Getting The Best Teachers Where They Are Needed Most

An Overview of Research on Teacher Quality, Recruitment, and Retention in Arkansas and the U.S.

Sami Sexton, Hendrix College







This project was carried out on behalf of Arkansas Advocates for Children and Families under the direction of Dr. Jay Barth, Bill and Connie Bowen Odyssey Professor.

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Executive Summary

Policymakers, parents, and school administrators all want to ensure that students are taught by the best possible teachers, and for good reason. Research has shown that teacher quality is one of the best indicators of student achievement (Kini and Podolsky, 2016). While everyone can agree on the importance of ensuring that students are taught by high-quality teachers, there is debate over the best way to ensure that this actually occurs. First of all, what practices or qualities make one teacher more effective than another? How can new teachers be trained to use the most effective teaching methods, and how can experienced teachers continue to improve? What should schools do to attract and retain the best teachers? These are all questions that policymakers and researchers have been trying to address for years.

This report provides an overview of the research on teacher quality, recruitment, and retention in Arkansas

and the United States. It also notes many disparities in teacher characteristics and retention across schools and summarizes many of the policies and programs in Arkansas that have tried to address these problems.

The report was written for Arkansas Advocates for Children and Families (AACF) by Sami Sexton, a 2017 graduate of Hendrix College's Arkansas Policy Program (APP). This program was developed by Hendrix politics professor Dr. Jay Barth with the support of the Bill and Connie Bowen Odyssey Professorship, which builds upon Barth's ongoing public policy and public opinion research and advocacy work related to Arkansas. Through APP, students and faculty provide nonpartisan, original analyses on key public policy issues in Arkansas through a new undergraduate think tank.

Sami's report offers research-based recommendations on how our state can help recruit, retain, and develop the best teachers in the regions and schools that need them most. Although the report's recommendations are the author's alone and do not necessarily reflect those of AACF, we are grateful for her hard work on this issue and hope that it provides policymakers and other stakeholders with insight into some of our education system's most persistent problems, from the perspective of a new college graduate.

The Cost of Losing Good Teachers

Despite the importance of having high-quality teachers, many schools are not able to retain enough of the teachers they hire. According to a study by the U.S. Department of Education's National Center for Education Statistics (NCES), among teachers who began their career in the 2007-08 school year, 10% did not return for a second year; the attrition rate reached 17% by the fifth year of teaching (Gray and Taie, 2015). This rate is lower than the estimated 50%attrition rate of some previous studies, but it is still problematic for many school districts. Depending on the characteristics of the school, replacing a teacher can cost anywhere from \$4,366 to \$18,000 (Kini and Podolsky, 2016). For comparison, the average school district in the United States spends \$10,700 per student each year, so replacing a teacher can cost more than educating a student for an entire year. Those costs are unsustainable, especially for schools in high-poverty areas that are already struggling with funding.

What Makes a Good Teacher?

Getting and keeping the best teachers in the places they are needed most depends upon having a clear understanding of what, in fact, makes a good teacher. Unfortunately, this is easier said than done, with some evaluators taking a subjective "I'll know it when I see it" approach to good teaching. Fortunately, as research on quality teaching has evolved, so has practice in many schools. Three approaches to defining effective teaching practices are summarized in the table below. Goldberg (2003) describes the common characteristics that all effective teachers share; Rosenshine (2012) lists ten effective teaching methods identified through research on cognitive science, master teachers, or cognitive supports; and the Danielson Framework includes four domains for evaluating teachers, which are then broken down into multiple components. The Danielson Group recommends using its framework both to train and evaluate teachers. Arkansas implemented the Danielson Framework as part of the Teacher Excellence and Support System (TESS), which will be discussed in further detail later in this report (See opposite page).

Teaching Experience

Multiple studies have shown that teachers are more effective when they are more experienced. That is not to say that every experienced teacher is better than every new teacher; it simply shows that teaching, like many other professions, is an area where experience matters. For example, a Learning Policy Institute review of empirical research found that greater teacher experience has been shown to impact not only student performance on standardized tests, but also other measures of student success such as school attendance (Kini and Podolsky, 2016). The gains from experience are especially pronounced in the first few years of a teacher's career but extend beyond that as well, and those benefits are highest when the teacher is gaining multiple years of experience in the same subject or grade level. Experience also has a greater impact on teacher quality when that experience takes place in a supportive work environment with opportunities for collaboration with other teachers and administrators (Kini and Podolsky, 2016).

Teacher Preparation Programs

One potential method for increasing teacher retention and quality is to use teacher training programs to ensure that new teachers are as prepared as possible for the challenges of the classroom before they begin teaching. Many states have training and certification programs with requirements such as courses in education and minimum scores on licensure exams; however, struggles in recruiting new teachers have led to the increased use of alternative programs (Zhang and Zeller, 2016). Some policy makers have even suggested that the only requirements necessary for

Table 1

Goldberg (2003)	Rosenshine (2012)	Danielson Framework
Willingness to put in necessary time outside of the regular classroom hours to prepare for class or to help students	Begins a lesson with a short review of previous learning	Planning and preparation - e.g. content knowledge, setting instruc- tional outcomes, designing student assessments
Effective classroom manage- ment style that results in a culture of respect and few behavioral problems	Presents new material in small steps with student practice after each step	Classroom environment - e.g. creat- ing an environment of respect and rapport, managing student behavior
Positive relationships with other teachers, administrators, and parents	Asks a large number of questions and checks the responses of all students	Instruction - e.g. engaging students in learning, demonstrating flexibility and responsiveness
Appropriate use of instructional methods	Provides models	Professional responsibilities - e.g. reflecting on teaching, maintain- ing accurate records, growing and developing professionally
Mastery of the subject being taught	Guides student practice	
	Checks for student understanding	
	Obtains a high success rate	
	Provides scaffolds for difficult tasks	
	Requires and monitors independent prac- tice	
	Engages students in weekly and monthly review	

someone to become a teacher are a background check and a passing score on a content test (National Council for Accreditation of Teacher Education, 2015).

Multiple studies have attempted to determine the impact of alternative training programs on teacher retention rates. For example, one study followed 60 new North Carolina teachers over seven years; 22 of those teachers had entered the profession through a traditional licensure program, 20 had entered through a lateral entry program that allowed them to earn a teaching license as they began their first year of teaching, and the remaining 18 had entered through the NC Teach program, a year-long alternative licensure program with five weeks of training in the summer. The study found that the teachers who had completed lateral entry programs were more likely to leave the teaching profession than either of the other two groups, and those who had completed the NC Teach program were slightly more likely to leave than those who had completed the traditional licensure program (Zhang and Zeller, 2016). The authors did acknowledge that teachers who had completed the alternative programs were more likely to work in disadvantaged areas, which could help to explain their lower retention rates. However, when interviewed, those who had completed the alternative licensure programs reported feeling less prepared for the classroom. Based on a statistical analysis of other factors affecting teacher retention, the authors concluded that up to one-fourth of teacher retention likelihood may be affected by the type of teacher preparation received (Zhang and Zeller, 2016).

Other research, though, has found less significant effects from the type of certification program on teacher performance. A study of 288 first year teachers in 20 public school districts in Texas attempted to determine whether the type of preparation program influences a new teacher's sense of self-efficacy; selfefficacy has been linked to other characteristics such as greater student motivation and better classroom management strategies (Fox and Peters, 2013). The study used the Teachers' Sense of Self-Efficacy Scale to determine these new teachers' perception of their own abilities in the classroom. Using this measure, there were no statistically significant differences found in reported self-efficacy based on the type of licensure program a teacher had completed (Fox and Peters, 2013). The researchers also collected responses to open-ended survey questions about what increased individuals' perceived readiness to teach; most respondents expressed that experience and mentoring were far more important than their particular teacher training program (Fox and Peters, 2013). However, a separate study also conducted in Texas found substantial differences between new teachers who had completed the traditional licensure program and those who had completed an alternative program. Those who had completed alternative licensure programs were often more stressed about teaching strategies and classroom management techniques and were learning how to teach as they went along, a problematic quality for the students in their classes (Linek et al., 2012).

Teach For America

One alternative program to attract teachers to highneed areas that has generated considerable attention and controversy is Teach For America (TFA). TFA attempts to recruit high-performing college students to teach in high-need schools for at least two years. New teachers recruited through the program prepare for the classroom by studying teaching through readings and videos as well as observing teachers in their communities, then attending a five-week summer training institute (Harding, 2012). According to TFA, research has shown that their teachers are as effective or even more effective than teachers from other preparation programs (Harding, 2012).

However, TFA has been criticized for its training program and for its teachers' allegedly high attrition rates. For example, Barbara Veltri (2012) spent seven years interviewing current and former TFA recruits to gain a better understanding of the organization's effectiveness. She found that the teacher preparation model employed by TFA focuses more on leadership than on actual teaching practices. Recruits told her that they did not receive sufficient training in areas such as child development, methods of pedagogy, or classroom management. In addition, training was not specialized based on the subject or grade level a recruit would ultimately teach; in fact, weeks into the training program, some recruits did not yet know what they would be assigned to teach.

Reports on teacher retention among TFA members also call into question the organization's effectiveness. Up to 60 percent of its members remain in education in some capacity, whether they continue to teach or transition into administrative positions; however, only 43.6 percent of its teachers remain in the low-income school they were placed in for more than the required two years, and that number drops to 14.8 percent after five years (Donaldson and Johnson, 2011). This has led to criticism that TFA only perpetuates the cycle of inexperienced teachers entering and soon leaving high-need schools. It is possible, though, that these teachers' high attrition rates are due not to the organization itself, but the qualities of the schools they have been assigned to. Attrition rates for all teachers at high-poverty schools are high; some research suggests that the attrition rates of TFA members at these schools may be comparable to attrition rates of other teachers in similar settings (Grissom, 2008).



Teacher Licensure Exam Scores

In order to promote higher teacher quality, states often utilize licensure tests to determine who is qualified to become a teacher. One of the most common of these is the PRAXIS, which is used by 47 states (Educational Testing Service, 2016). Different states use different PRAXIS cutoff scores to determine who will be given a teaching license, though. For example, Connecticut uses a higher cutoff score than North Carolina. These differing cutoff scores, combined with student performance data in each state, may provide an indication of whether these tests are actually reliable indicators of a future teacher's effectiveness. Using this approach, Goldhaber (2007) found that teachers who met the cutoff score in North Carolina produced average student achievement gains that were 3 to 6 percent of a standard deviation higher than those produced by teachers who did not meet the cutoff score. Connecticut's higher cutoff score produces only slight increases in teacher effectiveness and results in large numbers of otherwise qualified individuals who are ineligible to teach in the state.

National Board Certification

One particular advanced certification that receives considerable attention is that of the National Board for Professional Teaching Standards. Approximately 110,000 teachers nationwide have received this certification, which requires 200-400 hours of professional development and costs \$1,900 (Sawhuck, 2015). Multiple studies have found positive impacts on student achievement from board-certified teachers (Sawhuck, 2015). However, these studies did not find evidence that the certification process itself actually improved individual teachers' performance; the gains in teacher effectiveness could simply result from good teachers choosing to go through the certification process.

Mentoring

Even the most highly-trained teacher is not necessarily prepared to take on the challenges of the classroom immediately. Effective mentoring programs are essential for helping new teachers learn, and they may also help to reduce teacher attrition rates. Among individuals who began teaching in the 2007-08 school year, 92 percent of those assigned a mentor continued teaching for a second year, while only 84 percent of those without a mentor continued (Gray and Taie, 2015). By the 2011-12 school year, the sixth year of their careers, 86 percent of these teachers who had a mentor their first year were still teaching, while only 71 percent of those without a mentor were (Gray and Taie, 2015).

More than half of states now require that new teachers go through a mentoring program, but the quality of these programs varies widely, and there are still gaps that result in fewer teachers at low-income schools actually having mentors (Alliance for Excellent Education, 2014). To be most effective, mentoring programs should require that every new teacher has a mentor in the same field with whom there is regular communication (Alliance for Excellent Education, 2014). The New Teacher Center recommends that mentoring programs include assistance for at least two years from carefully selected mentors, continuing assessments of the new teacher's progress, and plans for professional development (Alliance for Excellent Education, 2014). Arkansas law requires new teachers to complete a mentoring program, a process that will be discussed later in this report.

School Factors

Some qualities unrelated to an individual teacher's abilities can also impact his or her effectiveness. For example, smaller class sizes have been shown to positively influence student performance in early grade levels, especially for poor and minority students (Finn and Achilles, 1999). Those results have been reproduced in subsequent research and have been found to have lasting impacts, even into students' college careers (Mathis, 2016). Smaller class size has been criticized as a policy solution due to the resulting cost and need for more teachers, but some studies have found lower teacher attrition rates when class sizes are smaller, which would both reduce costs associated with replacing teachers and result in a more experienced teacher work force (Isenberg, 2010).

Additionally, factors such as working conditions and salary can impact teacher quality. Because of the way school funding systems work in many states, school districts in wealthier areas are able to pay teachers more than districts in high-poverty areas. High-poverty schools have higher rates of teacher attrition, which can contribute to lower teacher quality (Guarino et al., 2006). These high attrition rates may be at least partially due to more effective teachers leaving these districts for areas where they can be paid more or where they will receive more support from the school administration. According to the U.S. Department of Education, while 97 percent of new teachers who earned more than \$40,000 per year continued teaching for a second year, only 87 percent of those earning less than \$40,000 per year remained in the profession for a second year (Gray and Taie, 2015). Research suggests that higher salaries could both reduce attrition rates and increase the quality of the teaching workforce (Guarino et al., 2006). Similarly, working conditions such as effective mentoring programs, smaller class sizes, and administrative support can reduce attrition rates (Guarino et al., 2006).

Teacher diversity can also impact effectiveness. In 2014, the U.S. Department of Education predicted that for the first time, non-white students would make up a majority of students attending public schools, as the percentage of white students fell to 49.7 percent (Strauss, 2014). In contrast, according to the National Center for Education Statistics (2012), during the 2011-12 school year, the most recent year for which their data is available, 81.9 percent of teachers were white. Research has found that all students, not just students of color, could benefit from a more diverse teacher workforce for a variety of reasons. Minority teachers may be more willing to work in high-minority or high-poverty areas, they may set higher expectations for their minority students, and they may act as role models for minority students. Additionally, exposing children to diverse adults can help to reduce racial

tension and stereotypes as they get older (Albert Shanker Institute, 2015).

Teacher Evaluations

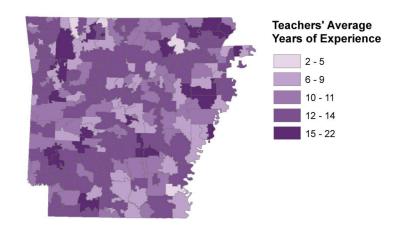
To identify some of the best teachers and provide more support to-or perhaps weed out-ineffective teachers, there must be a reliable way to assess teacher quality. Even teachers themselves agree that some sort of evaluation system is necessary, and most of them consider classroom observations and the resulting feedback to be extremely valuable (Donaldson, 2016). States differ in their evaluation systems, but many include some combination of classroom observations, student test scores, and other measures of student achievement. Student achievement is difficult to measure and is influenced by a variety of factors outside an individual teacher's control, but there are two models that are commonly used. The first is a prediction model, which attempts to predict how a particular student will perform on standardized tests given past performance and other factors such as socioeconomic status, then compares the predicted performance to the student's actual score (Reform Support Network, 2015). There are limitations to using prediction models; standardized tests are not administered in all subjects every year, and the tests themselves are controversial as a measure of student achievement. Another option is to compile student portfolios, a collection of work samples that show improvement in specified learning domains; these samples are then given to a reviewer, who assigns a student growth score (Reform Support Network, 2015). This process requires extensive training for reviewers to ensure accuracy and fairness, but it can be beneficial, especially in courses or grades that do not require standardized tests.

TEACHER QUALITY, RECRUITMENT, AND RETENTION IN ARKANSAS

Arkansas has made considerable improvements in teacher quality in recent years. The issue has been addressed by the state legislature, and new programs such as the Teacher Evaluation and Support System (TESS) have been passed. In part due to these programs, the grade assigned to Arkansas by the National Council on Teacher Quality has improved from an overall C- in 2009 to a B- in 2015 (National Council on Teacher Quality, 2015). However, as summarized in the following sections, Arkansas still has a long way to go in recruiting and retaining highquality teachers, particularly in hard-to-staff subjects and in certain geographic areas.

Teacher Characteristics in Arkansas

The average teacher in Arkansas has 10.4 years of experience, while 27.2 percent of Arkansas teachers have three or fewer years of experience (Arkansas Bureau of Legislative Research, 2015). According to the Arkansas Department of Education's Statewide Information System Reports, in the 2015-16 school year, there were 32,181 certified teachers. Of those, 28,844, or 89.6 percent, were white. In contrast, of the 476,049 students enrolled, 62.1 percent were white. 20.6 percent of Arkansas students are African-American, and 12.2 percent are Hispanic; among teachers, only 8.3 percent are African-American, and 0.5 percent are Hispanic.



Source: Arkansas Department of Education's School Report Cards, https://adesrc.arkansas.gov

Teacher Recruitment and Retention Problems in Arkansas

The rate of teachers entering the workforce in Arkansas has been slightly slower than the rate of students enrolled in schools; the number of teachers has grown by 3.4 percent since 2004, while the number of students has grown by 4.5 percent. Additionally, the number of individuals enrolled in teacher preparation programs has decreased by 36.3 percent since 2010 (Arkansas Bureau of Legislative Research, 2015). Meanwhile, average attrition rates of teachers in Arkansas since 2006 have been 15.3 percent after one year, 30.6 percent after three years, and 36.2 percent after five years.

The Bureau of Legislative Research also conducted a survey of superintendents, principals, and teachers across the state to assess what challenges Arkansas faces in recruiting and retaining high-quality teachers. When asked whether they were considering leaving the teaching profession, 25.6 percent of teachers in the survey indicated that they were. Of those, 58.7 percent cited stress and workload as the reason, while 22.8 percent cited salary, and 16.7 percent were retiring. When asked what could make them stay, 53.4 percent said greater salaries or benefits, and 38.0 percent said less paperwork or administrative burdens. The top issue cited by superintendents in the survey as a barrier to both teacher recruitment and retention was "difficulty in offering competitive salaries;" this was also the top issue cited by principals as a barrier to teacher recruitment. When teachers were asked what conditions would make them willing to move to a high-poverty or rural school, 52.9 percent said they would move if offered a higher salary, and 30.3 percent said they would move if offered better benefits; 31.7 percent said they could not be persuaded to move to one of these schools. The survey also asked if teachers were considering moving to another school; 17.1 percent of teachers were. Of those, 30.6 percent cited location as a reason, and 25.8 percent cited pay.

Licensure Waivers

In the 2014-15 school year, 1,613 waivers were requested for individuals teaching out of their subject area (Arkansas Bureau of Legislative Research, 2016). Of those, 1,527 were granted (94.6 percent). The largest number of waivers were granted for special education, followed by middle school core areas, gifted and talented, career orientation, guidance and counseling, library media, elementary education, and sciences. These waivers were granted due to schools' inability to hire teachers who were licensed in these subjects.

Factors Affecting Recruitment and Retention: School Funding and Teacher Salaries

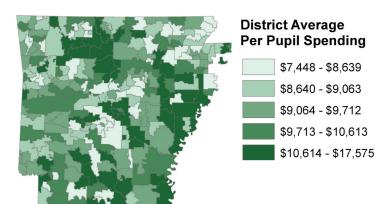
The Arkansas Constitution requires the state to "maintain a general, suitable and efficient system of free public schools" and to "adopt all suitable means to secure to the people the advantages and opportunities of education" (Ark. Const. Art. 14, §1). To achieve this, the state constitution establishes a minimum property tax of twenty-five mills to be used for school funding; individual school districts are then able to raise this property tax at their discretion (Ark. Const. Art. 14, §3). Approximately one-third of the money used to fund schools in Arkansas comes from this additional local property tax (Perkins, 2015). Local tax rates vary widely across the state; for example, in 2014, the millage rate in the DeQueen school district was 27.3, while the rate in the Fouke school district was 49.00 (Arkansas Department of Education, 2014). Due to differences in available funding among school districts, the state requires a minimal level of funding for each district to reach a level of adequacy and provides sufficient money to get to that level; for the 2016-17 school year, it was \$6,713 per student.

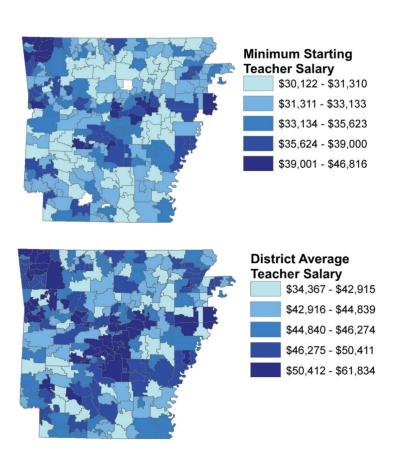
Arkansas also provides four types of categorical funds, which were at the following levels in 2016-17:

\$4,560 per student enrolled in Alternative Learning Environments; \$331 per student with limited English proficiency (LEP); \$between \$526 and \$1,576 per student in high-poverty districts (based on the percentage of students who qualify for free and reduced-price lunch programs); and \$32.40 per teacher for professional development.

Districts with additional property tax funding may choose to use that to supplement these amounts, resulting in variance in per-student expenditures and teacher salaries across the state. For example, perstudent spending ranges from \$7,448 in the Palestine-Wheatley school district to \$17,009 in the Marvell-Elaine school district, a difference of \$9,561 (Arkansas Department of Education, 2015). Minimum starting teacher salaries also vary. The state had a mandated minimum of \$31,000 per year in 2016-17, which will be increased to \$31,400 in 2017-18 (Act 246). Actual beginning salaries paid in the 2014-15 year ranged from \$29,244 in the Augusta school district to \$46,500 in the Springdale school district, a difference of \$17,256 (Arkansas Bureau of Legislative Research, 2016). This difference has grown from \$3,493 since the 2009-10 school year (Arkansas Bureau of Legislative Research, 2016).

Differences in the average teacher salaries paid across Arkansas are even larger than the differences in starting teacher salaries. Average teacher salary ranges from \$34,367 in the Pangburn school district to \$61,834 in the Rogers school district, a difference of \$27,467 (Arkansas Department of Education, 2015).





Source: Arkansas Bureau of Legislative Research, 2016

HOW HAS ARKANSAS ADDRESSED TEACHER QUALITY, RECRUITMENT, AND RETENTION?

Extra Funding For Hard-To-Staff Areas

The state does provide certain incentives to attract teachers to "high-priority" districts; for example, the High Priority District Incentive Bonus is available in districts with fewer than 1,000 students, at least 80 percent of whom are eligible for free or reduced lunches. This program provides a \$5,000 signing bonus to new teachers, \$4,000 in the second and third year of teaching, and \$3,000 in the fourth year (Arkansas Bureau of Legislative Research, 2015). In addition, legislation was enacted in 2017 to provide similar incentives for teachers in high-needs subject areas (Act 934), as well as student loan forgiveness for teachers willing to teach in high-needs subjects and geographic areas (Act 709). However, these incentives are clearly not enough to make up for the largest differences in salaries across the state.

Multiple Teacher Licensure Pathways

Arkansas has several different routes to teacher licensure, which the Arkansas Department of Education (ADE) classifies as traditional, nontraditional, and other. Through the traditional program, an individual will complete coursework in education at an accredited institution of higher education. The non-traditional route consists of alternative licensure programs that require a bachelor's degree or higher. These programs include the Arkansas Professional Pathway to Educator Licensure (APPEL) and accelerated programs such as Arkansas Teacher Corps, Teach For America, and the American Board for the Certification of Teacher Excellence. Other routes include a provisional professional teaching license, reciprocity of a license from another state, and adding additional areas of licensure.

In 2013-14, Arkansas granted 5,551 teaching licenses, 3,102 of which went to new teachers (U.S. Department of Education, 2015). There were 5,258 individuals enrolled in teacher preparation programs; this was a decrease of 14.66 percent from the 2012-13 school year. Of these individuals, 2,166 completed the programs that year, with 1,620 completing traditional licensure programs and 546 completing alternative licensure programs (U.S. Department of Education, 2015).

Traditional Routes

An individual earning an Arkansas teaching license through a traditional route will first complete a program of study that has been approved by ADE's Office of Educator Preparation and is accredited by the Council for Accreditation of Educator Preparation. There are currently 21 colleges and universities in the state with programs that meet these standards. Arkansas also has Memorandums of Understanding with Missouri State University, Texas Tech University, and Stephen F. Austin University to provide licensures in certain types of special education that are not offered in Arkansas colleges or universities.

Non-Traditional Routes

- Master's Degree Programs: ADE has approved certain Arkansas colleges and universities to offer three master's degrees that can lead to a teaching license: a master of arts in teaching; a master of education; and a master of education in teaching, learning, and leadership. Some of these programs allow a participant to work as a teacher while earning their degree.
- Arkansas Professional Pathway to Educator Licensure (APPEL): The APPEL program is available to individuals who have a bachelor's degree in an area other than education. Applicants are required to have a minimum of a 2.7 GPA, pass the PRAXIS exams, and pass a background check. It costs \$1,300 per year and allows an individual to teach under a provisional teaching license for two years while completing instructional modules on the state's subject-area standards, Arkansas Teaching Standards, and the Danielson Framework for Teaching. The individual is also assigned a mentor and given several assessments throughout his or her time in the program. After successful completion of the program, the teacher may be granted a Standard Teaching License.
- Arkansas Teacher Corps: The Arkansas Teacher Corps is a program that attempts to attract new college graduates to high-need schools. The minimum required GPA is 2.75, but a 3.0 is recommended. Participants will be assigned to teach either a subject close to their college major or one for which they have passed the PRAXIS exam. It is free to apply to the program, and fellows are paid according to the minimum teacher salary in the district they are assigned to, plus a \$5,000 stipend for each year of the program. The program requires that fellows teach in the school they are assigned

to for at least three years, as well as attend a six-week summer training institute before they begin teaching, followed by 10 professional development sessions during the school year. The fellows also complete all of the necessary requirements for a standard teaching license by the end of the program.

- Teach For America (TFA): Teach For America is a national program that seeks to attract high-achieving college graduates to teach in high-need areas. TFA requires applicants to have a bachelor's degree and a minimum GPA of 2.50. Participants complete a five- to sevenweek summer training program, then teach in their assigned school for at least two years while completing other coursework and working with a mentor. In January 2016, it was announced that TFA would receive an additional \$6 million in funding to place teachers in Arkansas, through a combination of state funding and private donations. This additional funding allowed 15 ore TFA members to be hired in southern and easter Arkansas, as well as 65 in the Little Rock School District (Hardy, 2016).
- American Board for the Certification of Teacher Excellence: The American Board for the Certification of Teacher Excellence offers a lowcost, online alternative to enrolling in a college or university's education program (American Board, 2016). In most cases, this program will cost less than \$3,000. Participants complete the program at their own pace, usually in an average of 7-10 months. They can then apply for a teaching position in an Arkansas school and receive a three-year provisional teaching license. Upon the completion of professional development courses, mentoring, and evaluations throughout those three years, participants can apply for a standard Arkansas teaching license.

Other Routes

• Provisional professional teaching license: A provisional teaching license may be issued for

three years and is non-renewable. Applicants must have earned a bachelor's degree with a minimum GPA of 2.70, have completed three years of relevant work experience, submit two letters of recommendation, pass the PRAXIS exams, and pass a background check. Anyone who receives this license is then eligible to teach, but must also complete 24 hours of training in pedagogy in addition to the professional development required of all teachers. They are also mentored for two years. After completing these requirements and being evaluated as proficient or above, they may apply for a standard teaching license.

- Reciprocity: Reciprocity is the recognition of a teaching license from another state. Arkansas evaluates the type of license that was granted to determine if its requirements are similar enough to the requirements of an Arkansas teaching license.
- Adding additional areas of licensure: Individuals who already have a standard Arkansas teaching license may test out of other licensure areas that are at a similar level.

EFFORTS TO IMPROVE TEACHER RECRUITMENT AND RETENTION IN ARKANSAS

Arkansas Teacher Cadets

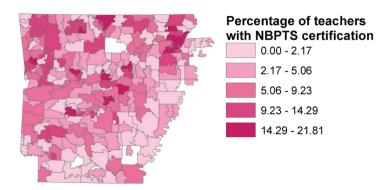
Arkansas has a new teacher recruitment program called the Arkansas Teacher Cadets that is designed to attract talented high school students to the teaching profession. Any Arkansas high school student with at least a 3.0 GPA is eligible to apply. It is a dual enrollment program, allowing these students to complete college education coursework while they are still in high school.

Incentives for National Board Certification

Arkansas provides incentives for teachers to complete

the National Board for Professional Teaching Standards certification. The state has funding to pay a teacher's application fee, and accepted teachers will be given three days of paid time off to work on the program's requirements. Additionally, if a teacher receives this certification, he or she is eligible for a \$5,000 annual bonus for up to ten years (Arkansas Department of Education, 2016).

Out of Arkansas's 32,181 teachers, 2,878 (8.9 percent) have received a certification from the National Board for Professional Teaching Standards. The average school district has 5.37 percent of its teachers certified, although actual values across the state range from 0 board certified teachers in 31 school districts to 21.8 percent of teachers certified in the Alma School District (National Board for Professional Teaching Standards, 2016).



Source: National Board for Professional Teaching Standards' Directory: http://www.nbpts.org/nbct-search?first_name=&last_name=&school_ state=AR&district=&certificate_area=&date_achieved

Mentoring & Support

Arkansas's Novice Teacher Induction System requires that all novice teachers (NT), defined as those with less than one year of teaching experience, have a mentor for at least one year, or two years for those completing certain alternative licensure programs (Arkansas Department of Education). Mentors "assist the NT in the implementation of the goals in the Professional Growth Plan, which is developed by the novice teacher and his or her administrator; identification and celebration of strength areas; procurement of resources (both human and material); and identification of professional development opportunities" (Arkansas Department of Education).

Starting in the 2016-17 school year, mentors and novice teachers began working together to complete the "Survive and Thrive" program, which includes an in-class coaching session during the fall semester, assistance in developing the novice teacher's professional growth plan, and a second in-class coaching session during the spring semester. Mentors are required to have at least three years of teaching experience, training in Charlotte Danielson's Framework for Teaching, and ratings of proficient or above on teacher evaluations. Additionally, they must be recommended by a school administrator and complete a one-day training program. A mentor can only be assigned one novice teacher, unless the school submits a request to the Office of Educator Effectiveness to assign more than one novice teacher to the same mentor.

The Arkansas Bureau of Legislative Research (2015) conducted a survey in which teachers were asked about their satisfaction with induction programs. 74.8 percent of respondents were either satisfied or very satisfied with their teaching internships; 53.2 percent were either satisfied or very satisfied with their mentoring (while 26.7 percent said this was not applicable to them).

Teacher Evaluation

In 2011, Arkansas passed the Teacher Excellence and Support System (TESS), a law intended to standardize teacher evaluations throughout the state. TESS relies on Charlotte Danielson's Framework for Teaching to provide a more in-depth evaluation system than the checklists that many school districts had previously used (Arkansas Department of Education). It went into effect for all teachers at public schools in the 2014-15 school year, requiring that novice teachers be evaluated annually and all other teachers be evaluated at least once every four years. To complete these evaluations, a school administrator observes the teacher in the classroom and gives a rating of "distinguished," "proficient," "basic," or "unsatisfactory" in the domains of "planning and preparation," "classroom environment," "instruction," and "professional responsibilities" (Arkansas Legislature, 2015). Teachers and evaluators then work together to develop a professional growth plan that sets goals to improve in areas identified by the evaluation.

If a teacher is rated as "unsatisfactory" in any domain of the evaluation, he or she is placed in "intensive support status" for a period of time established by the evaluator, but not lasting longer than two semesters unless the teacher makes substantial progress in that time period. The evaluator should then provide the necessary resources and support for the teacher to improve and meet the goals set by the professional growth plan. If the teacher does not meet the goals at the end of the time period set, the evaluator provides written notice to the teacher and notifies the superintendent of the school district, who then may recommend termination or nonrenewal of that teacher's contract, subject to appeal under the Teacher Fair Dismissal Act of 1983.

One area of teacher evaluations that has been left unclear is the use of measures of student growth. While the legislation establishing TESS acknowledged that "evidence of student growth is a significant part of the Teacher Excellence and Support System," it did not provide guidelines for how to use this evidence. In December 2015, the Arkansas Department of Education established a set of rules governing TESS. While Rule 6.01.2 requires that student growth be included in teacher evaluations "as determined by rules promulgated by the State Board," Rule 6.03 states that, "Until the State Board adopts rules defining one (1) or more student growth measures, a student growth measure will not be required as part of the annual overall rating" (Arkansas Department of Education, 2015).

The reactions to TESS from teachers and administrators have been somewhat mixed as it has begun to be implemented. In 2015, the Arkansas Bureau of Legislative Research conducted a survey

of superintendents, principals, and teachers, part of which asked about teacher evaluations. 57.7 percent of superintendents said that the TESS evaluation system was "useful," "very useful," or "essential," but several said that it was too time-consuming due to the required observations and paperwork. Among school principals, 82.1 percent rated TESS as "useful," "very useful," or "essential," although many of them also mentioned the time-consuming aspects of the law. Teachers surveyed viewed TESS more negatively; only 22 percent viewed it as "useful," "very useful," or "essential." When given a chance to respond to an open-ended question about "improving the teaching environment or student achievement," 12.6 percent mentioned teacher evaluations. Many teachers found TESS to be time-consuming and disliked the feeling of having to prove their worth through evaluations. During the 2017 legislative sesion, Act 930 and Act 295 were enacted to replace the TESS and Educator Mentoring Program, and new rules will be issued in the summer of 2017.

CONCLUSIONS AND RECOMMENDATIONS

Arkansas has made progress in improving teacher quality in recent years, and that progress should be acknowledged and commended. The state legislature realized the need for a standardized statewide evaluation system and passed the Teacher Evaluation and Support System (TESS). All new teachers are required to have a mentor and to receive feedback on how they can improve their teaching methods. The state provides funding to ensure that teachers are paid at least a minimum salary regardless of the districts in which they teach.

These efforts are important, but there are still issues that must be addressed. Many districts, especially rural and high-poverty districts, are still struggling to recruit and retain teachers. Fewer individuals are entering teacher preparation programs, leading to an increasing reliance on alternative licensure programs and Teach For America to fill vacancies. These programs often do not provide as much training in teaching methods and child development as traditional licensure programs would, and these teachers may not be as prepared to enter the classroom. While they will still have mentors and will likely improve dramatically after a few years of experience, those first few years are critical. Students need trained and qualified teachers every year; they cannot afford to wait for them to learn on the job.

While increased funding is not the sole answer to every problem in education, greater funding in specific areas does have the potential to make a difference. The cost of completing a traditional teacher licensure program can be high, especially for students from low-income backgrounds who may be more willing to return to low-income areas to teach. Increased scholarships and student loan forgiveness can help to offset some of these costs, lowering or removing a potential barrier to entering the teaching profession. Additionally, Arkansas should re-examine how teacher salaries are funded. When a new teacher in Springdale can make \$17,256 more in their first year than a new teacher in Augusta, it is clear where most of these new teachers will prefer to go. When average teacher salaries are \$27,267 higher in Rogers than in Pangburn, it is clear where experienced teachers will prefer to work. Providing a statewide minimum teacher salary is not sufficient to address these differences when that minimum is too low to provide a real incentive to teach in high-poverty schools. Teachers in those schools already struggle with additional student issues related to income levels; a lower income for individuals who are willing to work there should not be another burden. When other districts are offering better conditions and much higher salaries, it is easy to see why high-poverty districts have lower retention rates than wealthier districts. Arkansas has incentives in place to attempt to attract teachers to the districts that need them most, but the size of the incentives has not kept up with the differences in salaries. A \$5,000 per year bonus still leaves a \$12,256 gap in starting salaries, and an even greater gap in average salaries. To address the issue more effectively, the state needs to provide more funding to struggling districts in order to decrease those differences.

The TESS evaluation program was an important step in determining which teachers are effective and either assisting or firing ineffective teachers. During its rule making process of the new Act 930, policymakers should continue to determine whether there is a way to reduce the amount of paperwork involved in teacher evaluations. Teachers already have to spend time making lesson plans and grading assignments in addition to in-class teaching time; many see the TESS paperwork as just one more burden. While the paperwork cannot be eliminated completely, it should be reduced as much as possible to limit the amount of time it takes out of a teacher's day. Some school districts are also requiring more paperwork than the legislation actually mandates; this can be addressed through further training on how to implement the policy. Additionally, the goals of the state's new teacher evaluation system should be communicated clearly both to teachers and administrators. It must be made clear that this not primarily a punitive process designed to punish poorly-performing teachers. It is a support system, designed to help teachers determine both their strengths and weaknesses and to address any issues to improve their effectiveness. Teachers should not be made to feel as if they have to prove their worth through evaluations; instead, the evaluations should be seen as a collaborative effort between teachers and administrators to improve student outcomes.

The new teacher evaluation system should also include a clear definition of student growth. While it is admirable that the Department of Education is not requiring the sole emphasis to be placed on standardized test scores, the (temporary) lack of a student growth measure is problematic. If a goal is to improve student outcomes, there must be some way to measure that. A form of student portfolios could be effective; teachers would select assignments that show students' progress across the year. Under TESS, teachers were required to document various "artifacts" to demonstrate student achievement; these could be used as a student growth measurement. This method would require additional training both for teachers to learn how to select assignments and for evaluators to learn how to assign a student growth score based on them. If implemented properly, though, it could provide a more holistic picture of student progress across the year than a score on a standardized test would.

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