Legislative Legislative Legislative Committee

Teacher Quality and Quantity Reports

Date: June 25, 2021

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Introduction

Teacher preparation programs in top-performing countries know the number and types of teachers needed to fill local vacancies focusing their efforts on preparing teachers to meet current and future needs. In the U.S., the public education system is decentralized leaving educator preparation programs, state departments of education, and local school districts contributing to the teacher workforce in differing capacities. Research shows that the quality of teachers and their principals are the first and second most important school-level factors that impact student learning. Student access to quality teachers is impacted by preparation and the conditions of the workforce. School district and charter school leaders react to gaps in the workforce through short-term solutions such as hiring an alternative licensed teacher, filling a long-term position with a long-term substitute, or increasing class loads for existing teachers.

Teacher Workforce Reporting Requirements and Data Collection

States have attempted to measure the quantity of teachers and the quality of the teacher workforce by analyzing data reported by multiple education stakeholders. A majority of states have conducted supply and demand studies to assess the workforce and some states use data to oversee the quality of educator preparation programs. In New Mexico, state law requires a report from educator preparation programs and the Public Education Department (PED) to assess quality of teacher-candidates and quantify the number of candidates in the pipeline. PED now also uses this report to approve educator preparation programs. A recent five-year gap in reports led a public New Mexico post-secondary institution to start publishing an annual educator vacancy report in an attempt to demonstrate the magnitude of the teacher shortage in New Mexico. See attachment 1 Comparison of Current Reporting Indicators. Policymakers should determine what data is valuable and relevant to meeting the finding in the Martinez and Yazzie consolidated lawsuit which says well-trained staff is essential to ensuring all students have access to a high-quality education.

Supply and Demand Reports

Assessing teacher supply and demand is complicated and states implement a variety of approaches. Supply and demand reports consider the major components that assess the teacher workforce. According to educational researchers, when imbalances in the supply and demand for teachers occur, school districts may adopt strategies that create suboptimal learning experiences for students.

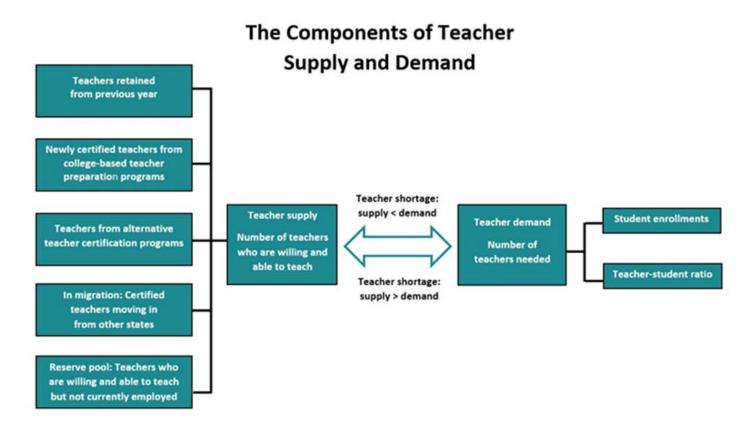
Supply. Supply of teachers at the beginning of the school year come from multiple sources.

- 1. New entrants into the system;
- 2. Former teachers reentering the system;
- 3. Current teachers continuing from the last year to the current year; and
- 4. Immigration of teachers from outside the system.

Data Collection According to educational researchers, teacher supply data should also contain metrics assessing the quality of teaching candidates. Findings have shown that sharp changes in demand may produce greater adjustments in "quality" than in "quantity." The U.S. Department of Education requires state-approved traditional and alternative educator preparation programs to report annual data on enrollment of teacher candidates, program completers, clinical experiences, licensure outcomes, goals and assurances, and pass rates. In New Mexico, educator preparation programs submit program outcome data to PED for the



statutorily required educator accountability report and during the state-accreditation process, New Mexico State University for their annual educator vacancy report, and the federal government.



Researchers have determined the number and types of teachers in **demand** at a given time is driven by school enrollment, student-teacher ratios, and teacher turnover.

- **Student enrollment** determines how many teachers are needed.
- **Student-teacher ratios** are impacted by changes in: 1) staffing patterns, 2) class sizes, and 3) program offerings affecting the relevant category of teachers.
- **Teachers leaving** the profession can be grouped in three different ways: 1) retirement, 2) preretirement exits, and 3) moving to other districts or schools.

Measuring Demand. Across the nation, quantifying the demand of the teaching profession is approached differently. Annually the U.S. Department of Education requires states to report shortage areas by specific grade, subject matter, and geographic areas to target federal support for teacher-specific incentives such as loan deferment, loan cancelation, and scholarships. In New Mexico, the report produced by the New Mexico State University evaluation and policy center uses publically available job postings to measure the potential shortage through quantifying state-wide vacancies. Other states quantify demand using metrics such as student enrollment, school district surveys of hard-to-staff positions, licensure data, retirement trends, and long-term substitute positions.

State Action and Strategies

Across the country, a variety of methods are employed to help inform education policy with relevant data on the educator workforce, including:



- Interactive Workforce Data Dashboards, which provide the public and policymakers with updated interactive tools visually display key data points to monitor the educator workforce. Kentucky's dashboard displays teacher supply and demand data sortable by location, subject area, and academic year. Missouri takes a different approach by providing sortable teacher quality metrics.
- Educator Workforce Task Force, which can convene to gather statewide public and cross agency input and provide recommendations to support a state's educator workforce through a published timely report. Oklahoma's teacher shortage task force report provided the legislature with eight recommendations to improve teacher retention and recruitment throughout the state. South Dakota's blue ribbon task force provided the legislature with both an analysis of the state's educator workforce landscape and over 30 recommendations to address teacher supply and demand challenges.
- Workforce Trend Studies, which analyze data over a three- to five-year period identifying trends in educator retention, mobility, shortages, and quality. Washington's beginning teacher mobility report provided educators and policy makers with information and analyses about statewide beginning teacher mobility and retention to inform teacher workforce policy. In addition to tracking new hires in the educator workforce, Maryland's teacher staffing report analyzes the potential impact national and state initiatives on staffing patterns.
- Supply and Demand Snapshot Reports, which gather data presented through graphs and tables on the relative supply of recent educator preparation program graduates and demand for teachers by content areas, grade levels, and qualifications. Florida's critical teacher shortage report identifies which certification and geographic areas are facing an unmet need of certified teachers. Hawaii takes a different approach by focusing on a variety of demographic factors of the teacher workforce supply and need across the state.
- State of the Workforce Reports, which provide in-depth information and analysis on a state's teacher workforce, licensure candidates, the needs of school districts, and legislation in the state. Nevada's teacher workforce report utilizes data from the teacher preparation programs and school district vacancy data to develop a clear picture of qualifications of recent teacher preparation program graduates, the educator workforce needs, and legislative efforts in Nevada. Minnesota's biennial report takes a different approach and goes below the surface of the educator workforce, looking at many measures contributing to the quality of the workforce and interconnecting outcomes of teacher recruitment and retention strategies in the report.

Accountability Reports for Educator Preparation Programs

There are several mechanisms at the federal and state levels to hold teacher preparation programs accountable for the quality of their programs and the teachers exiting their programs. Each mechanism requires data collection from the educator preparation program, often duplicative to other data collected. Depending on the state, educator preparation programs are often required to go through a national accreditation process to prove program quality and some states also require a state level program approval process. According to the National Center on Teacher Quality, 22 states publish publicly available data on teacher preparation performance.

In New Mexico, all educator preparation programs preparing teacher candidates for licensure must go through a state approval process that requires programs to report data for Education and Administrative Reporting System (EARS) and additional information to PED to use for on-site visits. See attachment 2, Educator Accountability Report. In addition to the required state process, six education preparation programs participate in a national accreditation process. As a part of the national accreditation process, programs are required to report on key effectiveness indicators. See attachment 3, Key Effectiveness Indicators. In addition to data collected through these avenues, educator preparation programs are also required to report data to the federal government annually on program admission requirements, candidate enrollment characteristics,

program completers, clinical experiences, program goals, and teacher-candidate licensure assessment passrates.

Recommendations

The Legislature should update how and what data should be collected on the teacher workforce to inform education stakeholder decision making around the recruitment, preparation, and retention of teachers in New Mexico.

- The Legislature should work with education stakeholders to determine what data is currently collected and how meaningful it is. This collective work can inform where current data gaps are and allow education stakeholders to identify data needed.
- The Legislature should ensure that workforce data is collected in the least bureaucratic and timely way possible to respond to the diverse needs of students in New Mexico.
- The Legislature should work with education stakeholders to decide how the data will be publicly distributed and accessible.



Comparison of Current Reporting Indicators

	Indicators Required by Section 22-10A-19.2 NMSA 1978	NM EARS Report	NMSU SOAR	Minnesota	Deleware	Georgia	<u>Idaho</u>	Maryland
1	Required by Statute	Х		Χ				Х
2 l	Reported Annually	Х	Х			Χ		
3 F	Reported Biannal			Χ				Х
4	Educator Preparation Program Reporting							
5 5	Standards for entering and exiting the educator preparation progam	Х		Χ				
6	The number of hours required for field experience for students teaching or administrator internship	Х					ı	
7	The number and percentage of students needing developmental course work upon entering the program	Х					ı	
8	Number of students admitted by program suject and type of program		Х					
9	The number and percentage of students completing each program	Х	Х	Х			Х	Х
10 5	Student pass rate on skills and subject matter exams required for graduation in each program and licensure area	х		х				1
11	A description of each program's placement practices	Х						1
12	The number and percentage of graduates hired by in-state school districts	Х		Χ		Χ	Х	X 1
13	Evaluation plan that inclused high-performance objectives	х						1
14	Educator prep programs asked to project production of teachers							X 1
15	The demographic of educator preparation program participants	Х		Χ			\Box	X 1
16	Program revenues/expenditures, staff salaries and benefits and operational cost per credit hour	Х						1
_	Summary data on faculty qualifications, including at least the content areas of faculty undergraduate and graduate							_
	degrees and their years of experience as kindergarther through grade 12 classroom teachers or school			Х			ı	
	administrators						ı	1
	The average ACT/SAT scores of students entering the program in the preceding year			Х				1
	Medium GPA of individuals completing admitted into licensure programs	X ¹						1
_	Survey results measuring student and graduate satisfaction with the program dissaggregatred by race			Х				
_	Number of students in supervised field experience and student teaching traditional/alt programs and hours			~				
	required	Х					ı	2
_ <u>_</u>	School District Reporting							2
-	Teacher and school personnel vacancies		Х	Х				X 2
	Substitute vacancies			Х				2
27	outoututo fuodinolo			^				
	Projections of teacher demand for each district taking into account the students expected to enroll in the district			Х				2
	New hires by certification area				Х		Х	2
_	Survey of school districts to report hard to staff positions				Х		\vdash	2
	A standard measure of the satisfaction of school principals or supervising teachers with the student teachers			Х			l	
_	assigned to a school or supervising teacher						\vdash	2
	School district specific data on teachers who are currently teaching and who left including licensure area, where			Х			l	
_	they were prepared, teacher evaluation scores						\vdash	2
-	The status of teacher retirement patterns				Х	Χ	\vdash	3
	School district reported recrutiment and retainment strategies			Χ			ш	3
	Public Education Department Reporting							3
_	Status of the educator workforce including total teachers, leaders, demographics and years of experience					Х	$ldsymbol{\sqcup}$	3
	Teacher/leader mobility					Х	Х	3
_	Teacher/leader retention					Χ	Х	3
<u> </u>	Total licenses issued by certification area							X 3
_	Alternative pathways to certification						Щ	X 3
- H	Initial hires from alternative license programs							X 3
-	Number of teachers credentialed in the state	Х					Щ,	X 3
401	Teachers by years of experience						Щ,	X 4
_								
41 l	Percentage of use of teaching licenses compared to active licenses Tying legislative investments to cohorts of students/updates on legislative policy changes			Χ			<u> </u>	

^{1.} Medium GPA of individuals is collected but not required by statute

22-10A-19.2. Educator accountability report.

A. The department shall:

- (1) design a uniform statewide educator accountability reporting system to measure and track teacher and administrator education candidates from pre-entry to post-graduation in order to benchmark the productivity and accountability of New Mexico's educator work force; provided that the system shall be designed in collaboration with:
- (a) all public post-secondary teacher and administrator preparation programs in New Mexico, including those programs that issue alternative or provisional licenses;
- (b) the teacher and administrator preparation programs' respective public postsecondary educational institutions; and
 - (c) the higher education department;
- (2) require all public post-secondary teacher and administrator preparation programs to submit the data required for the uniform statewide educator accountability reporting system through the department's student teacher accountability reporting system;
- (3) use the uniform statewide educator accountability reporting system, in conjunction with the department's student teacher education accountability reporting system, to assess the status of the state's efforts to establish and maintain a seamless pre-kindergarten through post-graduate system of education;
- (4) adopt the format for reporting the outcome measures of each teacher and administrator preparation program in the state; and
 - (5) issue an annual statewide educator accountability report.
- B. The annual educator accountability report format shall be clear, concise and understandable to the legislature and the general public. All annual program and statewide accountability reports shall ensure that the privacy of individual students is protected.
- C. Each teacher and administrator preparation program's annual educator accountability report shall include the demographic characteristics of the students and the following indicators of program success:
 - (1) the standards for entering and exiting the program;
- (2) the number of hours required for field experience and for student teaching or administrator internship;
- (3) the number and percentage of students needing developmental course work upon entering the program;
 - (4) the number and percentage of students completing each program;

- (5) the number and types of degrees received by students who complete each program;
- (6) the number and percentage of students who pass the New Mexico teacher or administrator assessments for initial licensure on the first attempt;
 - (7) a description of each program's placement practices; and
 - (8) the number and percentage of students hired by New Mexico school districts.
- D. The educator accountability report shall include an evaluation plan that includes high performance objectives. The plan shall include objectives and measures for:
 - (1) increasing student achievement for all students;
- (2) increasing teacher and administrator retention, particularly in the first three years of a teacher's or administrator's career;
- (3) increasing the percentage of students who pass the New Mexico teacher or administrator assessments for initial licensure on the first attempt;
- (4) increasing the percentage of secondary school classes taught in core academic subject areas by teachers who demonstrate by means of rigorous content area assessments a high level of subject area mastery and a thorough knowledge of the state's academic content and performance standards;
- (5) increasing the percentage of elementary school classes taught by teachers who demonstrate by means of a high level of performance in core academic subject areas their mastery of the state academic content and performance standards; and
 - (6) increasing the number of teachers trained in math, science and technology.
- E. In addition to the specifications in Subsections C and D of this section, the annual educator accountability report shall also include itemized information on program revenues and expenditures, including staff salaries and benefits and the operational cost per credit hour.
- F. The annual educator accountability report shall be adopted by each public post-secondary educational institution, reported in accordance with guidelines established by the department to ensure effective communication with the public and disseminated to the governor, legislators and other policymakers and business and economic development organizations by November 1 of each year.

History: Laws 2007, ch. 264, § 2; 2009, ch. 20, § 1.



TPA The Key Effectiveness Indicators

Assessment Categories	Key Indicators	Recommended Measures
l Candidate	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.
Selection and Completion	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
completion	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 & EPP overall.
	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
II Knowledge	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.
and Skills for Teaching	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	Impact on K-12 Student Learning	TEACHER CONTRIBUTION TO STUDENT LEARNING : Success of program completers in 2 nd and 3 rd 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 33 rd and above the 67 th percentile compared to the average score and distribution for all novice teachers statewide and for all teachers statewide—Program specific.
as Classroom Teachers	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 first two years of full-time teaching, using valid and reliable statewide instruments—Program specific.
IV Contribution	Entry and Persistence in Teaching	EMPLOYMENT: Percent of completers from 2 nd and 3 rd most recent completer cohort (including alternate route completers) employed within two years of program completion, by gender and race-ethnicity—Program specific & EPP overall. PERSISTENCE: Percent completers (traditional and alternate route) from the 4 th 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 & 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.
to State Needs	Placement/Persistence in High-Need Subjects/Schools	EMPLOYMENT: Percent of completers from 2 nd and 3 rd 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.