

# Staying in the Field: Connecting Preparation Program Characteristics to Teacher Retention in Texas

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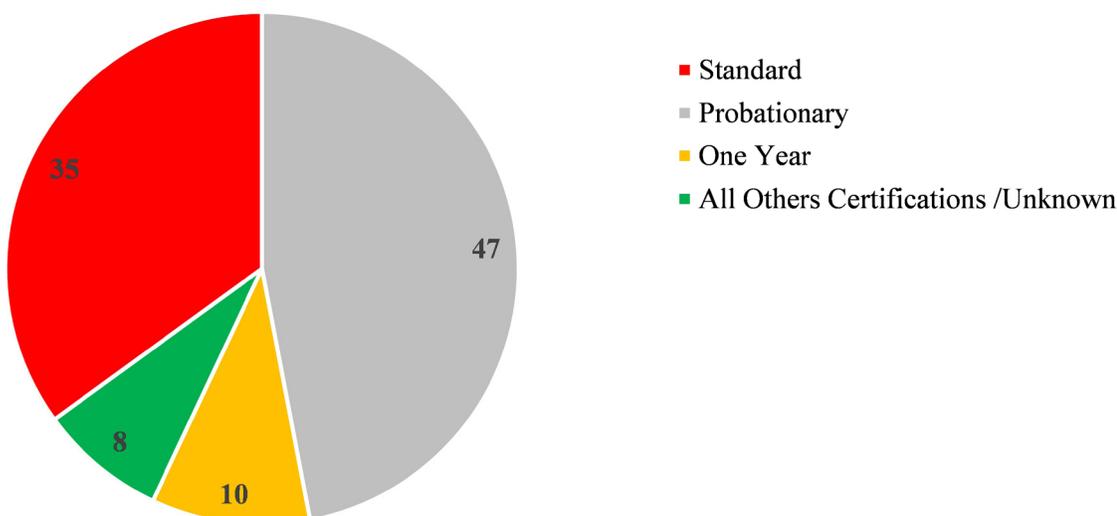
The Department of Education released new Teacher Preparation Regulations in October 2016<sup>i</sup> which are being implemented in an attempt to address the uneven preparation approaches across various types of Educator Preparation Providers (EPPs). These regulations call for more transparency regarding the outcomes of the teachers after they have been placed in schools. The regulations allow states to have autonomy in measuring program performance for traditional, alternative certification, and distance education EPPs while requiring reports on the effectiveness of the programs to increase feedback between programs, school districts, teachers, and other interested parties. The increased scrutiny on EPPs creates an opportunity to look more closely at the characteristics of the various types of teacher training pathways.

Data collected by the Center for Research, Evaluation and Advancement of Teacher Education (CREATE) show that less than one third of Texas teachers are being trained through traditional university based EPPs. The majority of teachers are earning their credentials through Alternative Certification Programs (ACPs). Extant literature provides evidence that while ACPs are popular for professionals seeking certification, traditional preparation programs are more effective at producing teachers that are retained in the profession<sup>ii</sup>. Studies have noted that teachers prepared in traditional university programs are more likely to have continuous service than teachers trained in alternative certification programs<sup>iii, iv, v</sup>. Teacher quality and student outcomes are more favorable when they are taught by teachers trained in traditional, university based programs<sup>vi, vii</sup>.

A recent CREATE policy brief by Burrige, Lowrey, and Horn<sup>viii</sup> examined the retention rates of Texas teachers prepared by traditional university based EPPs and those trained via ACPs. We extend that work by looking at university characteristics in traditional training programs that potentially influence teacher retention in the field. This study focuses on university based teacher preparation programs as evidence suggests these EPPs demonstrate more favorable teacher retention outcomes than ACPs.

For a cohort of nearly 21,000 teachers who entered the classroom during the 2009-2010 academic year, Figures 1 and 2 provide the source and type of initial certification. Nearly half (47%) of all teachers in this cohort initially held probationary certificates, and less than one-third (29%) completed university-based teacher preparation programs as undergraduate students.

Figure 1: 2009-2010 Cohort of Teachers, by Certification Type (in %)



Data Source: TEA  
(Public Education Information  
Management System), 2015

Event-history analysis was used to calculate annual rates of retention in continuous service<sup>ix</sup> for all teachers in the 2009-2010 cohort (N=20,916) and for cohort members certified by university-based EPPs through undergraduate programs (N=6,016). As Figure 3 shows, 78% of teachers certified through university-based EPPs remained in continuous service during their first five years of teaching; this rate of retention is 50% higher than that of the entire 2009-2010 cohort.

Figure 2: 2009-2010 Cohort of Teachers, by Certification Program (in %)

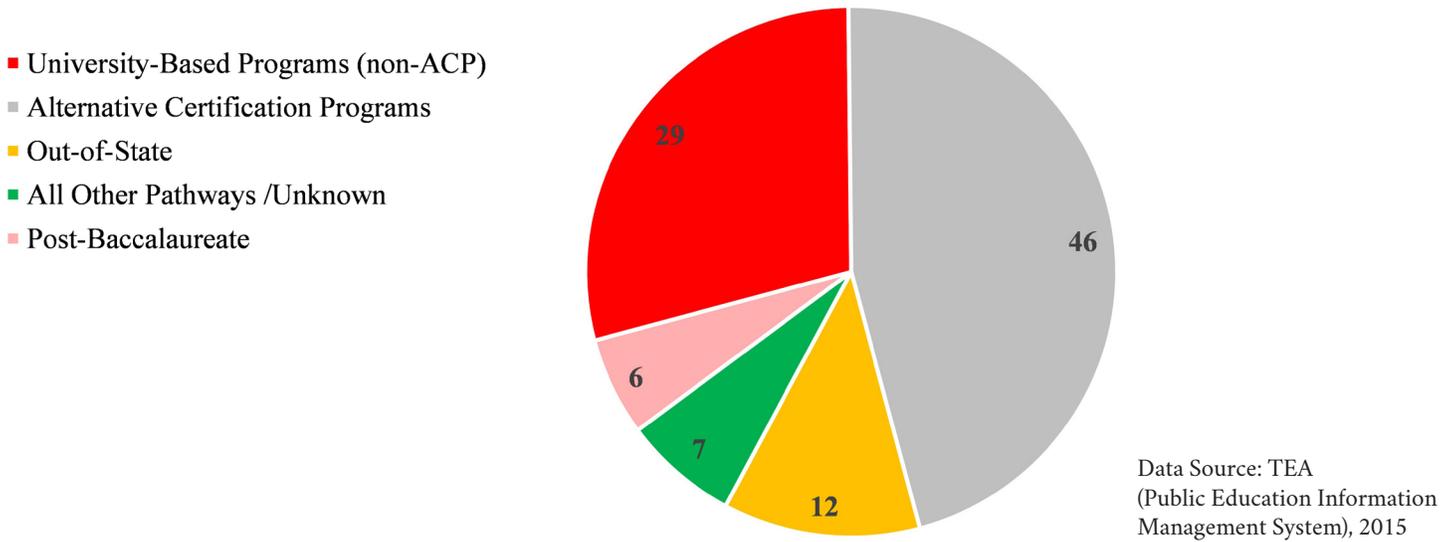
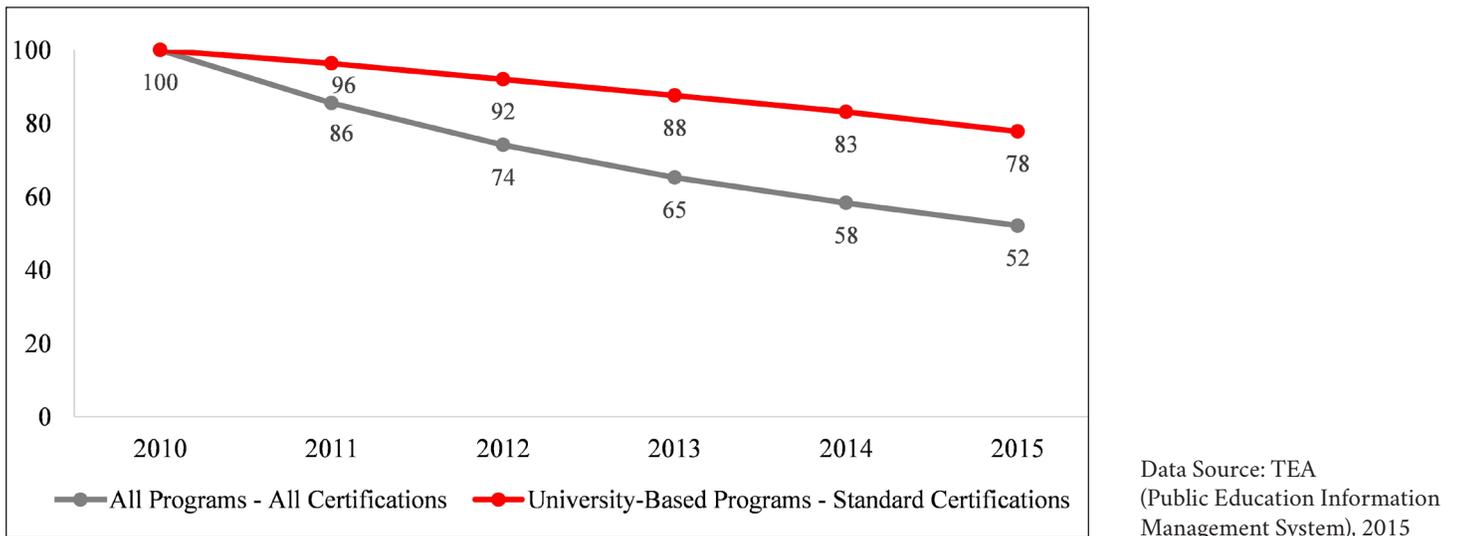


Figure 3: Comparison of Retention in Continuous Service, 2009-2010 Cohort by Certification Program and Type (in %)



Publically available data from two federal reporting systems<sup>x, xi, xii</sup> were used to identify characteristics of university-based EPPs associated with teacher retention during the first five years of service. Table 1 provides a list of institutional characteristics included in the analysis along with parameter estimates<sup>xiii</sup> indicating the direction and statistical significance of the association. Public control of an EPP and higher percentages of Hispanic students were associated with higher retention rates. However, the magnitudes of their relationships to teacher retention were very small. Readers are strongly cautioned against drawing conclusions beyond those presented below.

**Table 1: Characteristics for University-Based Education Preparation Providers and Associations with Retention in Continuous Service, 2009-2010 Cohort (in log odds)**

EPP CHARACTERISTICS	PARAMETER ESTIMATES
EPP has minimum SAT admissions requirement	0.06
EPP requires applicants to submit an essay	0.05
EPP requires applicants to interview	-0.03
EPP requires applicants to submit recommendation	0.01
Institution is publically (1) or privately (0) controlled	-0.20*
Percent of female students in the EPP	0.09
Percent of African American students in the EPP	-0.81
Percent of Asian American students in the EPP	-0.04
Percent of Hispanic students in the EPP	-0.90***
Percent of white students in the EPP	-0.084
Institutional spending on instruction per estimated FTE enrollment	0.004*
Average number of clock hours required for student teaching	<0.001***

\* p< .05 , \*\* p<.01, \*\*\* p<.001

Data Sources: TEA (Public Education Information Management System), 2015; NCES (Integrated Postsecondary Education Data System), 2015; U.S. Department of Education (Higher Education Act Title II Reporting System), 2015

## Policy Recommendations

This study highlights some unanswered questions about the administration of university based EPPs in Texas. Below are some recommendations for seeking the answers to these questions:

- Many teachers agree that time spent student teaching is valuable<sup>xiv</sup> and more recent studies utilize this metric in connection to teacher retention<sup>xv, xvi</sup>. However, this study found that more hours teaching during training does not necessarily lead to higher teacher retention. EPPs need to develop mechanisms for measuring the effectiveness of their student teaching practices.
- While there are several studies which indicate the benefits of teachers earning their certification through a traditional university program, there is little direct evidence for these outcomes. More researchers and administrators should dedicate space to understanding what differentiates traditional university based preparation programs from each other instead of comparing the outcomes to ACPs.
- Policy makers in the state of Texas should conduct a review of the different EPPs in an effort to understand how requirements for EPPs are being executed and assessed.

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- i The final document is available at <https://www2.ed.gov/documents/teaching/teacher-prep-final-regs.pdf>
  - ii Darling-Hammond, L. (2000). How teacher education matters. *Journal of teacher education*, 51(3), 166-173.
  - iii Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Heilig, J. V. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives*, 13(42)
  - iv Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30-33.
  - v Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of educational research*, 76(2), 173-208.
  - vi Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, 8(1).
  - vii Ingersoll, R., & Kralik, J. M. (2004). Teaching quality. *Education Commission of the States*.
  - viii Burrige, A., Lowrey, S., & Horn, C. (2016). *Staying in the Field: Teacher Retention Patterns in Texas*. Center for Research, Evaluation & Advancement of Teacher Education. Available at <http://www.uh.edu/education/research/institutes-centers/create/reports-pub/>
  - ix Continuous service retention is distinct from other types of retention because it does not allow for reentry into service. As a result, retention in continuous service rates are lower than retention rates in general. For standard retention rates in the 2009-2010 cohort, see: Burrige, A., Lowrey, S., & Horn, C. (2016). *Staying in the Field: Teacher Retention Patterns in Texas*. Center for Research, Evaluation & Advancement of Teacher Education. Available at <http://www.uh.edu/education/research/institutes-centers/create/reports-pub/>
  - x Institutional level data were gathered from two publically available databases: the Integrated Postsecondary Education Data System (IPEDS) and the Higher Education Act Title II Reporting System.
  - xi U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics (2015). *Integrated Postsecondary Data System*. Retrieved from <https://nces.ed.gov/ipeds/>
  - xii U.S. Department of Education, Office of Postsecondary Education (2015). Higher Education Act Title II Reporting System. Retrieved from <https://title2.ed.gov/Public/DataTools/Files.aspx>
  - xiii Parameter estimates provided are in log odds, and their magnitudes should not be directly compared.
  - xiv Levine (2006) found that while 76% of teachers surveyed in the study counted student teaching as the most important aspect of their education program, depending on the TPP, the time in the classroom varies greatly from less than one semester to a full-year apprenticeship
  - xv Ingersoll, R. M., & May, H. (2012). The magnitude, destinations, and determinants of mathematics and science teacher turnover. *Educational Evaluation and Policy Analysis*, 34(4), 435-464.
  - xvi Whipp, J. L., & Geronime, L. (2015). Experiences that predict early career teacher commitment to and Retention in High-Poverty Urban Schools. *Urban Education*, 0042085915574531.