EVIDENCE OF EXCELLENCE:

Using Data to Elevate Teacher Preparation in Texas

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Created in 2011, the Consortium focuses its work on leveraging private resources to produce credible and necessary data on the most important educational challenges facing Texas. For more information on the Texas Education Grantmakers Advocacy Consortium please visit www.tegac.org.

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INTRODUCTION

Texas serves more than five million students, of whom almost 60 percent are economically disadvantaged. There are over 340,000 teachers, prepared primarily by 136 different educator preparation providers in Texas.[1] As Teach Plus Texas Policy Fellows, we have seen the impact on students when teachers are unprepared for the classroom. What's more, Texas teachers report that poor teacher preparation is having a negative impact on student performance in Texas—especially when underprepared teachers drop out of the classroom.[2]

What type of public data would provide the aspiring teachers with necessary information to choose the educator preparation programs (EPPs) that prepare them to effectively lead classrooms? In the spring of 2018, members of the Teach Plus Texas Policy Fellowship collected feedback on which data would be most beneficial to aspiring teachers, and which data would drive improvements in the educator preparation programs themselves.

The 29 members of the Teach Plus Texas Policy Fellowship are teachers from across Texas. We teach in a wide variety of traditional district and public charter schools and are invested in how state education policy affects our classrooms and our students. Our perspectives as current teachers in K-12 Texas public schools are important as our state works to address the need for a more effective system for publicizing what matters about educator preparation programs.

With this purpose in mind, we joined a group of Teach Plus Policy Fellows across the nation to design a set of questions that would identify areas of need for more transparency about EPPs. This research will inform a national policy report, however, all of the research and recommendations included in this paper come from Texas teachers only. Based on this research, we developed recommendations to strengthen the public reporting of the most important data from EPPs.

FINDINGS

1. Teachers relied on reputation, relevant teaching experience, and flexibility when they chose which program to attend.
2. When asked what data should be made publicly available, teachers believe that impact on K-12 student learning, demonstrated teaching skill, subject-specific pedagogical knowledge, mastery of teaching subjects, and entry and persistence in teaching are most important.
3. For purposes of accountability, teachers believe that the same indicators—impact on K-12 student learning, demonstrated teaching skill, subject-specific pedagogical knowledge, mastery of teaching subjects, and entry and persistence in teaching—are the most important.
4. Teachers believe that the Texas Education Agency (TEA) should publish data and other information on EPPs in an accessible format.

RECOMMENDATIONS

1. Hold EPPs accountable for effectiveness using the following metrics: Pedagogical knowledge, mastery of teaching subject, impact on student learning, demonstrated teaching skill, entry and persistence in teaching, placement and persistence in high need campuses, and completer rating of program.
2. In addition to those metrics upon which TEA holds EPPs accountable, TEA should display data on the length, cost, format, and amount of classroom experience that candidates receive in the program.
3. Create a user-friendly online dashboard for teacher candidates to search through and compare EPPs that show data points and other deciding factors for candidates. In addition, require all EPPs to present the same data in a standardized fashion on their own websites.

++++++++++ METHODOLOGY ++++++++++

Our research was designed to answer the following questions:

1. What information do teachers typically use to determine which preparation program to attend?
2. What measures, information, and data do teachers believe are the best descriptors and indicators of quality of teacher preparation programs?
3. What weight and importance do teachers assign to various measures and data on teacher preparation programs as indicators of quality? On what measures would teachers seek to grade the quality of teacher preparation programs?

To answer these questions, we conducted research in two phases. First, we reviewed the types of indicators used in other states to determine EPP quality. We selected the list of effectiveness indicators included in Teacher Preparation Analytics' 2016 report (see Appendix A, Figure 3).[3] Then we conducted focus groups and administered a complementary survey across Texas asking teachers to analyze the indicators and provide their input on which ones best determine EPP quality. Overall, we heard from 225 current classroom teachers from across Texas. See Appendix A for a more detailed description of our methodology.

In this brief, we present findings from our data collection, followed by our recommendations on how to improve public data transparency on EPPs.

FINDINGS

FINDING 1: TEACHERS RELIED ON REPUTATION, RELEVANT TEACHING EXPERIENCE, AND FLEXIBILITY WHEN THEY CHOSE WHICH PROGRAM TO ATTEND.

When asked how they chose which program to attend, teachers reported that they relied primarily on a program's reputation, the teaching experience they would get during the program, and how flexible the programs were in meeting their timing and geographic needs.

REPUTATION

When teachers talked about their path to the classroom, many stated that they relied on a program's reputation to inform their decisions. Many teachers directly mentioned an advisor or an educator who recommended a specific program. Based on these recommendations, potential teachers chose their program. Reported one teacher, ***"I chose a proven program that was recommended to me by my children's principal. It is also the most well-known in my area."***

Furthermore, many teachers reflected on the reputation of specific programs to make decisions about EPPs. University ranking, teacher preparation quality, and focus on equity were topics that teachers considered when joining a teacher preparation program. According to one teacher, ***"I looked into universities that had strong educational programs, specifically geared toward younger elementary school education. I also looked for a university whose program had a lot of teachers placed into a teaching position after graduation based on a strong student-teaching program."***

RELEVANT CLASSROOM EXPERIENCE:

As young professionals look for educator preparation programs, they are looking for a program that can meet their unique certification needs. These teaching candidates want to get in the classroom as early as possible. Applicants want the opportunity to apply newly-learned teaching strategies, heightening their engagement and purpose in the classroom. They desire an EPP that mirrors the reality of the discipline. Teachers reported: ***"I wanted a school that offered real-world application of the skills I was being taught. I did not only want theory, I wanted to know what it was going to be like when I was actually in the room in front of kids."***

"The program at the university I attended got prospective teachers into the classroom immediately. We were observing the university campus school early in the program … We also participated in math and science labs that addressed hands-on learning and student misconceptions. The university allowed future teachers the opportunity to experience the classroom numerous times before graduation."

Aspiring teachers choose EPPs that allow them to connect to real-world experiences of being in the classroom. They want to be prepared in an environment with similar issues that they would likely encounter when they are certified. It was imperative to make connections between their field work and coursework through early and frequent classroom experiences. Veteran teachers believe that in order for a potential teacher to be successful, they need both relevant and in-depth experience in the classroom. In many traditional programs, this looks like student teaching or a residency. In many alternative programs, this may look like observations. Teachers believe that the more exposure that pre-service teachers get to real classrooms, the better the teacher will be prepared to enter the teacher force and stay. One teacher stated: ***"I looked for a program that would work with me from the beginning to the end and provided me with onsite experience in the classrooms. The classroom hours ensured that I would be comfortable working in the classroom."***

Some respondents felt regret that their selected program did not have much classroom experience. For example, one teacher wrote, ***"If I were to go back and look at more program options, I would choose one that actually had me interning in a classroom first, to gain hands-on experience."***

A few teachers noted that working with colleagues who did not have substantial experience in the classroom prior to entering their first year teaching taxed the veteran teachers on campus: ***"I have seen so many people go through the alternative programs without ever having to turn in or provide anything academic (i.e. lesson plans, scopes, sequences, etc.) but just do one or two observations. These same people struggle through their teaching careers draining their peers who know how to plan and do academics."***

ACCESS AND FLEXIBILITY:

Finally, both traditionally and alternatively-trained teachers considered access to be vital in their decision-making process. Teachers mentioned factors such as location, cost, flexibility, and time as major motivating factors when making their program decisions. A large fraction of teachers in Texas are prepared through alternative certification programs. The appeal of many of these programs may lie in the flexibility and convenience of their certification paths. As reflected in the research, many respondents wanted a career change after graduation or they already had a family; they specifically looked for a program that would accommodate their already-busy life. Below, teachers describe why flexibility was an important factor in their decisions: ***"I was an engineer, I wanted to teach and heard of a need at a local school. I interviewed and got the job on the same day. I chose my program based on it being the only option my school district knew of that accepted engineering degrees to teach math, and would let me teach right away."***

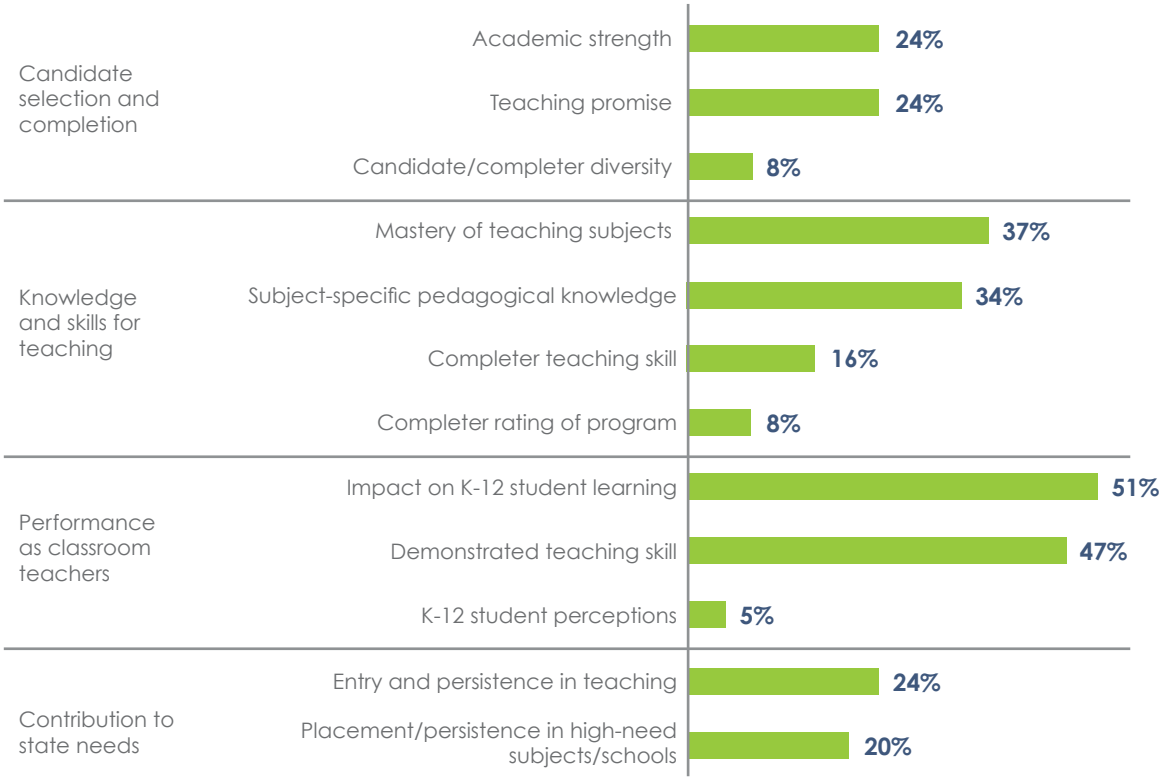
"I looked for an in-depth and affordable program. I wanted a program that would give me the adequate support before and after I started my career in education."

Traditional colleges that had more flexibility and options also appealed to prospective teachers as they could maximize their educational experience. Said one teacher, *"When I decided to become a teacher, I sought out alternative programs where I could obtain my teaching certification. I enrolled in Texas Teachers, but the online approach was not giving me the classroom experience or knowledge from educators that I was looking for. Then I researched universities programs and found that Texas State has a program where I could obtain my Masters' degree and teacher certification at the same time."*

FINDING 2: WHEN ASKED WHAT DATA SHOULD BE MADE PUBLICLY AVAILABLE, TEACHERS BELIEVE THAT IMPACT ON K-12 STUDENT LEARNING, DEMONSTRATED TEACHING SKILL, SUBJECT-SPECIFIC PEDAGOGICAL KNOWLEDGE, MASTERY OF TEACHING SUBJECTS, AND ENTRY AND PERSISTENCE IN TEACHING ARE MOST IMPORTANT.

In focus groups across the state, we discussed which indicators tell us the most about EPP quality. Teachers rated the most important factors in a survey, discussed which factors were the most meaningful, and described their thinking in writing. Teachers prioritized the following indicators when asked which three indicators they feel are the most informative for describing the quality of a teacher preparation program: Impact on K-12 student learning (51 percent); demonstrated teaching skill (47 percent); mastery of teaching subjects (37 percent); and subject-specific pedagogical knowledge (34 percent). In focus group conversations and written comments, teachers also indicated that they believe that placement and persistence in high need campuses and completer rating of programs are important factors (See Figure 1).[4]

FIGURE 1. *Most Informative Indicators of EPP Quality*



Below, we describe teachers' thinking about the importance of the seven key indicators.

IMPACT ON K-12 STUDENT LEARNING:

Teachers believe that student achievement data is an important tool to evaluate EPPs. Many respondents focused on the need to focus on growth in the classroom rather than achievement to ensure that programs that place teachers in high need areas will not be adversely affected. Teachers suggested using National Assessment of Educational Progress (NAEP) scores to track growth.

DEMONSTRATED TEACHING SKILL:

Teachers need to be able to design and then sequence lessons toward learning objectives. They need to guide students in active participation in the learning process. Teachers must analyze and reflect on their teaching for effectiveness. Said one teacher, ***"Because I teach high school, I know from student feedback that teacher competency in the subject that they teach is very important to the students. I also recognize that one can have mastery of his subject area, but if he doesn't have the ability to effectively teach, it doesn't matter—students won't be able to learn like they can from someone who teaches well. Teaching also requires a 'stick-to-it-iveness' that many individuals don't have, so the 'demonstrated teaching skill' [metric] is important to show that teachers coming out of a particular program are staying longer than a year."***

SUBJECT-SPECIFIC PEDAGOGICAL KNOWLEDGE:

Teachers believe that in order for educators to be successful, they must have pedagogical knowledge, or specialized knowledge of teachers to create productive and effective learning environments. Beyond having skill in your chosen subject, teachers need to be able to plan, facilitate, and evaluate the learning that is happening in their classroom on a daily basis. Without specific teacher moves, mindsets, and abilities, someone with strong content knowledge will not flourish with students. Future educators need to be evaluated in their judgement of classroom situations, effective intervention, and relationship building. A productive learning environment takes a lot of thoughtful effort, and teachers entering classrooms should be held accountable for their ability to do that work. Explained one teacher: ***"I chose these because it is important to recognize all learning environments and to have an appreciation for high need education as well as what education looks like at all levels. Having a big picture mindset has the ability to influence our approach in our content-specific classrooms (for which we should also contain a working knowledge)."***

MASTERY OF TEACHING SUBJECTS:

Teachers believe that in order to be effective in the classroom, they must demonstrate and possess knowledge of their content. Teachers believe that effective educators demonstrate mastery of the content they are teaching not only through passing a content test, but by having a deep and working knowledge of their content. Mastery of content allows teachers to focus on how to best present content to students in an engaging and meaningful manner: ***"It is vital not only to know what to teach, but to know when and how to teach it."***

ENTRY AND PERSISTENCE IN TEACHING:

Teachers argued that entry into the profession and persistence in teaching are two critical indicators of program effectiveness, especially because teachers who are poorly prepared are much more likely to become overwhelmed and leave the profession. ***"Staying in the profession for a longer amount of time is also indicative of how well a teacher is prepared. I have seen unprepared teachers leave quickly because they have not found success,"*** said one teacher. ***"Teachers who are well-prepared I suspect will be much more likely to find a job, and persist in that job,"*** noted another.

PLACEMENT AND PERSISTENCE IN HIGH NEED CAMPUSES:

Teachers believe that EPPs should be held accountable for providing teachers to high need areas, specifically to low income schools with high need populations and preparing those teachers to stay in the profession. As teachers enter these schools and communities, EPPs should be held accountable for providing skills and mindsets to teachers to be in the classrooms with students from a variety of cultures and backgrounds. Every pre-service teacher should be exposed to both theories and practices of culturally-relevant pedagogy so that when they enter their classroom, they are prepared for rapidly-growing diversity in Texas classrooms. No teacher would argue that ineffective teachers in classrooms should stay, but we know that the more prepared a teacher candidate is for the reality of the classroom, the longer they will most likely stay in the profession. When new teachers are coming into schools every year, it puts a strain on both administrative resources and veteran teachers. Teachers surveyed believe that EPPs should be held accountable for the retention of teachers overall, and, more specifically, the retention of teachers in high need areas. Additionally, teachers believe that the state should collect data on why teachers leave the profession. ***"Programs need to ensure that candidates are driven and prepared for entering a classroom. Candidates need to be given the chance to observe and participate in various classrooms from different districts and areas around the city they would like to teach in. Programs need to ensure that teacher candidates demonstrate skill to teach in the classroom, are aware of best practices to use in the classroom, and are aware of current research about child development."***

"Persistence in high need school where there are a lot of demands is a good indicator of the preparation they receive."

COMPLETER RATING OF PROGRAM:

In discussion, focus group participants also emphasized the importance of completers' ratings of programs. They said: ***"I feel that diversity offers an element to a program that is more valuable than academic knowledge. Completer rating helps prospects determine if these teachers feel they were prepared."***

"I believe that the impact the teacher has on a student is the most important aspect of being an educator… Completers who rate the program are in the best position to give feedback on the effectiveness of the program."

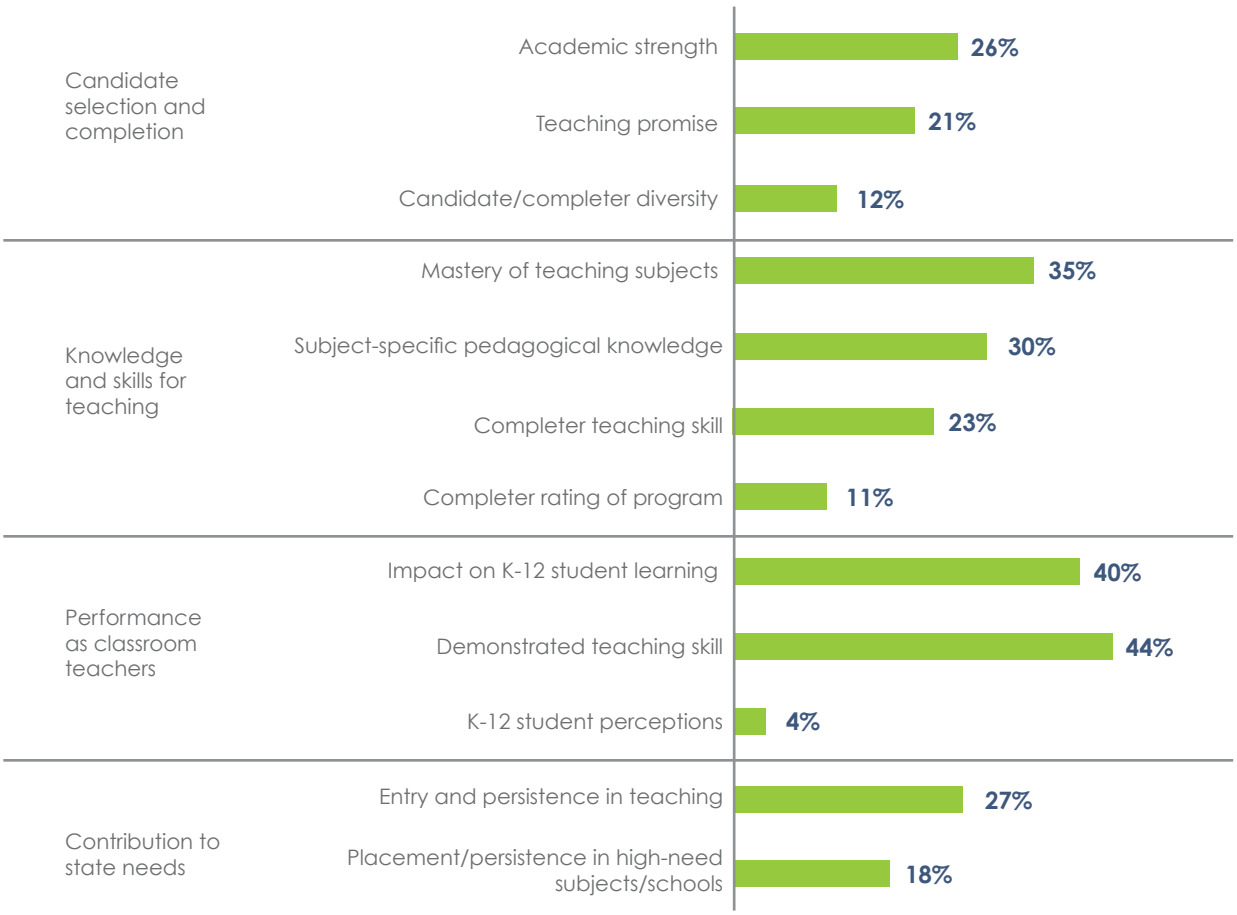
Currently, TEA publishes data on demonstrated teaching skill (via a principal survey, but not teacher evaluation ratings), subject-specific pedagogical knowledge, mastery of teaching subjects, entry and persistence in teaching, and many other metrics on its website.[5] And the state is working to publish completer ratings of programs. However, it doesn't currently publish data on impact on K-12 student learning or persistence in high need campuses. TEA is currently planning an overhaul of this system, and is working to make the data available in a more user-friendly format.

FINDING 3: FOR PURPOSES OF ACCOUNTABILITY, TEACHERS BELIEVE THAT THE SAME INDICATORS—IMPACT ON K-12 STUDENT LEARNING, DEMONSTRATED TEACHING SKILL, SUBJECT-SPECIFIC PEDAGOGICAL KNOWLEDGE, MASTERY OF TEACHING SUBJECTS, AND ENTRY AND PERSISTENCE IN TEACHING—ARE THE MOST IMPORTANT.

When discussing how to hold programs accountable, teachers prioritized the same indicators. Expressing pride in the challenge—and high stakes—of their profession, teachers argued that the state should be conducting rigorous evaluations of programs and holding programs accountable for effectiveness. Teachers prioritized the following indicators when asked for up to three indicators they believe are the most useful for the purpose of "grading" teacher preparation programs: Demonstrated teaching skill (44 percent); impact on K-12 student learning (40 percent); mastery of teaching subjects (35 percent); subject-specific pedagogical knowledge (30 percent); and entry and persistence in teaching (27 percent) (see Figure 2).[6] In focus group conversation and written comments, teachers also indicated that they believe that placement and persistence in high need campuses and completer rating of programs are important factors.

Figure 2 illustrates which indicators teachers believe the state should use to grade teacher preparation programs.

FIGURE 2. *Most Important Indicators for program accountability*



Currently, the state of Texas holds preparation programs accountable for demonstrated teaching skill (as measured by principal surveys), subject-specific pedagogical knowledge and mastery of teaching subjects (as measured by certification exams), and other metrics, and it is working on publishing completer ratings of programs (as measured by teacher surveys aligned with the Texas Teacher Standards). It does not hold programs accountable for their graduates' impact on K-12 student learning, entry and persistence in teaching, or placement and persistence in high needs campuses.

FINDING 4: TEACHERS BELIEVE THAT THE TEXAS EDUCATION AGENCY SHOULD PUBLISH DATA AND OTHER INFORMATION ON EPPS IN AN ACCESSIBLE FORMAT.

In our research, teachers repeatedly mentioned the importance of data transparency. Teachers pointed out that collecting data and measuring the effectiveness of EPPs was essential, but if the data were not readily accessible or understandable, than its use would be limited. In focus group discussions, teachers mentioned that they were unaware of what data was already being collected or where to find that information. One teacher stated, *"Transparency is key! Make the information easy to understand and obtain. It's so difficult to find data on this subject when it should be easily accessible considering it's information consumers and the general public should be privy to."*

In significant numbers, teachers mentioned accessibility while sharing data on EPPs. The information must be easily found and easily read. They recommended that TEA publish the data in a central location in a user-friendly format, and that EPPs publish their data on their own websites: *"It should be required for programs and colleges to release the information on their websites."*

++++++++++ RECOMMENDATIONS ++++++++++

Educators guide their decisions in the classroom with data-driven instruction. Our research shows that before even entering the classroom, teacher candidates are also data-driven in their decisions to choose the best programs to prepare them for the classroom. We highlighted themes in our research with our findings and the following recommendations seek to address them. We make these recommendations based on the participants' suggestions and examples of the types of data that guided their decision-making process. Other recommendations are in response to participants' comments or ideas.

RECOMMENDATION 1: Hold EPPs accountable for effectiveness using the following metrics: Pedagogical knowledge, mastery of teaching subject, impact on student learning, demonstrated teaching skill, entry and persistence in teaching, placement and persistence in high need campuses, and completer rating of program.

TEA should measure EPP effectiveness and hold them accountable by prioritizing the outcome measures in the table below. The first five indicators are based on the survey respondents' answers to questions asking them to prioritize the top three measurements they felt were important in identifying quality EPPs. The final two indicators are based on focus group discussions.

Pedagogical Knowledge	Program completer's mean score and pass rate of rigorous state assessment used for certification (e.g. Pedagogy and Professional Responsibilities (PPR)).
Mastery of Teaching Subject	Program completer's mean score and pass rate of rigorous state assessment used for initial licensure (e.g. Texas Examinations of Educator Standards (TExES)).
Impact on Student Learning	Success of completer's students in growth-based assessment (Developmental Reading Assessment (DRA), Fountas and Pinnell, Measure of Academic Progress (MAP), etc.) in years of growth. Average years of growth of cohort and percentage of teachers that achieved one year's worth of growth in their classrooms.
Demonstrated Teaching Skill	Measurement of teacher's teaching skill through observation with a normed rubric.
Entry and Persistence in Teaching	Percent of program completers (defined by those who receive their state certification) and percent of teachers who teach every year up until their fifth year.
Placement and Persistence in High Needs Campuses	Percentage of candidates placed in high need campuses and the percentage of candidates who remain in high need campuses one, two, and three years after placement.
Completer Rating of Program	Normed survey sent out to teachers at the end of their first full year teaching after initial certification.

RECOMMENDATION 2: In addition to those metrics upon which TEA holds EPPs accountable, TEA should display data on the length, cost, format, and amount of classroom experience that candidates receive in the program.

We recommend that TEA publish information on the total cost of the program, length of the program until certification, and coursework format (online, in person, blended). This will enable candidates to select the programs that fit their needs.

We recommend that TEA publicize the amount of classroom experiences required in a program's curriculum. Relevant classroom experiences could include teacher candidate observations in certified teachers' classrooms and opportunities to teach lessons alongside a host teacher. Many teachers in our focus groups mentioned that they sought out programs with opportunities to immediately apply new knowledge, or teach lessons in a mentor teacher's classroom. Candidates should be able to identify programs that offer more opportunities to engage students in the classroom prior to having their own classroom.

RECOMMENDATION 3: Create a user-friendly online dashboard for teacher candidates to search through and compare EPPs that show data points and other deciding factors for candidates. In addition, require all EPPs to present the same data in a standardized fashion on their own websites.

The data collected from EPPs should be transparent, accessible, and centralized so that candidates can make the best-informed decisions. We recommend that TEA ease the burden for teacher candidates by creating a user-friendly dashboard that allows users to filter through EPPs with established data points. This dashboard should also include information on the structure of the EPP (in-person, online, blended), location, cost, and expected time until teacher licensure, as well as the amount of classroom experience teacher candidates receive in the program.

The state should require posting of predetermined data points on websites in a standardized format that would include pedagogical knowledge, mastery of teaching subject, impact on student learning, demonstrated teaching skill, entry and persistence in teaching, placement and persistence in high need campuses, completer rating of program, amount of classroom experience, cost, format of the program, and program timeline. EPPs would have the option of publicizing supplemental information in various formats, but would have to include required data points in a pre-established presentation that would be uniform for all EPPs or link directly to the online dashboard.

CONCLUSION

The quality of teacher preparation programs has a significant impact on student achievement and teacher retention. Because the highest-need students are disproportionately taught by new teachers, the quality of teacher preparation programs has a significant impact on the students who need outstanding teachers the most. Teachers across Texas have identified key indicators that provide the most relevant information about program quality—and those metrics should be used to provide information to aspiring teachers and for program accountability. In addition, we believe that this information should be made widely available, including being published in a user-friendly format on the TEA website and on the programs' websites. What gets measured gets done, and there is nothing more important in education than ensuring that every student has an effective teacher.

++++++++++++++++++ APPENDIX A ++++++++++++++++++

PHASE 1. REVIEWING EXISTING DATA ELEMENTS, METRICS, AND REPORTS

Working with Teach Plus Policy Fellows and Fellow alums from across the country, we reviewed existing examples of teacher preparation reports and data. The result of this review was a comprehensive list of indicators, metrics, and data elements that have been used in various states' educator preparation program report cards. We chose the list of effectiveness indicators included in Teacher Preparation Analytics' 2016 report, which is reproduced here (see Figure 3).[3]

FIGURE 3. *Key Effectiveness Indicators*

Assessment Categories	Key Indicators	Recommended Measures
I Candidate Selection and Completion	Academic Strength	PRIOR PROFICIENCY 1. Average candidate GPA in most recent coursework (high school or college) prior to program entry-Program specific. 2. Overall entering cohort average percentile score in national distribution on standardized entrance tests required by IHE or EPP (SAT, ACT GRE, MAT, or College Skills Test (e.g. Praxis Core) Program specific & EPP overall. UNDERGRADUATE COMPLETER PROFICIENCY. Average completer GPA in teaching subject major compared to all university students in same major Program specific & EPP overall.
	Teaching Promise	ATTITUDES, VALUES, AND BEHAVIORS SCREEN. Percent of accepted program candidates whose score on a rigorous and validated "fitness for teaching" assessment demonstrates a strong promise for teaching Program specific.
	Candidate/ Completer Diversity	COMPLETIONS OF ADMITTED CANDIDATES: Number & percent of completers in newest graduating cohort compared to number and percent of candidates originally admitted in same cohort: overall and by race/ ethnicity, age, and gender—Program specific and EPP overall.

II Knowledge and Skills for Teaching	Mastery of Teaching Subjects	CONTENT KNOWLEDGE TEST: Program completer mean score,* tercile distribution, and pass rate on rigorous and validated nationally normed assessment of college-level content knowledge used for initial licensure—Program specific. *Verified proficiency benchmarks may be substituted for mean scores on these assessments.
	Subject-Specific Pedagogical Knowledge	PEDAGOGICAL CONTENT KNOWLEDGE TEST: Completer mean score,* tercile distribution, and pass rate on rigorous and validated nationally normed licensure assessment of comprehensive pedagogical content knowledge—Program specific.
	Completer Teaching Skill	TEACHING SKILL PERFORMANCE TEST: Program completer mean score,* tercile distribution, and pass rate on rigorous and validated nationally normed licensure assessment of demonstrated teaching skill—Program specific.
	Completer Rating of Program	COMPLETER PERCEPTIONS OF PROGRAM QUALITY: State or nationally-developed program completer survey of program quality and teaching preparedness, by cohort, upon program completion and at end of first year of full-time teaching—Program specific.

III Performance as Classroom Teachers	Impact on K-12 Student Learning	TEACHER CONTRIBUTION TO STUDENT LEARNING: Success of program completers in 2nd and 3rd most recent cohorts or of alternate route candidates during their first two years of full-time teaching based on valid and rigorous student learning measures, including value-added or other statewide comparative evidence of K-12 student growth overall and in high-need schools. Average student growth score for completer cohort and percentage of completers in cohort scoring below the 33rd and above the 67th percentile compared to the average score and distribution for all novice teachers statewide and for all teachers statewide—Program specific.
	Demonstrated Teaching Skill	ASSESSMENTS OF TEACHING SKILL: Annual assessment based on observations of program completers' or alternate route candidates' first two years of full-time classroom teaching, using valid, reliable, and rigorous statewide instruments and protocols—Program specific.
	K-12 Student Perceptions	STUDENT SURVEYS ON TEACHING PRACTICE: K-12 student surveys about effectiveness of completers' or alternate route candidates' teaching practice during the first two years of full-time teaching, using valid and reliable statewide instruments—Program specific.

IV Contribution to State Needs	Entry and Persistence in Teaching	EMPLOYMENT: Percent of completers from 2nd and 3rd most recent completer cohort (including alternate route completers) employed within two years of program completion, by gender and race-ethnicity—Program specific and EPP overall. PERSISTENCE: Percent completers (traditional and alternate route) from the 4th most recent completer cohort who remain in teaching or other educational roles for 1, 2, & 3 years after initial entry. OR, percentage of completers attaining a second stage teaching license in states with multi-tiered licensure—Program specific and EPP overall. Percentages for Employment and Persistence for each program to be compared to statewide mean average for each certification field and mean average for programs in all fields. EPP average to be compared to mean average for all EPPs statewide.
	Placement/ Persistence in High-Need Subjects/Schools	EMPLOYMENT: Percent of completers from 2nd and 3rd most recent completer cohort (including alternate route completers) employed within two years of program completion in high needs schools and subjects, by gender and race-ethnicity-Program specific & EPP overall. PERSISTENCE: Percent completers (traditional and alternate route) from 4th most recent completer cohort who remain teaching in high-need subjects or in teaching or other educational roles in high-need schools for 1, 2 & 3 years after initial entry—Program specific & EPP overall. Percentages for Employment and Persistence for each program to be compared to statewide mean average for each certification field and mean average for programs in all fields. EPP average to be compared to mean average for all EPPs statewide.

PHASE 2. COLLECTING TEACHER INPUT ON THE VALUE OF INDICATORS AND METRICS OF PROGRAM QUALITY

Using the above indicators, we conducted focus groups and a survey that asked teachers to provide feedback on what data elements they believe to be the most useful and informative when describing the quality of teacher preparation programs.

Two hundred twenty-five elementary, middle, and high school educators from traditional district and public charter schools across the state—including Amarillo, Arlington, Austin, Cedar Park, Dallas, Donna, Houston, Leander, San Antonio, and Weslaco—offered their perspectives through these focus groups and survey.

In these focus groups, we informed teachers about the data that TEA currently makes available on EPPs, and facilitated discussions about how to improve upon these current standards. The teachers offered their own recommendations about what data would support better transparency.

++++++++++++++++ ENDNOTES ++++++++++++++++

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[2] TNTP (2016). Effective From Day One: Teacher Perspectives on their Preparation. Retrieved from TEGAC website: http://tegac.org/wp-content/uploads/2016/06/From-Day-One-TNTP-FINAL.pdf.

[3] Teacher Preparation Analytics (2016). A Guide to the Key Effectiveness Indicators. Retrieved from the Teacher Preparation Analytics website: http://teacherpreparationanalytics.org/wp-content/uploads/2017/01/KEI-Guide-12-15-16.pdf.

[4] Question 5: "A recent research report by Teacher Preparation Analytics identified 12 key indicators for teacher preparation program quality, organized into four categories. These categories and their corresponding indicators can be found on the handout. Please take a few minutes to familiarize yourself with these indicators and their recommended measures. We will discuss other indicators that might also be important, but for now, let's focus on these 12. When you examine this list of indicators, which three do you feel are the most informative for describing the quality of a teacher preparation program? (Please choose up to three.)" Responses: (n = 225) "Academic strength" (23.6 percent), "Teaching promise" (24.0 percent), "Candidate/completer diversity" (8.4 percent), "Mastery of teaching subjects" (36.9 percent), "Subject-specific pedagogical knowledge" (34.2 percent), "Completer teaching skill" (15.6 percent), "Completer rating of program" (7.6 percent), "Impact on K-12 student learning" (51.1 percent), "Demonstrated teaching skill" (47.1 percent), "K-12 student perceptions" (4.9 percent), "Entry and persistence in teaching" (24.0 percent), "Placement/persistence in high-need subjects/schools" (19.6 percent) Results may not sum to 100 percent due to rounding.

[5] Texas Education Agency (2018). 2015-2016 Accountability System for Educator Preparation Annual Reports. Retrieved from the Texas Education Agency website: https://tea.texas.gov/Texas_Educators/Preparation_and_Continuing_Education/Consumer_Information_about_Educator_Preparation_Programs/2015-2016_Accountability_System_for_Educator_Preparation_Annual_Reports/

[6] Question 10: "If states used these indicators to 'grade' teacher preparation programs, which indicators do you believe would be useful for this purpose? (Please choose up to three.)" Responses (n = 225) "Academic strength" (25.8 percent), "Teaching promise" (21.3 percent), "Candidate/completer diversity" (12.0 percent), "Mastery of teaching subjects" (35.1 percent), "Subject-specific pedagogical knowledge" (30.2 percent), "Completer teaching skill" (23.1 percent), "Completer rating of program" (11.1 percent), "Impact on K-12 student learning" (40.4 percent), "Demonstrated teaching skill" (44.0 percent), "K-12 student perceptions" (4.0 percent), "Entry and persistence in teaching" (27.1 percent), "Placement/persistence in high-need subjects/schools" (18.2 percent)