

# Improving Teacher Preparation



## Guiding Principles for Business Leader Advocacy

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*Business leaders have a tremendous opportunity to impact teacher quality in a transformative way. Advocating for a better preparation system will help teachers be more effective in their jobs, reinforcing efforts to ensure every child has access to a great teacher. Improving teacher preparation solidly aligns with strategies to make our public education system more transparent and accountable, customer-focused, and ultimately a better return on investment.*

There is overwhelming evidence that how we prepare the next generation of teachers needs to improve. For instance:

- Those seeking to become teachers have surprisingly little information about which programs will prepare them well.
- Teachers-in-training receive insufficient practical experience in the classroom before they're licensed.
- The supply pipeline of new teachers is not aligned with the demand needs of schools and districts - we're training too many teachers who will have difficulty finding work, while not training enough of the teachers our kids need most.

We can do better by our kids. [STATE] business leaders must be a leading voice calling for strengthening our educator preparation programs across the state. The following principles should guide [OUR STATE]'s improvements:

1

[OUR STATE] must use better data to **align supply and demand**. Our schools cannot meet their staffing needs without a robust pipeline of high-quality talent. State officials must collect and utilize school and district data, including current and future hiring needs, turnover trends, and student characteristics, and work with preparation programs to align the teacher supply pipeline with actual demand. [OUR STATE] can also **encourage and enable new partnerships between districts and preparation programs** through incentives and certification flexibility.

2

[OUR STATE]'s teachers should **demonstrate they have teach effectively** as a pre-condition for earning their licensure. Every preparation program should offer rigorous clinical experiences that expose teaching candidates to the students and challenges they will encounter in the districts and schools they are most likely to teach, under the constructive mentorship of an effective veteran educator. **Only those teachers-in-training who demonstrate their ability to manage and teach in a classroom should be eligible to be in charge of one themselves.**

3

[OUR STATE]'s teacher preparation market should not operate in the dark. The bottom line is that **all consumers of teacher preparation - districts, schools, and prospective candidates - should know which programs prepare graduates to be effective teachers with the students they will be teaching**. Prep programs should have access to data that helps them improve. And when the state accredits and re-accredits preparation programs, it should do so on the basis of performance outcomes. Those programs that do not pass muster should lose their state approval to operate.

# Aligning Supply & Demand



## Teacher Preparation Policy Toolkit: Advocacy One-Pager

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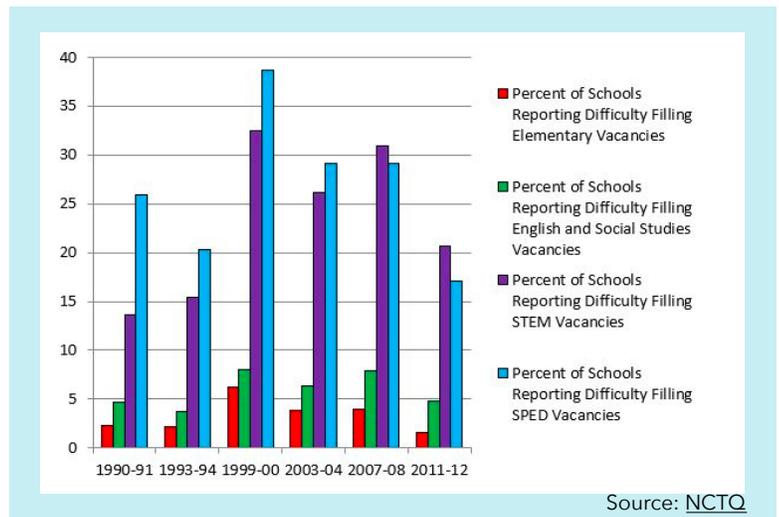
*There's nothing more important in school than ensuring every student has great teachers. So when we hear that there's a pending teacher shortage, we may be right to fear this looming crisis could have a profoundly negative impact on our kids. But what if the real story is more complicated? What if some teachers in your state are having trouble finding jobs, while dozens of high schools start the year without effective educators for chemistry and geometry classes? Why do some urban districts struggle to find teachers who can be successful in their classrooms, while schools in the suburbs have 100 candidates for every vacancy? What if we're solving for the wrong problem?*

### The problem is real

Over the past three years, approximately 4,000 stories about the pending 'teacher shortage' crisis appeared in papers across the country. However, this narrative is inaccurate, incomplete, and lacking in specifics about actual staffing needs.

To be sure, many districts and schools face serious challenges in finding well-trained teachers who have the specialized skills to certain subjects and students. At the same time, however, teacher shortages are not universal. Some states, like Arizona, California, Indiana, and Oklahoma face huge challenges, while others are training twice as many K-5 teachers as needed.

It is impossible for policymakers, education leaders, and preparation program leaders to fix a problem if they're not focused together on the right pain points. And there's ample evidence that's exactly what's happening.



### High-Need Subject Areas

75% of states report teacher shortages in specific areas, including STEM, special education, ESL, and world languages.

### Meeting Student Diversity

By 2022, over half of public school-going students will be non-white. Yet today only about 1 in six teachers is a teacher of color.

### Urban Schools and Low-Income Students

Over half of teachers in one recent survey reported receiving no special training on how to serve high-needs, low-achieving students.

Percent of principals reporting difficulty maintaining an adequate supply of effective teachers:

**60%** in urban schools

**58%** in schools with 2/3 or more low-income students

### We can learn from business.

With better data, we can have smarter conversations about the real staffing challenges our schools and districts face. We can also use this data to better align supply and demand, which will make the market for new teaching talent even stronger.

States should collect data regularly regarding school and district current and future hiring needs, turnover trends, and vacancy characteristics such as student and teacher demographics and subject areas.

States should work with preparation programs to align the teacher supply pipeline so that programs are producing the teacher candidates that schools and districts need most, while accelerating new partnerships between districts and prep programs through incentives and certification flexibility.

### Who is doing this well?

A few states have recognized that simply talking about producing more teachers isn't enough, and are getting serious about collecting data and taking the lead in getting educator prep programs and districts on the same page in terms of what kind of talent is needed.

**Tennessee** released a report earlier this year comparing new teacher demand with the supply created by the state's prep programs, with particular attention to specialization needs and teacher diversity. The report makes specific recommendations about how districts and prep programs can better utilize data and collaborate to address hiring needs. To complement those efforts, Tennessee recently awarded nearly \$200,000 in innovation grants to four prep programs to support increasing educator diversity and the number of teachers in high-demand licensure areas.

Recognizing the complexity of a statewide teacher shortage in a large, rural state, the **Rural Opportunities Consortium of Idaho** conducted an in-depth study to understand how teacher demand differed between rural and non-rural areas using national data, even breaking down differences among rural districts according to remoteness. Applying this analysis to Idaho's rural schools, the study offers recommendations for district leaders and policymakers to address Idaho's specific demand issues.

### LEARN MORE:

Elizabeth Ross, Managing Director of State Policy, [National Council on Teacher Quality](#)  
Dan Goldhaber, Director, [Center for Education Data & Research](#)

# Aligning Supply & Demand



## Teacher Preparation Policy Toolkit: Research Summary

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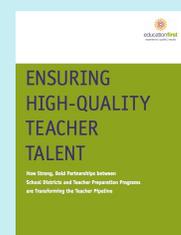
*States, school districts, and preparation programs need to use better data and partnerships to align supply and demand. States should collect data regularly regarding school and district hiring needs, turnover trends, and vacancy characteristics such as student and teacher demographics and subject areas. Using this demand data, states should work with preparation programs to align the teacher supply pipeline so that programs are producing the teacher candidates that schools and districts need most. States can also encourage and enable new partnerships between districts and preparation programs through incentives and certification flexibility.*

Generalizations about teacher shortages are often inaccurate and incomplete, and reveal little about actual staffing needs. Due to the lack of meaningful data, a generalized myth around current and future teacher shortages often drives a misplaced sense of urgency among policy-makers and stakeholders to solve the wrong problem.

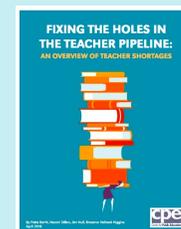
- It's a common misconception that there's a teacher shortage when there's actually a misalignment between supply and demand in certain areas. Nationally, teacher preparation programs graduate 175,000-300,000 teachers per year, while districts only hire between 60,000-140,000 teachers ([Cross, 2016](#)).
  - States hit particularly hard by teacher shortages include California, Arizona, Oklahoma, Indiana, and Hawaii, though those shortages are typically in specific subjects and grades ([Will, 2017](#); [Aragon, 2016](#)).

The types of teachers being produced by teacher preparation programs are not aligned with the types of teachers actually needed most by schools and districts.

- 75% of states report teacher shortages in specific areas, including STEM subjects, special education, and hard-to-staff schools (schools serving economically disadvantaged students, black students, and Hispanic students. This has been a persistent problem for decades ([Cross, 2016](#); [Cowen, et al., 2015](#)).
  - In a teacher survey by Hope Street Group, over half of teachers reported they had no instruction in their prep programs on how to serve high-needs, low-achieving populations, even though teachers with such experiences are in high demand ([Hope Street Group](#)).
- In a 2012 national survey, 60% of principals find it challenging to maintain an adequate supply of effective teachers in urban schools and 58% find it challenging to maintain an adequate supply in schools with  $\frac{3}{4}$  or more low-income students ([Markow et al., 2012](#)).
- Preparation programs are producing an overabundance of elementary school-level teachers, leaving many graduates unemployed ([Cross, 2016](#)).
  - Some states' programs are training twice as many K-5 elementary teachers as needed, while districts face dire shortages of STEM teachers, which leads to STEM subjects being filled by under qualified teachers ([Sawchuk, 2013](#)).
- The US Department of Education projects that by 2022, 54.7% of the public school-going population will be non-white, yet only 16.5% of the current teaching profession consists of teachers of color ([Bailey & Hussar, 2014](#); [Barth et al., 2016](#)).
  - Research has demonstrated that when there is a racial match between students and teachers of color, there are better student outcomes, especially in high-poverty environments and with at-risk populations ([Goldhaber et al., 2015](#)).
  - In a 7-year study of 2.9 million public school students in Florida, minority students had higher test scores and higher levels of achievement when they had teachers of similar ethnicity ([Egalite, 2015](#)).



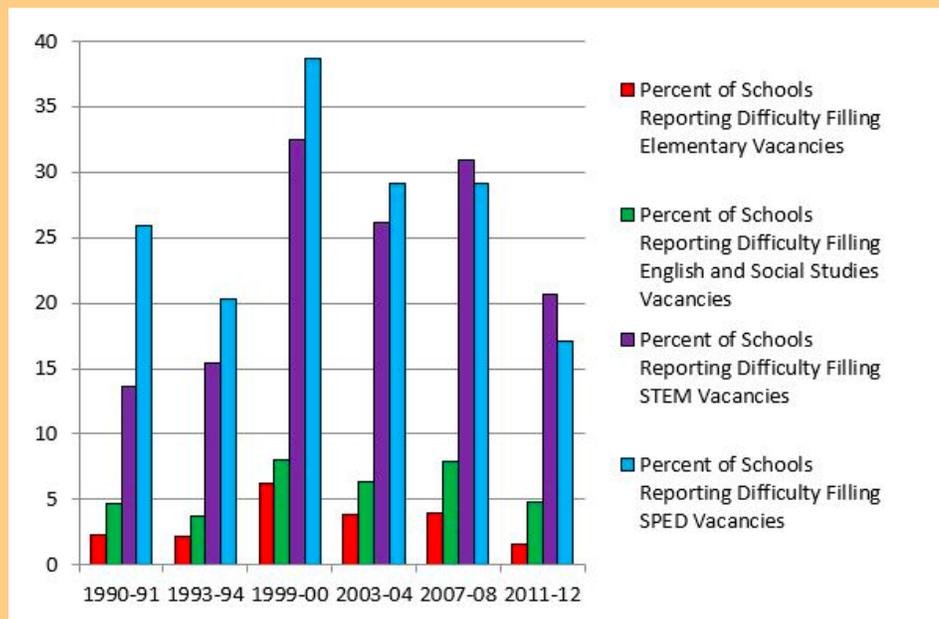
### Education First Ensuring High- Quality Teacher Talent



### Center for Public Education Fixing the Holes in the Teacher Pipeline: An Overview of Teacher Shortages

There is both a need and opportunity to correct this problem.

- After a decade of flat student enrollment, it’s estimated that the school-going population will increase by 3 million students in the next decade, signaling the need for qualified, properly placed teachers ([NCES, 2014](#)).
- The shortage of teachers in high-need areas provides states an opportunity to develop a strategic plan with established long-term policy solutions that strengthen the teacher workforce and improve equity ([Carver et al., 2016](#)).
- A growing number of partnerships between teacher preparation programs and schools/districts are transforming the teacher pipeline by producing candidates that are better fulfilling the district’s needs ([Horwath et al., 2016](#)).
  - Through innovative approaches, various universities in Denver, Boston, California, Arizona, and Oregon, among others, are partnering with local school districts to fulfill the talent the districts need by aligning program expectations, establishing mentorships, creating high-quality clinical-experience pathways, sharing data, and successfully communicating to create strong candidates ([Horwath et al., 2016](#)).
  - Alternative routes to teacher preparation, such as The New Teacher Project and Teach For America, are used by many jurisdictions to fill gaps in high needs areas and educator diversity ([Sparks, 2017](#)).
    - Teach For America, in particular, has been recognized for its work in recruiting teachers of color, and overall, TFA teachers have the highest percentage (51%) of non-white individuals of any large teacher preparation program in the nation. ([TFA; Title II](#))



This graph illustrates the huge variation in the types of vacancies school districts are having difficulty filling. It’s often reported that there is an overabundance of elementary school teachers being produced, and this graph further supports that point. When discussing teacher shortages, STEM subjects and special education are the areas where shortages are consistently present ([NCTQ](#)).

Source: NCTQ

**RESOURCES:**

Dan Goldhaber, Director, [Center for Education Data & Research](#)

Elizabeth Ross, Managing Director of State Policy, [National Council on Teacher Quality](#)

# Teacher Training & Development



## Teacher Preparation Policy Toolkit: Research Summary

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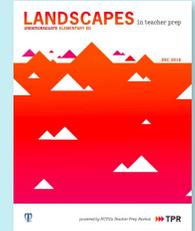
*Every preparation program should offer clinical experience that exposes teaching candidates to the students and challenges they will encounter in the districts and schools they are most likely to teach. Teachers-in-training should demonstrate their ability to manage and teach successfully in a classroom before they are responsible for one themselves. Meaningful clinical experience and demonstrated classroom competency should be required as conditions of educator licensure.*

Currently, educator preparation programs are not adequately providing teachers with the practical development necessary to be successful in the classroom.

- Teachers reporting that they feel underprepared to teach during their first year is a persistent problem. According to a 2012 survey by the American Federation of Teachers, 1 in 3 teachers felt unprepared to teach on the first day and a 2014 survey by Teach Plus found that 75 percent of teachers reported they were inadequately prepared to meet the needs of their students during their first year ([American Federation of Teachers, 2012](#); [Teach Plus, 2014](#)).
- Although research has shown student teaching to be predictive of student and teacher outcomes, school and district leaders nationwide have concerns that preparation programs are inadequately preparing teachers for today's classroom ([NCATE, 2010](#)). Notably, half the teachers surveyed would like to see more in-class experience in educator preparation programs ([Hope Street Group](#)).
- Despite conclusive evidence supporting the positive impact of clinical experience, few states have policies requiring such experiences as part of preparation programs ([Cohen & Wyckoff, 2016](#)).

High quality clinical experience makes a big difference in teacher effectiveness, and teachers shouldn't have to wait until they're on the job to learn the job.

- Stronger performance during pre-service training is correlated to stronger school-year performance, which leads to better student outcomes ([TNTF, 2013](#)).
- First year teachers benefit from the mentorship of an effective veteran teacher and from working in schools with student populations that resemble the schools in which they intend to work ([Cohen & Wyckoff, 2016](#); [Ronfeldt et al., 2013](#)).
- 100% of principals reported that teacher residencies, which emphasized in-classroom experience, improved student learning and achievement and said such programs have a positive impact on their school culture ([National Center for Teacher Residencies, 2017](#)).
- Strong content knowledge alone won't necessarily produce better student results; however content knowledge complemented with a strong clinical experience that includes high-quality field experiences will positively impact student achievement ([Darling-Hammond et al., 2009](#)).



**National Council  
on Teacher  
Quality**  
[Landscapes in  
Teacher Prep:  
Undergraduate  
Elementary Ed](#)



**Southern Regional  
Education Board**  
[Teacher Education:  
Expanding the  
Intersection of  
Evidence and  
Policy](#)

### TRAINING REQUIREMENTS IN OTHER FIELDS



A pilot needs 1,500 hours of flying experience to operate a commercial aircraft.



A surgeon needs to complete a 5-year residency to be eligible for board certification.



A barber needs to complete 1,500 hours of training to be licensed.



In most states, obtaining a driver's license requires at least 30 hours of driving experience



A ship captain must complete 720 hours of on-water experience to be licensed.

Sources: [www.faa.gov](http://www.faa.gov), [www.acgme.org](http://www.acgme.org), [www.learn.org](http://www.learn.org),  
[www.maritimeinstitute.com](http://www.maritimeinstitute.com), [www.leg.wa.gov](http://www.leg.wa.gov), [www.residency.wustl.edu](http://www.residency.wustl.edu)

**WHY SHOULD TEACHING BE ANY DIFFERENT?**

A robust clinical experience blends content, pedagogy, and professional coursework around an abundance of field experiences necessary for allowing students to connect what they learn with the practice of using it (NCATE, 2010).

- There are many models for good clinical experience. The common characteristics that most successful models share are integrating in-classroom learning with high quality field experiences, a strong mentoring network, and placing a high importance on the accountability of their graduates.
  - Generally, very few traditional university programs are doing this right comprehensively, however, Texas Tech, USC, and Arizona State University excel in certain elements such as providing strong clinical experiences and mentorships (NCTQ & Ben Riley, 2017).

Outside of traditional university programs, several alternative providers have developed thoughtful redesigns of what clinical experience should look like, prioritizing a broader range of the components discussed above. Such models include:

1

### MASSACHUSETTS

Massachusetts teacher licensure requires a full semester of in-classroom, student teaching with a supervising practitioner who provides mentoring. A university supervisor provides observation of candidates in the classroom throughout the semester and provides them with a written report after each consultation. At the end of the semester, the supervising practitioner and university supervisor confer together and determine the candidates recommendation for licensure and graduation. ([Massachusetts DOE](#))

2

### RELAY GRADUATE SCHOOL OF EDUCATION

Relay Graduate School of Education takes a unique route to teacher preparation by stressing high accountability for their graduates. They use a curriculum that blends theory and application, where candidates take what they have learned in the classroom to practice and perform in a school setting. Program candidates must demonstrate student achievement in order to graduate ([Relay GSE](#)).

3

### BOSTON TEACHER RESIDENCY

The Boston Teacher Residency program places teacher “residents” in schools under the guidance of an experienced mentor teacher. Throughout the year of teaching, the resident gains more responsibility in the classroom while also taking graduate-level courses through the University of Massachusetts Boston. Those who complete the program successfully earn a MA in Teaching and an entry-level teaching license ([Boston Teacher Residency](#)).

## RESOURCES:

Dan Goldhaber, Director, [Center for Education Data & Research](#)  
Ben Riley, Founder and Executive Director, [Deans for Impact](#)

# Teacher Training & Development



## Teacher Preparation Policy Toolkit: Advocacy One-Pager

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*Imagine scheduling major surgery and finding out your doctor (without any surgical residency) has only performed a couple of out-patient procedures. Care to book a flight with a pilot who's never been behind the controls of a commercial aircraft? Would you even want to be your hairdresser's first cut?*

*Now imagine finding out that your child's teacher has had limited exposure to the challenges of a real classroom, and was never evaluated on her ability to teach before earning the privilege of teaching your child. And consider it from the teacher's perspective - would you feel like you were adequately prepared to manage a classroom full of energetic, high-need kids on your own without showing you can do it successfully with a veteran teacher to guide you through it?*

### The problem is real

We all know how important teachers are for student achievement - every student should have access to a great teacher. Yet teachers consistently report feeling like they weren't prepared to teach during their first year. School and district leaders share the same concerns.

What's missing? Teacher preparation programs in most states are not required to do their part by ensuring teachers get the kind of experience and training they need to be successful in the classroom.

It doesn't have to be that way. Teachers who do well in their student teaching go on to be better teachers when they're in charge of their own classroom. So let's give them the training they need to shine.

### We can learn from business.

As business leaders, we want a public education system that is more transparent and accountable, customer-focused, and ultimately a better return on investment. Improving how teachers are prepared moves our state in the right direction.

### Let's start with two straightforward, common-sense policies:

Every educator preparation program should offer clinical experience that exposes teaching candidates to the students and challenges they will encounter in the districts and schools they are most likely to teach.

Teachers-in-training should demonstrate their ability to manage and teach successfully in a classroom before they are ever eligible to be in charge of one themselves.

According to a 2012 survey by the American Federation of Teachers, 1 in 3 teachers felt unprepared on the first day.

A 2014 survey by Teach Plus found that 75 percent of teachers said they were inadequately prepared for their first year.

### Who is doing this well?

There are many models for good clinical experience. The common characteristics that most successful models share are:



We should look to:

**Massachusetts** licensure requires a full semester of in-classroom, student teaching with a supervising teacher who provides mentoring. A university supervisor provides observation of candidates in the classroom and provides them with a written report after each consultation. At the end of the semester, the supervising teacher and university supervisor confer together and determine whether the candidate is ready for licensure and graduation.

**Relay Graduate School of Education** takes a unique route to teacher preparation by stressing high accountability for their graduates. They use a curriculum that blends what candidates have learned in the classroom with practice and perform in a school setting. Program candidates must demonstrate that their students learn in order to graduate.

The **Boston Teacher Residency** program places teacher “residents” in schools under the guidance of an experienced mentor teacher. Throughout the year of teaching, the resident gains more responsibility in the classroom while also taking graduate-level courses through the University of Massachusetts Boston. Those who complete the program successfully earn a MA in Teaching and an entry-level teaching license.

### LEARN MORE:

Elizabeth Ross, Managing Director of State Policy, [National Council on Teacher Quality](#)  
Benjamin Riley, Founder and Executive Director, [Deans for Impact](#)

# Consumer-Driven Teacher Prep



## Teacher Preparation Policy Toolkit: Advocacy One-Pager

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*Imagine you want to be a teacher and are deciding where to enroll for training. How would you select the right program, one that will prepare you to be successful with students?*

*Now imagine you are a district administrator charged with recruiting 30 math and science teachers for the next school year. Where will you find these teachers? From which programs should you recruit, and how will you know whether these programs are producing the top-notch talent that your schools need?*

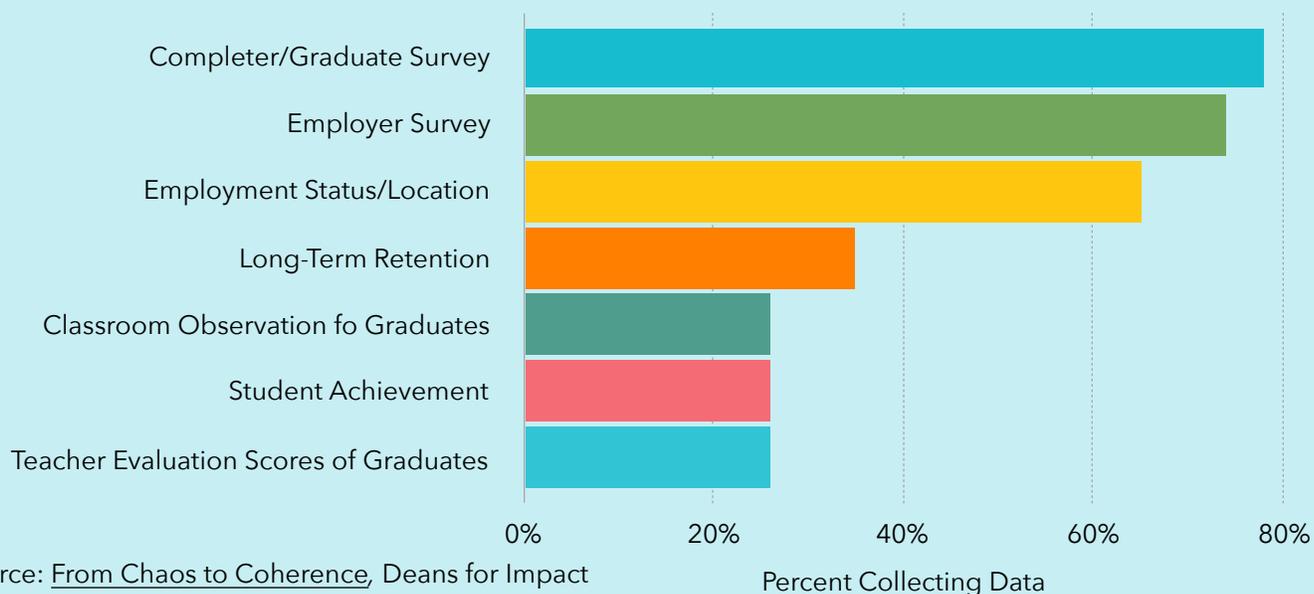
### The problem is real

Even though educator preparation programs are accredited by states, consumers have shockingly little information about which programs produce the best teachers. And with the vast differences among programs in terms of coursework, fieldwork, and assessments, figuring out how to compare them is virtually impossible in most states.

Problematically, it's not just consumers who are operating in the dark; state accreditors and program deans often lack meaningful information to drive their decisions. A majority of states still do not connect student achievement data to teacher preparation programs, and only half of the states publicly report any kind of program performance information online. Prep programs themselves typically do not get information from states regarding graduate performance in the classroom, and only about one in four traditional preparation programs gather information on the performance of their teacher candidates.

In fact, what we know from some of the most forward-thinking deans in the country is that while they regularly seek feedback from graduates and districts that hire them, few are collecting data about how well their graduates actually teach.

### Program Access to Post-Enrollment Data



## CONSUMER-DRIVEN TEACHER PREP ADVOCACY ONE-PAGER

In order to thrive, business must respond to customer demand and use data to improve their products and services. We shouldn't expect any less from where our teachers go to learn. By making meaningful performance information publicly available, states can equip both teacher-training providers and consumers to make the right choices.

Let's start with two straightforward, common-sense policies:

States should collect and publish performance data on preparation programs so that districts, schools, and prospective candidates can know which programs prepare graduates to be effective teachers, and so program leaders have the information they need to strengthen their training practices.

States should accredit and re-accredit programs based on performance outcomes - and those programs that do not pass muster should lose their state approval to operate.

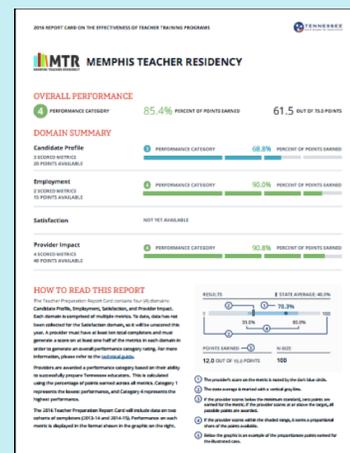
## Who is doing this well?

While most states aren't getting this right, a few states serve as models for collecting teacher preparation program performance data, publicly reporting that data in an accessible format, and using that data in an effective manner.

**Delaware** publishes report cards for preparation programs that include data such as pass rates on performance assessments, number of completers and non-completers, average teacher evaluation ratings, employer / supervisor satisfaction, and retention. Programs receive renewal status based on this data.



**Tennessee** prep program report cards include a wealth of demographic and academic information about each program, along with graduate data such as placement and retention rates, Praxis II scores, and teacher evaluation data. Just as important, programs get direct access to the data to target improvement.



## LEARN MORE:

Chad Aldeman, Principal, [Bellwether Education Partners](#)  
Elizabeth Ross, Managing Director of State Policy, [National Council on Teacher Quality](#)

# Consumer-Driven Teacher Prep



## Teacher Preparation Policy Toolkit: Research Summary

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*States should collect and publish performance data on preparation programs to inform better decision-making. The bottom line is that all consumers of teacher preparation - districts, schools, and prospective candidates - should know which programs prepare graduates to be effective teachers with the students they need to teach. And when the state accredits and re-accredits preparation programs, it should do so on the basis of performance outcomes. Those programs that do not pass muster should lose their state approval to operate.*

End users have little information about the quality of teacher preparation program and the data that is actually available isn't useful from a consumer or program-improvement perspective because it focuses on inputs rather than outputs.

- There are vast differences in focus and intensity of coursework, fieldwork, and assessments among the 2,000 different teacher preparation programs in the US, making it difficult to compare program graduate effectiveness ([Cohen & Wyckoff, 2016](#))
- As of 2014, only 22 states had started publicly linking teachers' classroom performance with teacher preparation programs, and only half of the states give feedback to preparation programs about information on their graduates (([DOC, 2014](#); [DOC, 2017](#)).
- In a survey of 23 programs by Deans for Impact, only six reported having access to teacher performance data and less than one in three have access to other data on their graduates' performance ([Deans For Impact, 2016](#)).
- There often isn't a sense of shared responsibility that acknowledges teacher preparation programs, schools, districts, and policymakers must work together to ensure teachers are being properly educated and prepared ([Horwath et al., 2016](#)).

States do not hold teacher preparation programs accountable for results, and there is a general lack of data collected or available regarding outputs of programs.

- As of 2015, only 25 states publicly report data on their websites, and of those, just 13 collect objective, program-specific data, while only two set minimum standards for performance. 33 states do not connect student achievement data to teacher preparation programs ([NCTO, 2015](#)).
- Only around one out of every four traditional preparation programs gathers information on the performance of their teacher candidates and even less information is gathered once in the classroom ([Greenberg, McKee, Walsh 2013](#)).
- Generally program accreditation and licensure requirements focus on program inputs instead of graduate impact, and do not use common outcome measures ([Cohen & Wyckoff, 2016](#)).
- Partially in response to the lack of transparency and accountability available through state accreditation systems, new types of prep programs have been created outside of the traditional university-based programs that incorporate measures of program quality and accountability into their design ([Crowe, 2010](#)).
- Currently, most preparation programs are evaluated with little regard to the results they produce. The Council for the Accreditation of Education Preparation recommends the development of a system where the data can be used for improvements in curriculum, clinical-based experiences, and assessments ([CAEP, 2016](#)).
- When asked what other measures teacher prep programs should be evaluated by, teachers surveyed by the Hope Street Group mentioned teacher retention, educator effectiveness, and pre-service teaching opportunities. Notably, half the teachers surveyed would like to see more in-class experience in educator preparation programs ([Hope Street Group, 2016](#)).



### Data Quality Campaign

Using Data to Ensure That Teachers are Learner Ready on Day One



**Deans for Impact**  
From Chaos to Coherence: A Policy Agenda for Accessing & Using Outcomes & Data in Educator Preparation

### States must be thoughtful in developing report card systems for teacher preparation programs and ensure they're useful for both improvement and accountability purposes.

- There are many challenges to developing effective accountability systems, including compiling and linking data in a meaningful way and the sharing and distribution of data to the appropriate stakeholders ([Lemke, 2015](#); [DQC, 2017](#)).
- Bellwether identifies several tradeoffs that states must consider in designing accountability systems for preparation programs, including cost, complexity, and accessibility. Tradeoffs include, it's less expensive and requires less capacity to track fewer measures, and it sends a message that the measures being accounted for are of importance. Although states can create a meticulous accountability system when holding programs accountable for numerous measures, a more complex system can be complicated and hard to navigate, potentially reducing buy-in and credibility ([Aldeman & LiBetti Mitchel, 2016](#)).
- Determining how to measure teacher effectiveness is often the biggest challenge. For instance, measuring effectiveness of teachers in non-tested grades and subjects continues to be a challenge, and thus compounds efforts to assess the quality of preparation for those teachers. Assessing alternative prep programs that follow a different timeline and structure, entirely, presents another challenge for states seeking to create a coherent system ([Pianta, 2015](#)).

### Only a few states serve as models in collecting teacher preparation program performance data, publicly reporting that data in an accessible format, and using that data in an effective manner.

#### DELAWARE

Delaware require preparation programs to collect and report data on effectiveness and performance of program completers based on student achievement. Programs are required to annually report metrics on placement in DE schools, pass rates on program performance assessments, number of completers and non-completers, average teacher evaluation ratings, employer/supervisor satisfaction, and retention. Data is made available to the public, including minimum standards of performance, using program report cards ([NCTQ](#); [Delaware DOE](#)).

#### FLORIDA

Florida preparation programs are required to collect and report data on the performance of students taught by program completers based on the student learning growth formula and completers' annual evaluations. For approval, programs must collect data around placement and retention rates. Prior to program completion, during field experience, candidates must demonstrate their ability to positively affect student learning. Programs must guarantee the quality of program completers during the first two years and the program must provide additional training at no cost to the teacher if their evaluation is unsatisfactory ([NCTQ](#)).

#### TENNESSEE

Tennessee requires reporting on three indicators: placement and retention rates, Praxis II scores, and teacher effectiveness data based on the Tennessee-Value-Added Assessment System scores. Report cards including demographic and academic profiles of each preparation program and data on the program completers over time. The report allows programs access to data to help make targeted improvements and provides the public information on preparation program completers ([Tennessee DOE](#)).

#### RESOURCES:

Elizabeth Ross, Managing Director of State Policy, [National Council on Teacher Quality](#)  
Chad Aldeman, Principal, [Bellwether Education Partners](#)

# Collecting the Right Data



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## Teacher Preparation Policy Toolkit: Data Guide

Most data elements related to educator preparation fit into one of the following categories:

- **Number of current and projected vacancies** by district, school, grade, subject, and other school and student characteristics. (Are state, district, and school leaders planning ahead?)
- **New teacher profile data** that shows for each teacher: years on the job, years in current school placement, name and type of school, diversity characteristics, name of preparation program and year of completion, and clinical experience evaluation data. (Are districts and schools able to hire the teachers they need for the students they have?)
- **New teacher performance data** comprised of comprehensive evaluation ratings based on student growth, classroom observations, and student survey data. (Are new teachers effective?)
- **Preparation program data**, including information on candidate demographics, recruitment, and placement; coursework and clinical training; graduate performance in their first few years of teaching; new teacher retention data; and satisfaction and perception survey data from graduates, and school and district partners. (Are preparation programs meeting demand and preparing effective educators?)

Focus Area	Issue	Questions to Ask	Measures/Data Needed
<b>Aligning Supply and Demand</b>	Teacher talent pipeline is not meeting district & school staffing needs	<ul style="list-style-type: none"> <li>• What are the current and future staffing needs of districts and schools?</li> <li>• What are the average vacancy rates for each subject and grade?</li> <li>• Are high-need districts receiving a sufficient number of graduates?</li> <li>• Are preparation programs and districts communicating regularly regarding staffing needs?</li> </ul>	<ul style="list-style-type: none"> <li>• Existing and projected vacancies by region, subject, school type (urban, rural, suburban, high-performing, turnaround), and student demographic</li> <li>• Number of program graduates by region, specialization, and school type</li> <li>• Percentage of teaching vacancies not filled within 60 days of start of school</li> </ul>
	Lack of diversity among new teachers	<ul style="list-style-type: none"> <li>• Does the diversity of teacher supply match the diversity of the student population?</li> <li>• Do existing training pathways produce a diverse pool of teacher candidates?</li> <li>• Are programs placing their graduates in diverse schools?</li> </ul>	<ul style="list-style-type: none"> <li>• Student demographic information by district and school</li> <li>• Preparation program applicants and graduates, disaggregated by race and ethnicity</li> <li>• Percentage of candidates who have applied and been hired by district, disaggregated by race and ethnicity</li> </ul>
	Surplus of quality teachers	<ul style="list-style-type: none"> <li>• Are preparation programs working with districts to train teachers according to targeted staffing needs, e.g. special subjects and grades?</li> </ul>	<ul style="list-style-type: none"> <li>• Program graduate employment data, including percentage of graduates who are not hired within 180 days of program completion.</li> <li>• Existing vacancies by region, subject, school type (urban, rural, suburban, high-performing, turnaround), and student demographic</li> </ul>

Focus Area	Issue	Questions to Ask	Measures/Data Needed
<b>Assessing Preparation Program Quality and Impact</b>	Preparation program graduates are not effective in the classroom	<ul style="list-style-type: none"> <li>• Can state data systems collect and track effectiveness data over time?</li> <li>• Are new teachers receiving regular feedback and observations, along with robust performance evaluations?</li> <li>• Do new teachers have the content knowledge necessary to be effective?</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation data for new teachers, linked to preparation program and disaggregated by school and student characteristics</li> <li>• Teacher candidates clinical experience observation/evaluation data</li> <li>• Teacher candidate content assessment data (by relevant subject)</li> <li>• Teacher candidate GPA, praxis score, and certification exam data (e.g. edTPA)</li> </ul>
	Program graduates are unprepared for the challenges of teaching	<ul style="list-style-type: none"> <li>• Do teacher preparation programs have school partners to support clinical experience?</li> <li>• Are clinical experiences guided and overseen by effective mentor teachers?</li> <li>• Are programs providing their candidates with exposure to a wide variety of interdisciplinary experiences?</li> <li>• Are students giving feedback on their teacher candidate's performance during the clinical experience?</li> </ul>	<ul style="list-style-type: none"> <li>• Preparation program methodology for evaluating teacher candidates during clinical experience</li> <li>• Teacher candidates clinical experience observation/evaluation data</li> <li>• Clinical experience field placement information for all teacher candidates, including hours, student/classroom demographics, and coursework</li> <li>• Effectiveness and teaching experience data for field placement mentor teachers</li> </ul>
	Prospective teachers are uncertain when selecting the program that will prepare them best	<ul style="list-style-type: none"> <li>• Are program graduates satisfied with their coursework and preparation, including clinical experience?</li> <li>• Are programs effective in preparing their graduates to meet the needs of diverse learners?</li> <li>• Are programs assessing their graduates' degree of satisfaction with the program?</li> <li>• Are hiring districts and schools satisfied with program graduates' level of preparedness?</li> <li>• How many program graduates become teachers immediately after graduation?</li> <li>• Are program graduates teaching in the grade/subject that they trained?</li> </ul>	<ul style="list-style-type: none"> <li>• Survey data from teachers in years 1-5 regarding their level of satisfaction with their preparation program and self-assessed level of preparedness and quality of their clinical experience</li> <li>• Survey data from districts and schools regarding their level of satisfaction and perception of new teacher preparedness, linked to preparation programs</li> <li>• Retention rates among teachers in years 1-5, including exit survey data regarding reasons for attrition</li> <li>• State program evaluation ratings based in part on graduation performance and, graduate and district/school partner satisfaction</li> </ul>

Focus Area	Issue	Questions to Ask	Measures/Data Needed
<b>Ensuring New Teachers are Ready and Effective</b>	New teachers do not feel prepared for the classroom	<ul style="list-style-type: none"> <li>• Do new teachers report feeling prepared early in their career?</li> <li>• Are new teachers leaving the profession at higher than expected/acceptable rates?</li> <li>• Do new teachers report receiving sufficient meaningful clinical experience?</li> <li>• Do program graduates have to demonstrate teaching effectiveness before completing their program?</li> </ul>	<ul style="list-style-type: none"> <li>• Survey data from teachers in years 1-5 regarding their self-assessed level of preparedness and quality of their clinical experience</li> <li>• Retention rates among teachers in years 1-5, including exit survey data regarding reasons for attrition</li> <li>• Clinical experience field placement information for all teacher candidates, including hours, student/classroom demographics, and coursework</li> <li>• Preparation program methodology for evaluating teacher candidates during clinical experience</li> </ul>
	New teachers are not effective	<ul style="list-style-type: none"> <li>• Can state data systems collect and track effectiveness data over time?</li> <li>• Are new teachers receiving regular feedback and observations, along with robust performance evaluations?</li> <li>• Do new teachers have the content knowledge necessary to be effective?</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation data for new teachers, linked to preparation program and disaggregated by school and student</li> <li>• Teacher candidate clinical experience observation/evaluation data</li> <li>• Teacher candidate content assessment data (by relevant subject)</li> <li>• Teacher candidate GPA, praxis score, and certification exam data (e.g. edTPA)</li> </ul>



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