# **Policy Analysis**



Independent, principled state policy fostering limited and responsible government, free enterprise, and a robust civil society

# October 2016

# **Oklahoma's Teacher Supply: Shortage or Surplus?**

By Baylee Butler and Byron Schlomach

### Abstract

It is commonly alleged there is a teacher shortage in Oklahoma. *However, the evidence of a shortage* is scant. One study shows a trivial *shortage of 0.62 percent developing* in Oklahoma with some regions *suffering more significantly than others.* However, a close look at even this evidence yields a picture that changes dramatically if average class size rises only slightly. In addition, emergency certification numbers are analyzed and claims that such certifications *are evidence of a teacher shortage are* found wanting. Given developments in education technology and the lack of evidence of a true shortage, anecdotes from teachers moving to Texas should be discounted.

#### Introduction

Much has been made of an alleged teacher shortage in Oklahoma. Is this true? What is the actual relationship between supply and demand for teachers in Oklahoma?<sup>1</sup> Is there a shortage or a surplus? Is the supply/ demand relationship the same for all academic subjects and school districts? This paper examines these questions by looking at three classes of evidence.

In order of weakest to strongest evidence, first is anecdotal evidence - testimonials from teachers and administrators regarding Oklahoma's teacher job market. Second, is circumstantial evidence from the granting of certification exceptions (popularly known as emergency certifications) by the state to allow non-traditionally certified people to teach. And third, there is direct evidence from looking at the actual supply and demand numbers- counts of teachers leaving positions, current and future classroom teacher needs, current and future supply of new

teachers, and the current and future supply of existing teachers willing to teach.

### What Is the Evidence? Anecdotes

There are many anecdotes about the supply of teachers. Some point to a shortage, and others a surplus. A common theme on the shortage side is "Gone to Texas," as has been developed in newspaper stories. For example, a teacher from Tulsa made the news in Oklahoma and Texas when she decided to split up her family, move to Texas, and teach there for an increase in salary.<sup>2</sup> Another story told of a teacher "Gone to Texas" whose new husband also had a choice of working there.3 The general impression left by such stories is that Oklahoma's teachers are moving in droves to Texas for more pay. But, the cases reported are exceptional in nature, splitting a family in search of a higher lifestyle in one, and forming a new family in the other. Since there are over 42,000

This paper, in its entirety, can be found at http://www.1889institute.org/k-12-public-education.html.

Nothing written here is to be construed as necessarily reflecting the views of the 1889 Institute or as an attempt to aid or hinder the passage of any bill before the Oklahoma Legislature. © 2016 by 1889 Institute. Baylee Butler is a Research Associate for the 1889 Institute.

Byron Schlomach is the Director of the 1889 Institute.

public school teachers in Oklahoma, a few moving to Texas is insignificant.

Another "Gone to Texas" argument is that many new graduates of Oklahoma's education colleges take a job in Texas. This shouldn't be viewed as unusual. Texas and Oklahoma are neighbors in the same regional economy. Further, many students in Oklahoma universities are Texans who only came to Oklahoma to go to school.<sup>4</sup> Not surprisingly, many Oklahoma university graduates take teaching jobs in Texas, but many Oklahoma university business and engineering graduates also take jobs in Texas.

While there is anecdotal evidence arguing for a shortage, there is also anecdotal evidence of a surplus. For example, one Oklahoma educator with decades of teaching experience told us:

"I am certified in secondary English and History and I cannot find a job! I have applied for over 30 positions in 6 districts this summer and only had 4 interviews. This is becoming very stressful and disheartening. I love teaching and love my students and my subject matter, and am being denied an opportunity to pursue my life's calling. And it is not about pay. Yes, Oklahoma could do better by its teachers, but for those of us who can't see ourselves in any other position, that is not the issue.

l suspect that the shortages are in areas like science or special ed. If that is the case, tell her (State Superintendent Joy Hofmeister) to say that. I have looked at the job openings in OKC as well as all the districts in the NW (sic) part of the metro area. They are things like cafeteria worker, after school child care, teaching assistant, and special ed. Honestly, it makes me want to scream when I see the almost daily news stories about a "teacher shortage" and emergency certificates being granted when I am diligently searching for a place to teach with no success."<sup>5</sup>

This teacher's personal story matches up with stories of elementary education teachers who move with their spouse to a desirable Oklahoma community, but can't find employment in their own school districts. Rather, they must drive 30 miles for a job in a less desirable district. There are also anecdotes about social studies teachers who only get a job because they are also willing to be an assistant coach. There are numerous stories of teachers with PhDs working full-time as an adjunct in a community college for \$27,000 a year with no benefits.<sup>6</sup> Anecdotes like these argue there is a surplus of teachers.

#### **Emergency Certifications**

Many point out that 906 teachers (2.1 percent of total public school teachers) do not have regular certification, but rather have "emergency certification." They argue the fact 2 percent have emergency certification is evidence of a major teacher shortage. This assumes emergency certified individuals are not qualified to be in the classroom, and that administrators hire them out of desperation. However, no evidence is presented to back up this assumption.

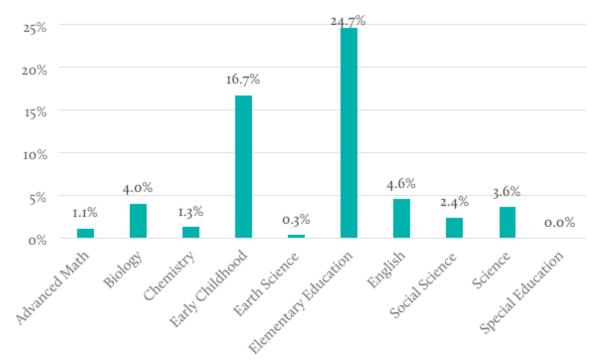
To be *un*qualified, the holder of an emergency certificate should lack adequate content knowledge and/ or teaching experience. It is true some lack teaching experience, but none should lack content knowledge. The teacher certification law clearly states "the Board shall issue a certificate to teach to a person who has successfully completed a competency exam used in a majority of other states."7 The Department of Education states that emergency certification requires "[v]erification that the applicant has either passed the requested subject area test or is registered for the next available test date."8 A request for emergency certification must come directly from the school district wanting to hire the uncertified applicant. An administrator must believe an individual would perform well in order to begin the process of requesting a certification on their behalf. Further, the district Superintendent writes a letter of support explaining why the Board should approve the certification. Many emergency certified individuals, no doubt, go on to become fully certified in the traditional sense. Thus, emergency certification recipients are a legitimate part of the teacher supply pipeline. The existence of teachers with emergency certification is not evidence of a teacher shortage. Emergency certification is merely a muchneeded alternative pathway for individuals to gain a traditional teaching credential.

The authors' examination of two calendar years of emergency certifications that came before the Oklahoma State Board of Education (OSBE) for approval confirms that emergency certification process serves as a pipeline for subject-qualified individuals to teach. All monthly approvals from January 2015 through September 2016 were included for analysis. During this two-year period, over 2,100 individuals were alternatively certified – roughly 1,000 certification exceptions, or less than 2.5 percent of all Oklahoma teachers, for each year. Some of the 2016 emergency certification monthly reports included data on the number of certifications that were renewals from the previous year. For example, in July of 2016, 304 emergency certifications were granted, but 122 were renewals.<sup>9</sup> All these renewals indicate the school district found the emergency certified teacher satisfactory, and many emergency certified teachers are interested in long-term employment.

Over 36 percent of all certification exception requests came from only three school districts: Oklahoma City, Putnam City, and Tulsa. While these are large districts with 19 percent of Oklahoma's students, they use emergency certification at almost twice the state average. This is consistent with anecdotal evidence that these three districts are avoided by experienced teachers and also points out that circumstances other than pay strongly impact a district's ability to recruit and retain teachers.

Figure I shows the distribution of emergency certificate holders by subject taught. It reveals that the bulk of emergency certification requests come, not from Science, Math and Special Education where shortages are constantly forecast and complained of, but from Early Childhood and Elementary Education. Forty-one percent of all emergency certification requests are for these two subject areas. All the sciences combined constitute only 9.2 percent of emergency certifications for 2015 and 2016. To some extent the use of emergency certification is caused by Oklahoma requiring separate certifications for Early Childhood and Elementary Education. So, a teacher switching in the summer from teaching 3rd grade to kindergarten may need to be emergency certified.

Given the anecdotal evidence of a serious shortage

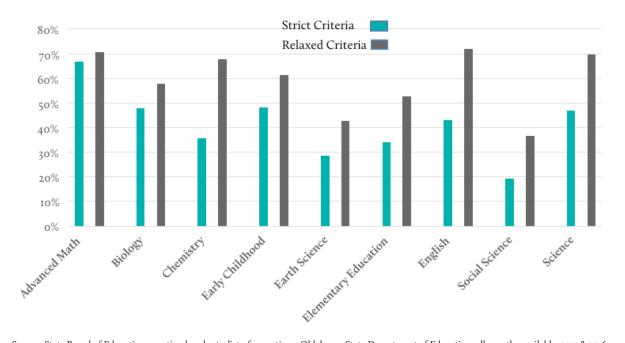


# Figure 1: Percentage of Certification Exceptions Granted in Select Subject Area

Source: State Board of Education, meeting handouts, list of exceptions, Oklahoma State Department of Education, all months available, 2015 & 2016, authors' calculations. NOTE: Percentages will not add to 100 since not all subject areas are illustrated.

of Special Education teachers, it is surprising to see zero requests for emergency certification in Special Education. Perhaps this is due to Special Education being reported as a sub-category of subject areas, or perhaps because the state does not have a good emergency certification program for Special Education.

Figure 2 (next page) shows the educational background of the emergency-certified teacher. While a news report was accurate in stating that some English teachers have degrees in Anthropology, this is not common.<sup>10</sup> The



# Figure 2: Percentage of Certification Exceptions Granted to Candidates with Relevant Academic Backgrounds in Select Subject Areas

Source: State Board of Education, meeting handouts, list of exceptions, Oklahoma State Department of Education, all months available, 2015 & 2016, authors' calculations.

bulk of the recipients teach in an area related to their educational backgrounds.

We analyzed educational background using both strict and relaxed criteria for matching teaching and degree subject areas. For example, in determining the percentage of English certification exception recipients with solid English backgrounds, the strict test counted only those with degrees in either English Education or English Literature. Under the strict criterion, only Chemistry majors were considered to have adequate chemistry backgrounds to teach Chemistry. Overall, fortythree percent of emergency certified teachers met this extremely strict requirement.

The relaxed test acknowledged those meeting the strict standards as well as those with degrees in a relevant area, such as Journalism for English, and Biology for Chemistry. In Advanced Math, English, Chemistry, and Science, 70 percent are subject-qualified under the relaxed criteria. In fact, many emergency certifications were granted to individuals with master's degrees, several with doctoral degrees, and two with MDs.

Of the emergency certifications that did not meet the relaxed education criteria, several were for people with degrees in sports, kinesiology, or physical education. Here, perhaps the school is more concerned with filling coaching positions rather than a pure teaching position The bulk of certification exceptions (emergency certifications) go to individuals who have educational backgrounds highly relevant to their area of certification, with many meeting the strictest requirements. Highly technical and traditional upper-division academic subjects constitute a small percentage of emergency certifications, and most of these clearly have relevant subject matter expertise. There are no grounds for suggesting that a large proportion of emergency-certified individuals are not knowledgeable enough to teach the subject matter they were hired to teach.

As to teaching experience, few new entrants to the teaching profession have significant teaching experience. At most they have been student teachers. However, often applicants for emergency certification have teaching experience. As noted earlier, many have actually held the same teaching position in the prior year. Some of the newcomers have taught in other states and are working through a certification process that is different from other states. Others are already certified in Oklahoma, but in a different subject, e.g. a certified elementary education teacher is emergency certified as an early childhood teacher, or vice versa.

As to those who do not have any teaching experience, El Reno superintendent Craig McVay stated to NewsChannel 4, "We can teach them how to teach."<sup>11</sup> There are a variety of approaches a school can take to "teach how to teach." They can range from self-study and informal mentoring to the structured, two-month summer boot camp used by Teach for America.

The low rate of use of emergency certification, and the quality of teachers who are emergency certified, shows the emergency certification program addresses a credentials/ jobs mismatch, not a skills/jobs mismatch. While the state might consider some modifications to the emergency certification system, it appears to be effective. Certainly, the low percentage of the work force employed through the emergency certification process does not indicate that Oklahoma has a significant teacher shortage.

#### **Actual Numbers**

Let's start with a look at the overall, national job market. According to the most recent Bureau of Labor statistics the unemployment rate among educators was 2.9 percent. This is well above the 2007 rate of 2.4 percent. So, there is a nation-wide surplus of education workers. However, this doesn't directly address the market for teacher jobs in Oklahoma.

To address this question, the Oklahoma State Regents of Higher Education (OSRHE) and other entities including the Department of Education, commissioned the American Institutes for Research (AIR) to conduct a study of teacher supply and demand in Oklahoma. AIR found there was a shortage, but that the future supply/ demand imbalance is a mere 0.62 percent.<sup>12</sup> While perhaps statistically significant, this level of predicted imbalance is trivial from a practical standpoint.

According to the AIR study, the actual number of traditional certifications has increased by six percent over the six-year time period (2009-10 to 2014-15) observed.<sup>13</sup> This increase in supply should make it easier to recruit individuals to fill vacant positions. However, not all regions of the state are affected equally. The southwest region has the most difficulty replacing teachers. In the future, AIR predicts that both the southwest and southeast will observe a decline in the relative supply of teachers. The northeast, on the other hand, is expected to remain relatively stable, and the northwest and central regions are expected to observe increases. Interestingly, AIR found that rural areas experience less turnover than city areas. Thus, while it may be harder to recruit new teachers to rural areas, once there they are less likely to leave.

In summary, the AIR study found a teacher shortage,

but overall it is trivial in size. However, even this trivial shortage is likely overstated. First, the AIR study may understate the supply of teachers. As an AIR researcher points out in a separate article, available public data on the supply of teachers does not give information as to the number of teachers who are unemployed or underemployed. The data simply look at the number of jobs filled and the number open. In other words, there are no data on the number of qualified job applicants who applied for a job but did not get it, nor the number who might re-enter the field if pay or working conditions improved.

Further, AlR's methodology may significantly overstate future demand for teachers. AIR assumes student/teacher staffing ratios will continue at current levels into the future. The student/teacher staffing ratio has a big impact on the number of teachers needed. For example, a minor change in the state's average from the current 16.3 to 16.4 would eliminate AIR's projected shortage altogether.<sup>14</sup> This could easily be done in one hiring cycle. Longer term, it should be assumed that the ratio will go significantly higher for two reasons.

First, in the 1980s most states, including Oklahoma, adopted a class-size reduction strategy in an attempt to improve student success. This resulted in a major drop in the state's student/teacher ratio. In 1975, Oklahoma's student/teacher ratio was 19.8.<sup>15</sup> As the Brookings Institution has pointed out, the class-size reduction strategy did not have any impact on student success, but did significantly increase cost.<sup>16</sup> It is reasonable to assume that at some point, Oklahoma will abandon this expensive and failed school improvement strategy.

Second, the student teacher/ratio should also increase with the spread of online technology, particularly in grades 4 through 12. As more courses go totally online, or blend online with face-to-face instruction, the need for a teacher decreases dramatically (though it does not disappear). Thus, five to ten years from now we may need significantly fewer teachers than AIR forecasts. If so, the state will have a significant surplus of teachers. (It should be noted that in the short-term the state could save significantly by simply moving up the ladder in teacher productivity. For example, were Oklahoma to move from its current 16.3 ratio to Indiana's 17.5 the resulting savings of \$127 million could be spent on teacher pay raises or other education priorities.<sup>17</sup>)

Another useful data source is the Oklahoma State School Boards Association's (OSSBA) survey of its members. The school districts reported 542 teaching vacancies as of the first day of August,<sup>18</sup> or slightly more than one percent of Oklahoma's 42,395 public school educator workforce.<sup>19</sup> This number is as of August 1, a point at which many school administrators have just begun to address new staffing needs. In many cases, these open slots are for new hires necessitated by enrollment surprises.

Another way to examine vacant positions is an online job search. After all, if schools are not posting their openings on a medium that can easily be found by potential applicants, then perhaps vacancies at those schools can be better attributed to poor recruiting. Teachoklahoma.org and teachers-teachers.com both listed fewer than 200 open positions on the date checked in August 2016. Another site, applitrack.com (operated by the Oklahoma State School Boards Association Hiring Consortium), had the greatest number of listings, by far. A total of 404 vacancies were listed, well shy of the 542 reported by school districts in the survey mentioned above.<sup>20</sup> Further, many of the openings are for non-core classes such as the Speech Pathologist opening at Norman Public Schools or the boys' basketball coach opening at Prague. These might be important positions, but not what most people think of when they hear "teacher shortage."

Thus, it appears that actual vacancies in early August represent less than I percent of total positions. This is an extremely small number of unfilled positions. What is witnessed in Oklahoma at the beginning of each school year when job openings are reported is not a shortage, but rather represents a routine sorting process matching qualified individuals willing to teach to the districts and schools willing to hire them.

## Conclusion

Based on the evidence, Oklahoma does not have a teacher shortage problem. At worst, there is a minor shortage in some disciplines that can easily be dealt with by a minor increase in average class size. If there are any significant problems, they are confined to a limited number of school districts. These districts are either in low population density districts with a limited labor pool, or in some very large urban districts that apparently provide teachers with poor working conditions. Overall, there is no teacher shortage. In fact, there may be a surplus.

## **End Notes**

<sup>1</sup> News9, "Educate Oklahoma: Teacher Shortage," News9.com, Aug 26, 2016, http://www.news9.com/story/32851763/educate-oklahoma-teacher-shortage.

Eger, Andrea and Nour Habib, "Crisis Hits Oklahoma classrooms with Teacher Shortage, Quality Concerns," Tulsa World, August 16, 2015, http://www.tulsaworld.com/news/education/crisis-hits-oklahoma-classrooms-with-teacher-shortage-quality-concerns/ article\_54627559-bcco-5ae5-b654-9b7eec46ab3c.html .

<sup>2</sup> Eger, Andrea, "Teacher Reluctantly Leaving Tusa for Texas: 'It's Not Just Salary...It's about Respect," Tulsa World, August 14, 2016, http://www.tulsaworld.com/news/education/teacher-reluctantly-leaving-tulsa-for-texas-it-s-not-just/article\_4fd664f2-8650-5b8d-b688-54e5818510e9.html.

<sup>3</sup> Felder, Ben, "Low Pay Sends Teachers Out of Oklahoma, Profession," The Oklahoman, July 10, 2016, http://newsok.com/article/5508902.

<sup>4</sup> Berg-Jacobson, Alex and Jesse Levin, Oklahoma Study of Educator Supply and Demand: Trends and Projections (Washington, DC: American Institutes for Research, September 2015), 24, 36, http://www.okhighered.org/studies-reports/teach-supply/2015-report.pdf. <sup>5</sup> Personal e-mail. Name withheld by request. This teacher did eventually find a position in her certified area of expertise.7

<sup>6</sup> Charlotte Allen, "The Highly Educated, Badly Paid, Often Abused Adjunct Professors," Los Angeles Times, December 22,2013, http://www.latimes.com/opinion/op-ed/la-oe-allen-adjunct-professors-20131222-story.html.

<sup>7</sup> 70 Oklahoma Statutes 6-190 sub-section G

<sup>8</sup> "Certification," Teach Oklahoma, website, http://www.teachoklahoma.org/get-certified.

<sup>9</sup> For the other months where renewal information is available, 125 out of 426 certifications were renewals (29.34%).

<sup>10</sup> Fultonberg, Lorne, "Oklahoma Approves 500 'Emergency' Teachers," August 27, 2015, NewsChannel4, http://kfor. com/2015/08/27/state-set-to-approve-500-emergency-teaching-certificates/.

<sup>11</sup> Ibid.

<sup>12</sup> Berg-Jacobson and Levin, 64.

13 Ibid.

<sup>14</sup> See Digest of Education Statistics, National Center for Education Statistics, https://nces.ed.gov/programs/digest/d15/tables/ dt15\_208.40.asp. The increase from 16.3 to 16.4 is a 0.62 percent increase.

<sup>15</sup> Statistical Abstract of the United States, Tables 187 & 221, (Washington, DC: Census Bureau,1976), http://www.census.gov/library/publications/1976/compendia/statab/97ed.html. Author calculation.

<sup>16</sup> Chingos, Matthew M., Class Size Tradeoffs in the Court of Public Opinion (Washington, DC: Brookings Institution, January 30, 2013), https://www.brookings.edu/research/class-size-tradeoffs-in-the-court-of-public-opinion/.

<sup>17</sup> Author's calculations based on current teacher numbers and average payroll in Oklahoma.

<sup>18</sup> Oklahoma State School Boards Association, "Oklahoma Schools Struggle with Teacher Shortage Despite Cutbacks, Survey Shows," website, http://www.ossba.org/2016/08/22/oklahoma-schools-struggle-with-teacher-shortage-despite-cutbacks/.

<sup>19</sup> Oklahoma Department of Education, Oklahoma Public Schools: Fast Facts 2015-2016 (Oklahoma City, OK, Oklahoma Department of Education, August 1, 2016), http://sde.ok.gov/sde/sites/ok.gov.sde/files/documents/files/Fast%20Facts%20FY16%20 Agust%201%202016%20Update%20Spread.pdf.

<sup>20</sup> Oklahoma State School Boards Association Hiring Consortium, mid-August openings, https://www.applitrack.com/osbac/online-app/default.aspx?all=1.