTU, Freed-Hardeman, Carson-Newman, Union, and UT Martin, Dr. Ronfeldt is currently exploring ways to identify the most effective mentor teachers, and how to provide mentor teachers with training to improve their effectiveness.

EROs may be able to provide more effective mentors to teacher candidates because these programs are generally more involved in the recruitment, screening, and selection of mentor teachers. EROs also provide more frequent and personalized mentoring to candidates during training and after they begin teaching full time. For example, Teach for America provides mentor teachers to candidates through its seven-week summer institute, in addition to coaches who assist corps members in content area lesson planning, and classroom management and culture. Every corps member also has a personal coach, called a “Manager of Teacher Leadership Development,” who provides continued support and mentoring to small cohorts of corps members throughout the two-year teaching commitment. The personal coaches observe new teachers in the classroom twice a week and give feedback on how new teachers can improve instruction. Candidates enrolled in residency programs are paired with a mentor and receive personalized support and instruction during the year-long apprenticeship portion of the residency. MTR continues to offer instructional coaching to residents throughout their three-year teaching commitment and adjusts the level of support to fit the needs of each teacher.

Based on OREA interviews, administrators and faculty of public and private EPPs hold mixed opinions about the quality and personalization of the mentoring process. Some EPPs indicated satisfaction with the quality of the mentors received from their K-12 school district partners. Other EPPs identified difficulties in this area, such as their limited involvement in the mentor selection process and the challenges associated with ensuring that all candidates receive a high-quality mentoring experience. TDOE is currently working to improve the level of collaboration between EPPs and districts in the selection of mentors through the Primary Partnership Initiative.

**Specialized training and coursework** – EROs require all candidates to teach in high-poverty schools. Knowing the type of schools in which candidates will teach allows EROs to develop specialized training and coursework designed to help teachers be successful in such schools. This specialized training and coursework is likely one of the reasons for the performance of ERO candidates.

The specialized training provided by EROs includes culturally responsive teaching, which is designed to help teachers succeed in high-poverty schools. Culturally responsive teaching is defined as “using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them.”

One of the first training sessions that TFA Nashville and Memphis candidates complete is called Justice Journey. This three-day, seminar style training experience covers such topics as educational inequity, both nationally and in Nashville and Memphis. Another component of the Justice Journey is training in cultural competence – the ability for candidates to successfully teach students who come from a background or culture that differs from their own. TFA Nashville embeds cultural competency training throughout its summer institute, including offering sessions on teaching English learners, refugee students, and students with special needs.

Some EROs also offer credit-bearing coursework to help candidates become effective teachers in high-poverty schools. For example, MTR candidates complete coursework designed to help them be successful teachers in Memphis area schools as part of the curriculum for the Master’s in Urban Education that is earned by all MTR completers. After a week-long orientation period, candidates take three summer courses: Planning and Assessment, Learning Theories, and Education Leadership. The Learning Theories course weaves in ideas about different learning theories and how trauma can affect learning. The Education Leadership course covers concepts like classroom management and creating a positive classroom culture for students. During the summer, the residents complete 20 community service hours alongside program alumni in the communities and neighborhoods in which they will teach. During the residency year, candidates take courses where they examine the origins of the achievement gap, study education law, and consider the role of race and poverty in education in Memphis.

State Board policy covers culturally responsive teaching by requiring EPPs to provide all teacher candidates with the “knowledge and skills to effectively teach all students” including “students from different racial, cultural, and ethnic backgrounds.” Board policy also requires EPPs to ensure that candidates participate in diverse field placements. Many EPPs include culturally competent teaching strategies in their curriculums so candidates are prepared to successfully teach a wide variety of students.

## Section 6: EPP Performance in the Outcomes-Based Funding Formula

OREA was asked to examine the extent to which EPP outcomes are accounted for in Tennessee’s outcomes-based funding formula, and how the Quality Assurance Funding program could be revised for the 2020-25 cycle to better reward positive outcomes for EPPs.



### Tennessee’s outcomes-based funding formula

Tennessee’s outcomes-based funding formula is a higher education funding tool that allocates state funds to Tennessee’s public colleges and universities based on performance. Outcomes rewarded in the formula consist of progression, completion, and efficiency measures, such as student credit-hour accumulation and the number of degrees awarded. The outcomes-based funding formula governs all operating appropriations for Tennessee’s public colleges and universities, with approximately 5.45 percent awarded under the Quality Assurance Funding program component in the formula. A substantial amount of public funding is allocated based on the recommendation created by this complex formula. In 2017-18, approximately \$913 million appropriated for higher education was allocated to colleges and universities according to the formula.

The outcomes-based funding formula creates funding recommendations based on three major components: Weighted Outcomes, Fixed Costs, and Quality Assurance Funding. EPPs are currently accounted for in two of the three components – Weighted Outcomes and the Quality Assurance Funding program.

The Weighted Outcomes component allocates funding for colleges and universities based on progression, completion, and efficiency measures, such as the number of degrees awarded, student credit-hour accumulation benchmarks, and graduation rates. Candidates enrolled in EPPs count toward funding allocated based on all three measures in this component of the outcomes-based funding formula.

Under the **Quality Assurance Funding (QAF)** program, public higher education institutions may earn additional funding on top of their outcomes-based funding appropriation for meeting certain quality standards related to student access, student learning, and student success. Each institution can earn up to an additional 5.45 percent of the total recommendation created by the outcomes-based funding formula. In fiscal year 2017-18, a total of \$43 million in QAF was distributed among all institutions. The 2015-20 QAF standards offer institutions a maximum grade of 100 percentage points, 75 of which are based on student learning, with the remaining based on student access and success. Exhibit 21 shows the standards and components in QAF and the points tied to each measure.

**Exhibit 21: 2015-2020 Quality Assurance Funding – standards, components, and points for universities**

Standards and components	Points
I. Student learning and engagement	75
•General education assessment	15
•Academic Programs	25
•Major filed assessments	15
•Institutional satisfaction study	10
•Adult learner success	10
II. Student access and success	25
Total	100

As of 2018, EPP outcomes are accounted for in two different components of the Quality Assurance Funding program: **academic programs** and **major field assessments**. To date, EPP performance within these components have contributed to, but not significantly affected, the amount of state funding received by public higher education institutions.

***Academic Programs (25 QAF Points for Universities)*** – The academic programs component awards 25 total QAF points to institutions based on academic program excellence and accreditation. Accreditable academic programs that lead to employment, like educator licensure programs or nursing programs, are expected to seek and maintain accreditation in order to earn points through this component of the QAF. Accreditable academic programs account for five of the possible 25 points.

EPPs contribute to the points that institutions earn for this component by achieving CAEP accreditation. According to THEC analysis, failure to receive CAEP accreditation for the EPP programs would result in a reduction in funding between 0.02 percent and 0.05 percent of the total QAF funds awarded to each institution. For example, if UTK were to lose CAEP accreditation, the university's funding would be reduced by a total of \$178,918, which is 0.02 percent of funding awarded to it through the Quality Assurance Funding program. All institutions have received accreditation for their EPP programs since the advent of the outcomes-based funding formula in 2010, so funding awarded through the academic programs component has not been reduced as the result of EPP performance.

***Major Field Assessment (15 QAF Points)*** – The major field assessment component awards 15 total QAF points to institutions for improving the quality of undergraduate major field programs, like teaching. Program quality is evaluated by examining the performance of graduates on approved examinations.

For programs that have a national licensure exam – like educator licensure programs – the passage rate for graduates on the national licensure exam is compared annually to the national average. For EPPs, the licensure exam was historically the Praxis, but is now edTPA as of January 2019. Institutions are not awarded full credit for each program in this component unless the program's passage rate is 100 percent or more of the national average. The amount of points tied to passage rates for certain exams changes each year because passage rates for more programs are included in the Major Field Assessment component each year in the five-year cycle of the OBF. An institution's performance on this component, thus, becomes less dependent on any one program, such as an educator licensure program or a nursing program, as more programs are included each year.

THEC conducted an analysis for OREA to show the fiscal impact of scoring within 85 percent of the national average for a large public EPP in the state. According to THEC analysis, scoring within 85 percent of the national average would generate a loss of funds ranging from \$139,358 to \$46,459, depending on the year.

Teachers made up 6 percent of graduates at the state's public universities between 2015 and 2017, and teachers who received individual TVAAS scores made up 1.9 percent of graduates during the same time period. (See Exhibit 22.) The Quality Assurance Funding program is currently constructed to judge the health of an institution, and to reward institutions for the performance of all graduates. Any future efforts to place a greater weight on teacher performance within the Quality Assurance Funding program should consider the percentage of graduates from Tennessee's public universities who are teachers.

**Exhibit 22: All graduates from public institutions compared to graduates who are teachers, 2015-2017**

Institution	Total graduates	Total graduates who became teachers	Percent of graduates who became teachers	Total teachers with TVAAS	Percent of graduates with TVAAS
APSU	6,557	535	8%	144	2.2%
ETSU	9,749	611	6%	144	1.5%
MTSU	14,904	1,023	7%	305	2.0%
TSU	4,834	154	3%	50	1.0%
TTU	7,037	1,047	15%	351	5.0%
UOM	13,059	632	5%	205	1.6%
UTC	7,300	567	8%	142	1.9%
UTK	21,139	584	3%	172	0.8%
UTM	3,999	600	15%	204	5.1%
Total	88,578	5,753	6%	1,717	1.9%

Source: Tennessee Higher Education Commission; State Board of Education, 2017 Educator Preparation Report Card.

**A discussion framework for incorporating EPP performance into the Quality Assurance Funding program for the 2020-25 cycle**

*Public higher education institutions are rewarded in the current Quality Assurance Funding (QAF) program for EPP performance through the Academic Programs component, based on accreditation status, and the Major Field Assessment component, based on the passage rates of teacher candidates on licensure exams. EPP outcomes in the form of completers’ TVAAS, observation, and LOE scores are not directly captured by the Quality Assurance Funding program.<sup>M</sup>*

*The three scenarios and three options presented below provide a discussion framework for how the QAF might be revised for the 2020-25 cycle to more directly capture EPP performance based on completer outcomes. Each of the following three scenarios assumes EPP performance would be based on new teachers in their first three years of teaching.*

**Scenario 1:** The portion of the Major Field Assessment component that captures EPP performance could be changed to award funding based on completer outcomes as measured by TVAAS, observation, and/or LOE scores along with, or instead of, passage rates on the edTPA assessment and relevant Praxis examinations.

Outcomes for EPP completers could also be incorporated into the QAF’s Student Access and Success component, possibly in conjunction with the potential changes to the Major Field Assessment described above. The Student Access and Success component allows an institution to choose student focus populations based on the institution’s mission. Institutions earn points based on their ability to increase the number of graduates from a particular focus population. Institutions do not currently have the option to choose teacher candidates as a student focus population, but this option could be offered during the 2020 – 2025 cycle, or institutions could be required to include teacher candidates as a student focus population, either in addition to the other student focus populations chosen by the institution. (i.e., teacher candidates would be a required student focus population, and the institution would choose the remaining student focus populations.)

<sup>M</sup> The Academic Programs component rewards institutions for having EPPs accredited by CAEP. Accreditation by CAEP is based in part on measures of teacher effectiveness.

**Scenario 2:** Points from existing components in the Quality Assurance Funding program (Exhibit 21) could be reallocated to create a new component that rewards institutions for the performance of EPP completers. Reallocating points to create a new component would result in a reduction in the funds available through the existing components assuming the QAF program remained capped at 5.45 percent of the total recommendation created by the Outcomes-Based Funding formula (OBF) and the amount of funding awarded to institutions through the OBF stayed constant.

**Scenario 3:** Additional funding could be provided to create a new component in the QAF program that rewards institutions for the performance of EPP completers. Creating a new component using additional funding would not result in a reduction in funds available through existing components in the Quality Assurance Funding program based on the assumptions described in Scenario 2.

*All three scenarios above contain a number of different performance criteria that could be used to measure EPP performance.*

**Option 1:** EPP performance could be based only on teachers of state-tested subjects and grades who generate individual TVAAS scores. Performance could be based on the percentage of completers who score at or above the state TVAAS average, or the percentage who receive a TVAAS score of at least a 3 or at least a 4. By including only teachers who generate individual TVAAS scores, this option is more likely to ensure that EPP performance is linked to only those teachers trained by the EPP.

The following observations should be considered relative to this option:

- Less than one-third of EPP completers received an individual TVAAS score between 2015 and 2017 because individual TVAAS scores are assigned only to teachers in Tennessee public schools who teach in grade and subject areas that generate state test scores. (See Exhibit 13).
- Less than 2 percent (1.9 percent) of graduates from Tennessee's public institutions of higher education between 2015 and 2017 were teachers who generated individual TVAAS scores. (See Exhibit 22).

**Option 2:** EPP performance could be partially based on the performance teachers with individual TVAAS scores and partially on the performance of teachers in non-tested subjects and grades. Both types of teachers could be weighted equally, or greater weight could be placed on one type of teacher, such as teachers who generate individual TVAAS scores. For teachers with individual TVAAS scores, performance could be based on the percentage of completers who score at or above the state TVAAS or LOE score average, or the percentage who receive a TVAAS or LOE score of at least a 3 or at least a 4. For teachers in non-tested subjects, performance could be based on the percentage of completers who score at or above the state average LOE score, or the percentage who receive an LOE score of at least a 3 or at least a 4.

The following observations should be considered relative to this option:

- There is little distribution of LOE scores among the five performance categories of Tennessee's teacher evaluation system; 95 percent of teachers received an LOE score of at least a 3 between 2015 and 2017.
- For some teachers of non-tested subjects (i.e., those without a growth portfolio in the state's teacher evaluation system), the 15 percent growth measure portion of their LOE score would be based on the schoolwide TVAAS score. The TVAAS score in this case would be based to a greater or lesser degree on the performance of other teachers prepared by a different EPP as well as teachers from the same EPP who are past their third year of teaching.

**Option 3:** EPP performance could be based to some degree on the number of teachers produced annually to fill subject-area shortages in Tennessee public schools. Subject-area shortages could be defined based on geographic or statewide subject-area needs. This option could be combined with Option 1 or Option 2.



## Section 7: Policy Considerations

### **Tennessee’s public EPPs could study the feasibility of creating job-embedded programs and teacher residencies that function similarly to those operated by EROs.**

While some public EPPs offer job-embedded programs and internship pathway programs, 79 percent of completers from Tennessee’s public EPPs completed the traditional student teaching licensure pathway between 2013 and 2016. As of 2019, no public EPPs operate job-embedded programs or teacher residencies that function like those operated by EROs. Public EPPs should consider studying the feasibility of creating smaller teacher training programs that function similarly to those operated by EROs.

A feasibility study might address questions such as how the program would require candidates to commit to teaching in high-poverty schools or schools with teacher shortages, whether programs should serve specific cities or geographic areas, whether specialized coursework and training should be developed for the programs, and whether financial incentives might be offered to participate in exchange for a commitment to teach for a designated period of time. Public EPPs should prioritize the creation of programs that share programmatic characteristics and structures with the programs operated by EROs.

Public EPPs should explore opportunities to create public-private partnerships as part of the feasibility study. Union University and Lipscomb University currently train teachers through partnerships with Teach for America and Memphis Teacher Residency. As of 2018, there are no public EPPs operating in partnership with an ERO to train teachers through residency or job-embedded programs.

A feasibility study should also consider how such programs would be funded. New programs might rely on existing resources or could possibly be funded, in whole or in part, through additional funding. One option that EPPs have is to partner with a local school district and use the flexibility and funding provided in the federal education law, ESSA, to support and expand residencies. ESSA’s Title II Teacher Quality State Grants are awarded to help states and school districts recruit and retain teachers in low-income schools and high-need subjects. These grant funds may also be used to reform teacher and leader preparation programs. In Virginia, the Richmond Teacher Residency, in partnership with Richmond Public Schools, has used the federal Teacher Quality Partnership Grants in combination with \$500,000 in state funds to prepare residents in high-need subjects and grades. Districts, states, or education-related organizations could match ESSA Title II Teacher Quality Partnership funds to increase the funding for such programs.

### **Tennessee’s public EPPs could calculate the cost per completer for each of the licensure pathways offered: traditional student teaching, internship, and job-embedded.**

Tennessee’s public EPPs are housed within large universities, and isolating expenditures for teacher candidates presents a challenge, in part because EPP costs must be disentangled from the broader school of education of which the EPP is one part. For example, professors who teach EPP coursework may also teach other courses to non-education majors; EPP coursework and training is offered in buildings that house courses for other programs; and EPP candidates, over the course of their enrollment, receive services from the school of education and the larger institution that are not associated with teacher training. EROs, by contrast, are stand-alone programs, making cost calculations comparatively simpler.

A cost calculation for each licensure pathway would enable cost comparisons among the three pathways and aid public EPP decisions about their existing programs. Public EPPs could perform this cost calculation in conjunction with studying the feasibility of creating job-embedded programs and teacher residencies that function similarly to EROs. A 2018 Bellwether Education Partners report found no evidence that teacher residencies are more expensive than traditional student teaching programs.<sup>16</sup>

**Tennessee’s public EPPs could survey all program completers and use results to make programmatic improvements.**

Five EPPs interviewed by OREA administer surveys to employers and program completers and use results to make programmatic changes, but all EPPs do not administer such surveys. Although the Tennessee Department of Education surveys new teachers as part of its annual Educator Survey, respondents answer general questions and the survey is not focused on providing EPPs with specific ideas for programmatic improvements. Previous years’ surveys included questions asking EPP completers to reflect on the quality of their clinical mentor teacher, or how well their program prepared them for teaching in their current school setting.

The Tennessee Department of Education and the State Board of Education are currently in the process of designing employer satisfaction surveys that may help EPPs make programmatic improvements, and plans to include results from this survey in the Educator Preparation Report card and Annual Report by 2020. In addition to these efforts at the state level, all EPPs may wish to survey their graduates to obtain additional information to use in program improvement efforts.

## Endnotes

<sup>1</sup> RAND, *Teachers Matter: Understanding Teachers' Impact on Student Achievement*, <https://www.rand.org/education-and-labor/projects/measuring-teacher-effectiveness/teachers-matter.html> (accessed Feb. 27, 2019). Dan Goldhaber, Stephanie Liddle, Roddy Theobald, and Joe Walch, *Teacher Effectiveness and the Achievement of Washington Students in Mathematics*, Center for Education Data and Research, University of Washington, Working Paper 2010-6.0, 2010, p. 1. Zeyu Xu, Ph.D., and Andrew Swanland, *Estimating Teacher Contributions to Student Learning: The Role of the School Component*, American Institutes for Research, Aug. 2013, p. 1.

<sup>2</sup> Jerome V. D'Agostino and Sonya J. Powers, "Predicting Teacher Performance with Test Scores and Grade Point Average: A Meta-Analysis," *American Educational Research Journal*, Vol. 46, No. 1, March 2009, p. 146.

<sup>3</sup> Gary T. Henry, Shanyce L. Campbell, Charles L. Thompson, Linda A. Patriarca, Kenneth J. Luterbach, Diana B. Lys, and Vivian Martin Covington, "The Predictive Validity of Measures of Teacher Candidate Programs and Performance: Toward an Evidence-Based Approach to Teacher Preparation," *Journal of Teacher Education*, Vol. 64, No. 5, 2013, p. 1.

<sup>4</sup> Matthew Ronfeldt, Stacey L. Brockman, and Shanyce L. Campbell, "Does Cooperating Teachers' Instructional

Effectiveness Improve Preservice Teachers' Future Performance," *Educational Researcher*, June 25, 2018.

<sup>5</sup> Steven Newton, *Preservice Performance Assessment and Teacher Early Career Effectiveness: Preliminary Findings on the Performance Assessment for California Teachers*, Stanford University, Stanford Center for Assessment, Learning, and Equity, 2010.

<sup>6</sup> Gary T. Henry, Kevin C. Bastian, C. Kevin Fortner, David C. Kershaw, Kelly M. Purtell, Charles L. Thompson, and Rebecca A. Zulli, "Teacher Preparation Policies and Their Effects on Student Achievement," *Education Finance and Policy*, Vol. 9, No. 3, Summer 2014, pp. 264 and 280.

<sup>7</sup> Charisse Gulosino, University of Memphis, "Evaluating the Tennessee Higher Education Commission's Report Card on the value-added estimates of teacher preparation programs," *Education Policy Analysis Archives*, Vol. 26, No. 33, 2018, p. 31, <http://dx.doi.org/10.14507/epaa.26.2604> (accessed Feb. 27, 2019).

<sup>8</sup> Charisse Gulosino, University of Memphis, "Evaluating the Tennessee Higher Education Commission's Report Card on the value-added estimates of teacher preparation programs," *Education Policy Analysis Archives*, Vol. 26, No. 33, 2018, p. 30, <http://dx.doi.org/10.14507/epaa.26.2604> (accessed Feb. 27, 2019). Chad Aldeman and Ashley LiBetti

Mitchel, *No Guarantees: Is it Possible to Ensure Teachers Are Ready on Day One?*, Bellwether Education Partners, Feb. 2016, pp. 1-14.

<sup>9</sup> Charisse Gulosino, University of Memphis, "Evaluating the Tennessee Higher Education Commission's Report Card on the value-added estimates of teacher preparation programs," *Education Policy Analysis Archives*, Vol. 26, No. 33, 2018, p. 30, <http://dx.doi.org/10.14507/epaa.26.2604> (accessed Feb. 27, 2019). Gary T. Henry, Kevin C. Bastian, C. Kevin Fortner, David C. Kershaw, Kelly M. Purtell, Charles L. Thompson, and Rebecca A. Zulli, "Teacher Preparation Policies and Their Effects on Student Achievement," *Education Finance and Policy*, Vol. 9, No. 3, Summer 2014, pp. 264 and 280. Dan Goldhaber, John M. King, and Roddy Theobald, *Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness and Attrition*, National Center for Analysis of Longitudinal Data in Education Research, American Institutes for Research, Duke University, Working Paper 149, Jan. 2016, p. 1. Chad Aldeman and Ashley LiBetti Mitchel, *No Guarantees: Is it Possible to Ensure Teachers Are Ready on Day One?*, Bellwether Education Partners, Feb. 2016, pp. 1-14.

<sup>10</sup> Dan Goldhaber, John M. King, and Roddy Theobald, *Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness and Attrition*, National Center for Analysis of

Longitudinal Data in Education Research, American Institutes for Research, Duke University, Working Paper 149, Jan. 2016, pp. 1-2.

<sup>11</sup> Dan Goldhaber, John M. King, and Roddy Theobald, *Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness and Attrition*, National Center for Analysis of Longitudinal Data in Education Research, American Institutes for Research, Duke University, Working Paper 149, Jan. 2016, p. iii.

<sup>12</sup> Donald Boyd, Pamela Grossman, Hamilton Lankford, Susanna Loeb, and James Wyckoff, *Teacher Preparation and Student Achievement*, National Bureau of Economic Research, Working Paper 14314, Sept. 2008, pp. 27-28.

<sup>13</sup> Dan Goldhaber, John M. King, and Roddy Theobald, *Does the Match Matter? Exploring Whether Student Teaching Experiences Affect Teacher Effectiveness and Attrition*, National Center for Analysis of Longitudinal Data in Education Research, American Institutes for Research, Duke University, Working Paper 149, Jan. 2016, pp. 1-2.

<sup>14</sup> Matthew Ronfeldt, Stacey L. Brockman, and Shanyce L. Campbell, "Does Cooperating Teachers' Instructional Effectiveness Improve Preservice Teachers' Future Performance," *Educational Researcher*, June 25, 2018. Tennessee State Board of Education meeting, Dec. 13, 2018.

<sup>15</sup> Matthew Ronfeldt, Dan Goldhaber, James Cowan, Emanuele Bardelli, Joy Johnson, and Christopher Daniel Tien, *Identifying Promising Clinical Placements Using Administrative Data: Preliminary Results From ISTI Placement Initiative Pilot*, National Center for Analysis of Longitudinal Data in Education Research, Duke University, Working Paper 189, April 2018, p. iii.

<sup>16</sup> Ashley LiBetti and Justin Trinidad, *Trading Coursework for Classroom: Realizing the Potential of Teacher Residencies*, Bellwether Education Partners, 2018, p. 16.



**Office of Research and Education Accountability**

Russell Moore, Director  
425 Fifth Avenue North  
Nashville, Tennessee 37243  
615.401.7866  
[www.comptroller.tn.gov/OREA/](http://www.comptroller.tn.gov/OREA/)