

Finding & Keeping Educators for Arizona's Classrooms



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May 2017

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Lessons to be learned about Arizona teacher recruitment and retention

Schools throughout Arizona are grappling with a teacher shortage as fewer young people enter the profession and experienced teachers are leaving the classroom. We often hear the obvious solution: “Pay teachers more.” While pay is certainly a factor – probably the major factor – for why teachers are not staying in the profession, the issue is more nuanced than pay alone.

Governor Doug Ducey on May 2 signed Senate Bill 1042 to alleviate the teacher shortage by relaxing the requirements needed to become a teacher in the state. As an example of the differing opinions to address the problem, State Superintendent of Public Instruction Diane Douglas opposed the bill on the grounds that lowering the standards required of teachers is inappropriate.

Morrison Institute for Public Policy’s report on teacher retention and recruitment brings concrete data to the discussion and supplements it with the voices of teachers and administrators from around Arizona to present an honest and unbiased picture of the state of our education workforce.

The voices of Arizona teachers come through loud and clear: They love their work and a strong majority of teachers say they are satisfied with their careers. But they are increasingly feeling the pressure from continually increasing workloads and decreasing wages, leading many to leave the profession early. These same forces undoubtedly also discourage young people from considering teaching as a career.

In recent years, teachers have become subject to stringent requirements, asking them to take on more responsibilities without added compensation. As teachers are required to take on more duties, it leads to many teachers burning out and to many leaving the profession. It takes several years for a teacher to become fully effective in the classroom. If a teacher leaves before his or her maximum effectiveness is reached, children in schools with high teacher attrition may never be taught by an effective teacher.

I’d like to thank Arizona Community Foundation, Helios Education Foundation and Pike and Susan Sullivan Foundation, whose generous support enabled Morrison Institute to further explore the issues our teachers currently face, and what action we can take to help.

If we do not find ways to keep effective teachers in the profession and attract qualified young professionals to become teachers, some children will never benefit from having an effective teacher in the classroom.

Consider that scenario for a moment. Imagine a teacher or two who made a positive impact on your life; now, try to imagine your life without that influence. It’s unthinkable, really – just as unthinkable as it is to not make a renewed commitment and investment for quality teachers in every classroom. We owe nothing less for the future success of our children and for our state.



Thom Reilly

Director

Morrison Institute for Public Policy

Executive Summary

Quality teaching is essential to providing our children with the knowledge and skills necessary for a high quality of life. It's essential to our economy, as well. Business thrives when it has ready access to an educated workforce, allowing Arizona to compete for the best industries and companies. Quality teaching helps build the society in which we live today and tomorrow.

This report uses hard data as well as voices from teachers themselves to describe the current state of Arizona's educational workforce, specifically focusing on the factors that attract new teachers into the profession and those factors that drive too many existing teachers out of it. Highlights of the findings include the following:

- Teachers of the baby-boom generation are approaching the end of their careers and will soon exit the profession as they retire. Meanwhile, mid-career teachers are leaving the classroom for various reasons, and fewer young teachers are taking up the profession.
- Forty-two percent of Arizona teachers hired in 2013 were no longer teaching in an Arizona public school by 2016. Fifty-two percent of Arizona charter school teachers hired in 2013 left within three years.¹
- Twenty-two percent of the teachers hired between 2013 and 2015 were not teaching in Arizona after one year.
- Over one-third of Arizona teachers have been in the classroom for four years or less.
- The large number of low-experience teachers helps explain the state's low overall education expense, since so many teachers are near the bottom of the pay scale.
- Arizona is losing more teachers each year than it is producing from bachelor of education programs at its three state universities.
- Median pay for Arizona's elementary school teachers has dropped by 11 percent since 2001. For high school teachers, the decline has been 10 percent.
- When adjusted for statewide cost-of-living, elementary school teacher pay is the lowest in the nation. High school teacher pay ranks 49th of the 50 states.
- A large majority of teachers surveyed indicate that they are very satisfied or somewhat satisfied with their careers.
- Seventy-four percent of administrators surveyed said their schools are currently experiencing a shortage of teachers.
- Hiring of new teachers was reported as being somewhat or extremely difficult by 85 percent of rural school administrators, compared to 77 percent of those in urban districts.
- Some rural Arizona districts are importing inexperienced teachers from the Midwest only to later export high-value veteran teachers back to the Midwest.
- Finding qualified teachers is difficult in specialized areas such as math, science and special education.
- The demographics of the teaching profession are lagging the changing demographics of the state. Just 14 percent of Arizona teachers are Latino, compared with 44 percent of K-12 students.



Four themes emerged from the research that went into this report:

- 1 Professional Pay** – Teachers are paid considerably less than those in other professions that require a four-year degree. The erosion in pay over time is a major contributor to both the exodus of teachers from the classroom and the inability to attract new teachers to the profession.
- 2 Increasing Workload** – Demands for accountability, coupled with budget cuts that have increased class sizes while curtailing support personnel, have markedly increased the workload for Arizona’s teachers. Teachers say they expect to work hard, but dislike being asked to work harder for less pay.
- 3 Support for the Work** – New teachers especially need support from colleagues, administration and the community to be successful in their work. Structured programs to help new teachers are essential to get them through the difficult first few years of their career. And all teachers need to feel that they are respected and supported by parents, administrators and government officials.
- 4 Passion for the Profession** – Teachers’ commitment to their calling came through clearly in comments from over 1,600 teachers across the state. They aspire to do the best that they can for their students, even under difficult conditions. Expert teachers stressed that no amount of preparation will keep a young teacher in the classroom for very long, unless he or she has the passion to be there.

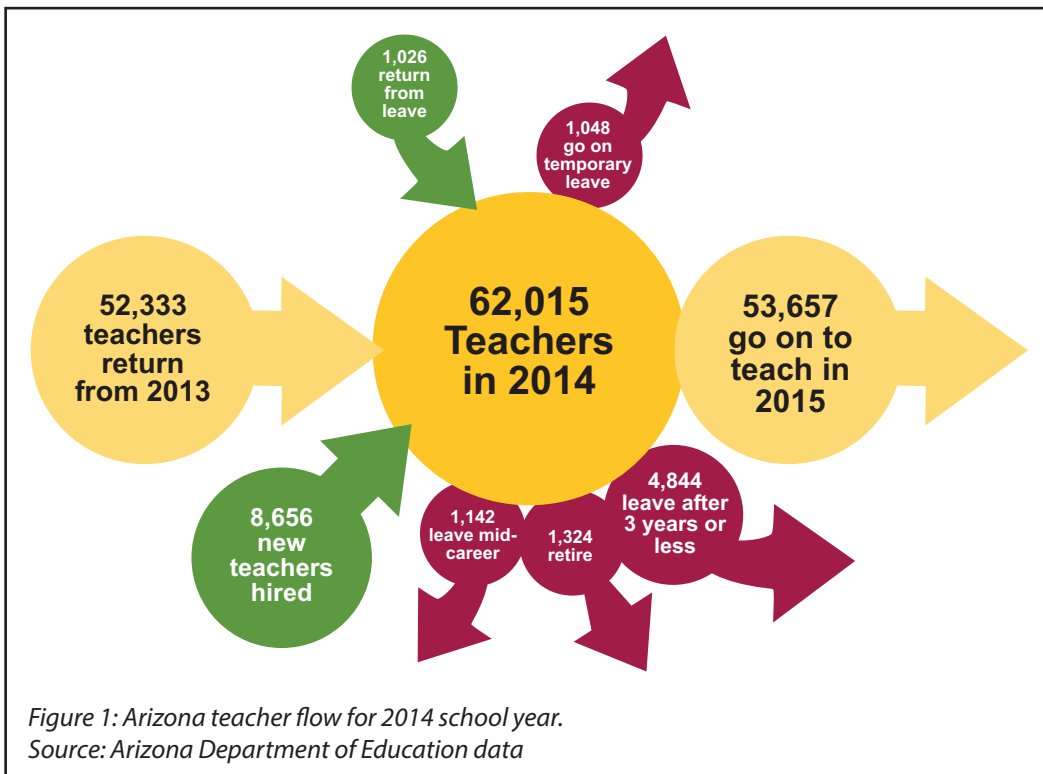
Arizona’s ability to resolve the issue of teacher attraction and retention will determine the state’s economic future. Reductions in real salary and increases in workload have gradually materialized over many years due to a complex web of events. Solutions will be equally complex and require years to fully implement, but the first step in seeking a solution is defining the problem. In the pages that follow, hard data and voices from teachers and administrators gauge Arizona’s education current and future workforce.

“I teach a school – we are the most impoverished school in my district. And sometimes we feel like we’re the forgotten stepchild for that school. But I stay there because of these amazing relationships that I am able to form with the students and their families. And I am now teaching to the point where some of my former students are now having students, and they’re the lower grades, but I’m able to be a part of that.

“Many of my students are the first ones to graduate high school. First ones to then even try to go to college. And so being a continuing force and and seeing that whole longevity of the education process is extremely meaningful to me and motivational to me.

“So every day is a new day and every day is a new opportunity. And so even when I am overwhelmed by any of these situations, and there’re so many situations, and today was chocked full of situations, every day’s a new day. And tomorrow’s going to be a new opportunity to start again and see what happens tomorrow. And it’s going to bring some great things. So, I find a lot of satisfaction in that.”

– Focus group comment from Phoenix-area teacher



Introduction

Twenty-two percent of the new teachers who were hired in Arizona between 2013 and 2015 left after their first year on the job. Of the new teachers hired in 2013, 42 percent were not in the ADE database by 2016.

– Arizona Department of Education data

The hiring and retention of quality classroom teachers are frequent topics of discussion in Arizona. News outlets report that the state is dead last in teacher pay and near the bottom in per-pupil expense while politicians trumpet plans to increase educational funding. Families fret over whether their child's education will be compromised because a long-term substitute is filling in for a vacant teaching position. Teachers worry about making ends meet and paying off student loans while they work under ever-increasing expectations of accountability and performance.


More than one-quarter of the 8,344 openings for teaching jobs in Arizona for the 2016-17 school year were vacant as of Nov. 28, 2016.² These vacancies were often filled by long-term substitutes or by having existing teachers teach extra classes. Another 27 percent of the openings were filled by those who did not meet the standard teacher requirements. This includes teachers whose certification is pending, and those with intern or emergency certificates.

"Pay is only one element of the reason teachers leave. I think lack of respect from students, heavy workloads, lack of support from admin, etc., have equal impact. It gets to that point where a teacher thinks, 'I'm doing all this work, get no respect or support, and I'm only paid this much?' That's the point when they leave."

– Survey response from high school teacher

No one doubts the importance of education, not only for the future well-being of Arizona's children but also for the economic health of the state. The students of today are the workers of tomorrow, with the surest guarantee of economic success for the state in the presence of an educated workforce. The jobs of tomorrow will require more in the way of education and training – not less – and employers will locate only in areas where they can be assured of workers that can perform, so a well-educated population is of importance to everyone. Arizona's civic and economic future is in the hands of classroom teachers, yet there have been signs that the system is stressed. There are many moving parts in this system and simplistic observations are unlikely to paint an accurate picture.

In an effort to gain insight into the many factors influencing the teaching profession in Arizona, Morrison Institute for Public Policy performed a comprehensive analysis of the state's educational workforce. Quantitative data and qualitative observations have been integrated in this report to understand where the state stands. A nuanced picture has emerged from this research. The problem is real: Arizona's school systems



are not attracting new teachers in the numbers needed, and they're in danger of losing their veteran teachers to retirement and burnout.

Low pay is certainly a major factor, but pay alone is not the answer. Nobody enters the teaching profession with expectations of wealth, but the steady erosion of wages, both in real dollars and relative to other occupations, make education a less-rational career choice. Veteran teachers chafe at administrative demands on their time that seem to take them away from their core task of teaching yet hold them accountable for student performance.

But through all of this, teachers expressed devotion to their profession and their students. The voices heard in this research are not just complaining about low pay or poor working conditions. Perhaps surprisingly, 69 percent are satisfied with their careers, yet they are continually being asked to do more with fewer resources. Retaining these experienced teachers and attracting talented newcomers to the profession are the key to Arizona's educational future.

Why Should We Care?

From a purely economic standpoint, low retention rates in any given occupation are not necessarily a problem. The fast food industry, for example, has for many years utilized a low-pay workforce that is constantly turning over. In jobs where years of experience have little effect on performance, churn won't be much of an issue. Teaching, however, unlike lower-skill occupations, requires time to master and when experienced teachers leave the classroom there is a real loss of expertise.


"The first three years of teaching are horribly challenging, and we do not have the funding to hire a staff that is capable of supporting and mentoring them through those first three to five years like they deserve."

– Interview with urban school superintendent

Despite the best efforts of universities to prepare novice teachers for the profession, it takes two or three years for a teacher to hit his or her stride. With over one-quarter of the state's teachers having three years or less experience, many Arizona classrooms are led by professionals who have yet to master the art of teaching. At the other end of the experience scale, 21 percent of Arizona's teachers are over age 55. This cohort will be gradually heading off into retirement over the next 10 years, and schools will need to attract new teachers to fill their shoes.

Student Achievement

Arizona's schoolchildren have consistently scored below the national average on the best measure of statewide student performance, the National Assessment of Educational Progress (NAEP) test. The good news is that the state has been moving the right direction lately. Arizona is the only state that showed statistically significant increases in grade 4 and grade 8 scores in the three content areas of math, reading and science between 2009 and 2015. With the exception of 8th grade math, the scores are still below the national average, but they



have been increasing despite the state's low funding for education. Arizona's teachers have been doing an admirable job while being in a tough situation.

“There's going to be a gap in instruction so those kids are losing out on receiving comparable instructions as their peers in a similar course. Administratively, it's a big hassle because parents become up in arms, parents become concerned, 'what happened to Mr. So and so, who's teaching my kid?' So we have a lot of fallout to deal with on the admin side, but it really goes back to the instruction, that ultimately parents care about what's going on in their kid's education. And I have to send out a letter saying 'sorry so and so has left the school, and we're going to do our best to get a qualified teacher in there.'”

– Interview with urban school principal

But that progress may be in danger if good teachers are not consistently available in the classroom. A report from the Arizona Department of Education highlights the potential problem: “A higher percentage of inexperienced teachers negatively impacts student achievement. . . .Higher turnover of beginning teachers creates years of unstable learning environments for students.”³ Schools that have a difficult time attracting teachers end up hiring inexperienced and less-prepared teachers.⁴ The negative effects of high teacher turnover will be felt by low-income students who need the most help.⁵ All students in difficult situations need a stable classroom environment to have a chance to succeed, disadvantaged students even more so.

An Uncommon Profession

There are several unusual characteristics of teaching as an occupation that distinguish it from other careers. Like those working in the health care field, teachers have jobs centered on service to others. Teachers also carry the extra responsibility of their quasi-parental duties during the school day. Parents have reason to be concerned about the professional experience and capabilities of schoolteachers – much more concern than they would for the capabilities of other professionals.

There also is a wider public benefit to education that accrues even to those who do not have children in school. Having a well-educated population, as Thomas Jefferson noted, is essential to democracy. It is also essential to a thriving economy. Today's schoolchildren are the workers and taxpayers of the future and the state's ability to prosper is directly tied to the success of our education system.⁶ All of these factors point to a special significance to the teaching profession that calls for wider public attention and scrutiny.

Aside from the unique societal impact from the teaching profession, there are additional aspects to the occupation that may influence both attraction of new teachers and the retention of existing teachers.



Few Other Careers Require a Four-Year Degree

Ninety-eight percent of teachers in district schools hold bachelor's degrees, and 30 percent also hold a master's degree. Charter schools are exempt from the requirement to hire certified teachers, although many choose to hire only college graduates or those holding certification.

The certification requirements imposed by all district schools and many charter schools put aspiring teachers in an unusual position. Although a bachelor's degree may be desirable in many fields, teaching is one of the few occupations where a four-year bachelor's degree is most often required before their career can begin.

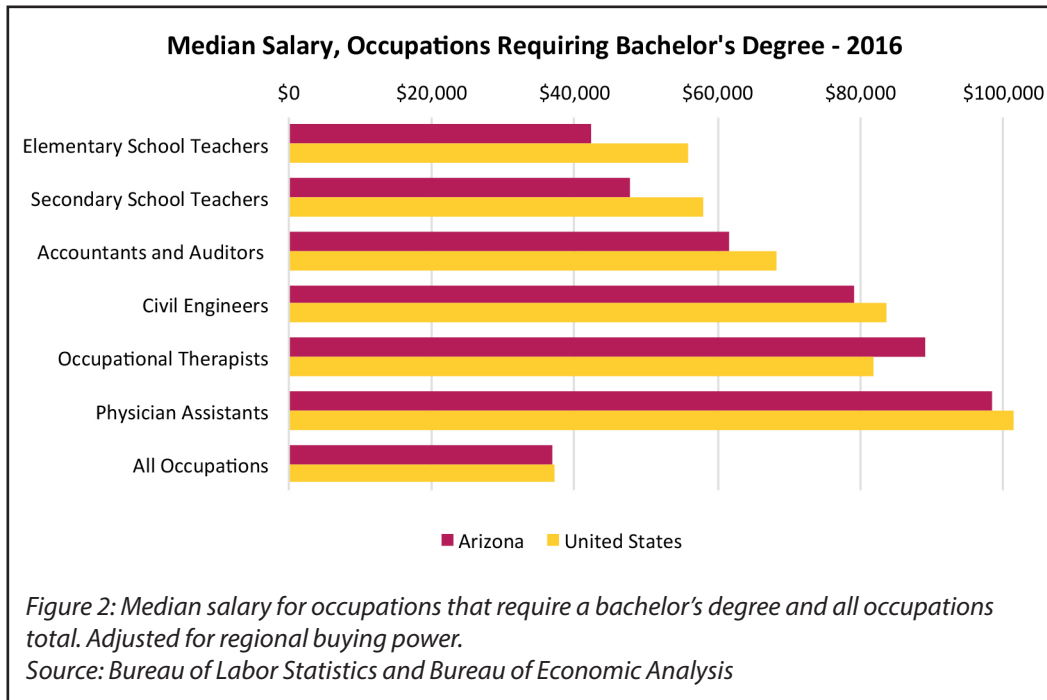
"All my friends who also have a master's degree in other fields are paid twice or even three times as I am. Although I love teaching, I have to be practical. As a bilingual, working as a translator for big companies is a much better choice than working as a foreign language teacher."

– Survey response from charter school teacher

A young person with a good head for computers can get started right out of high school installing hardware or managing a network. There are many nursing or medical aide jobs available to those with a two-year associate's degree. Those interested in either the information technology or medical fields will find career advancement easier if they get a bachelor's or master's degree, but it is entirely possible to get started in these and many other fields without the degree.

Engineering is one of a very few other professions where a four-year degree is essential to begin a career. Other licensed professionals that require a four-year degree include accountants and some medical specialties. These are compared to teaching in Figure 2. Note that the figures presented have been adjusted for regional cost of living, which inflated Arizona's salaries to account for the state's somewhat lower cost of living. Also, note that the "all occupations" category has comparatively low salary when compared against these professions that all require a bachelor's degree. This is because about 70 percent of the overall workforce does not have a degree, so their wages are generally much lower.

Pay: the Common Denominator



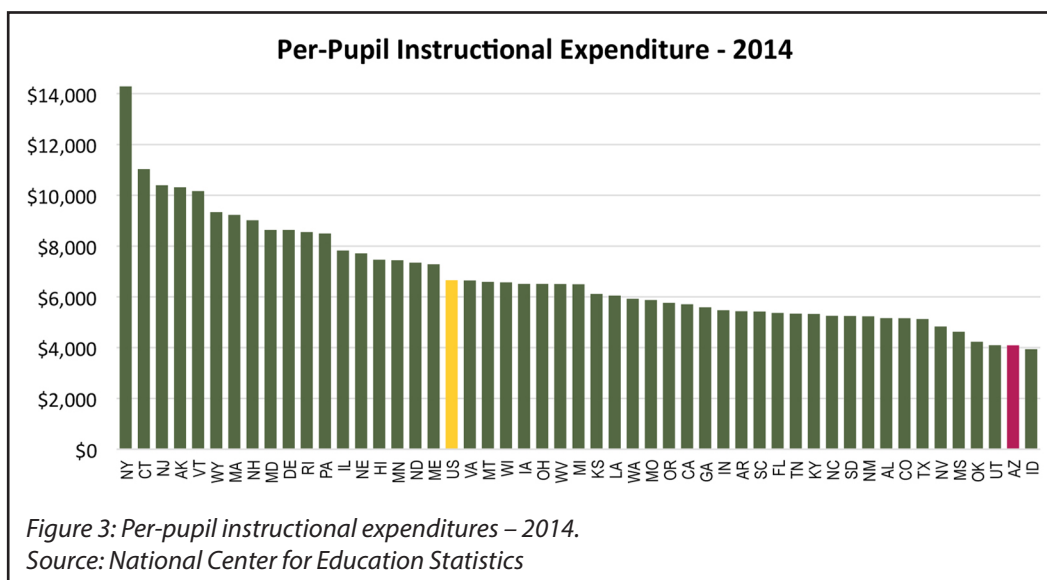
Salary is not the whole story, but it is an important part of the story concerning teacher attraction and retention. Most stories about education in Arizona refer to studies showing the state at the bottom of national rankings for per-pupil spending. These stories are dismissed by critics who either say the state's funding isn't really so bad or that funding doesn't really matter – that we should focus on student achievement instead.

Discussions of teacher pay inevitably turn emotional as they touch on the hot-button issues of education, taxation and equity. Politicians find themselves trapped between appealing to the voters' desire for an excellent education system and their demands for further tax cuts. The result has been incremental change that quiets the debate for a brief time but fails to transform the system.

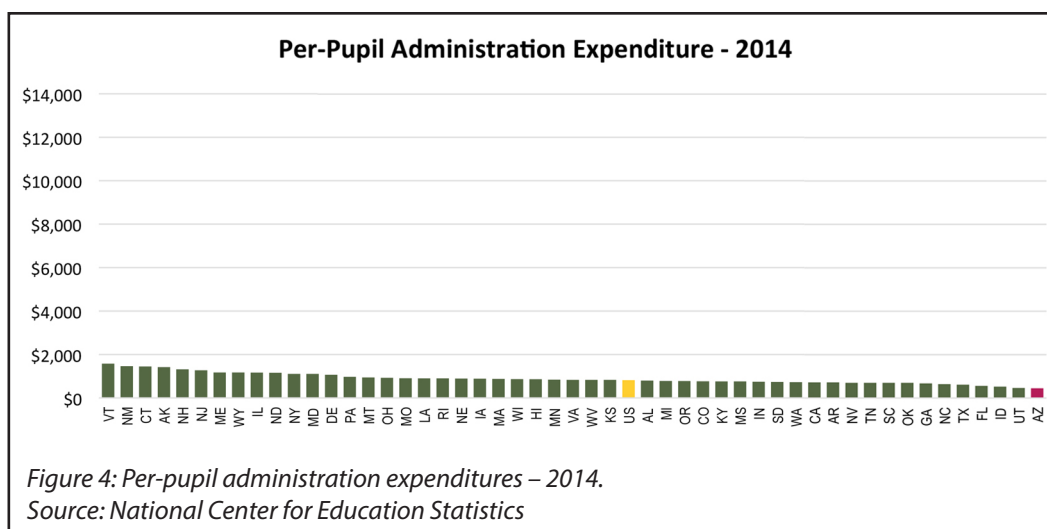
There are, however, several objective claims that should be discussed when the state's education system is examined:

Education is a very labor-intensive industry – In Arizona, as in the rest of the country, salaries and benefits account for nearly 80 percent of all K-12 expenditures.⁷

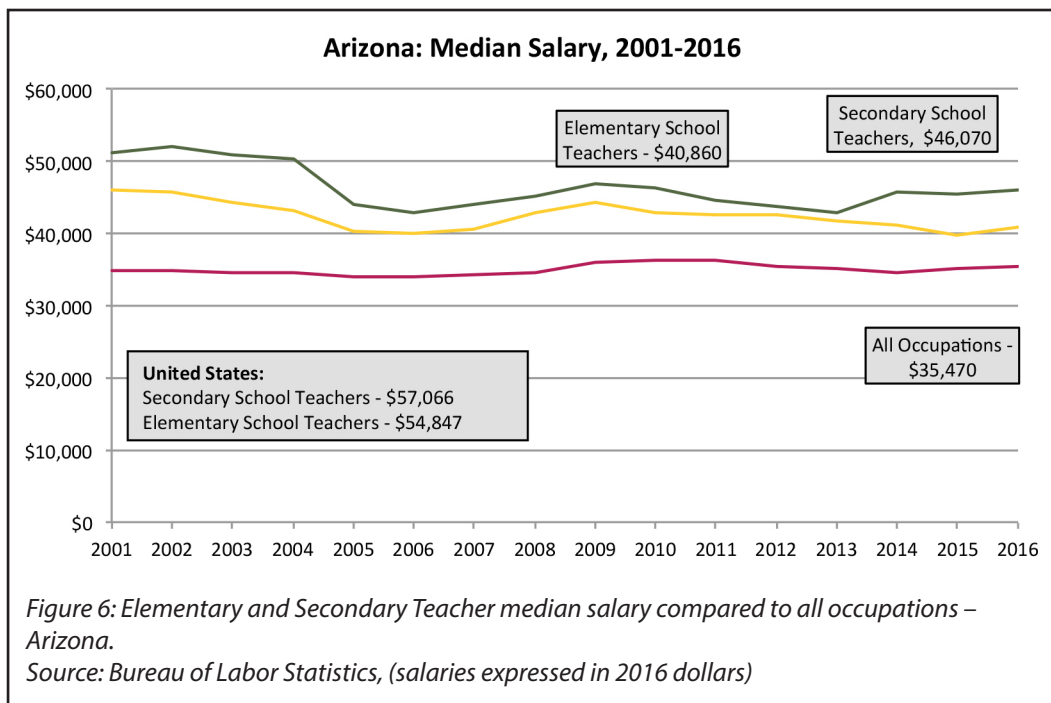
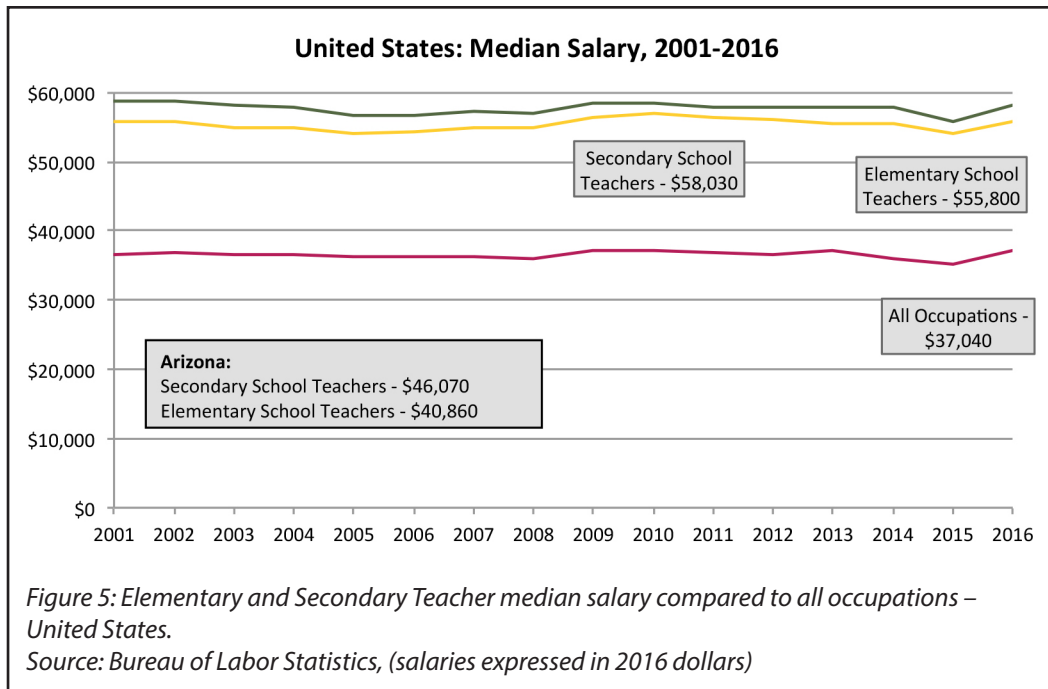
By any measure, Arizona is near the bottom of the nation for per-pupil expense – There may be arguments over whether the state ranks 49th or 47th, but the state is certainly in the bottom five states.⁸ Minor adjustments to these figures to correct for possibly inaccurate student counts or cost-of-living will not change those rankings much. Arizona students receive 31 percent less than the national average for education funding (Figure 3).



Moving funds from administration to the classroom will make little difference – There are certainly efficiencies to be gained by streamlining educational administration, but Arizona spending on administration is less than any other state (Figure 4).⁹ Administration expenses include both school administration for principal services and district-level expenses, but not student support such as counseling and transportation. Moving every dollar of these administrative expenses into the classroom would raise Arizona to 47th place, up from 49th place, in per-pupil instructional expenditure.



Real wages for Arizona teachers have been declining – When adjusted for inflation, nationwide salaries for elementary and high school teachers have been essentially flat since 2001 (Figure 5). The story in Arizona is markedly different. Although wages for all occupations actually rose by 2 percent from 2001 to 2016, elementary school teachers are now paid 11 percent less on average and high school teachers are paid 10 percent less (Figure 6).

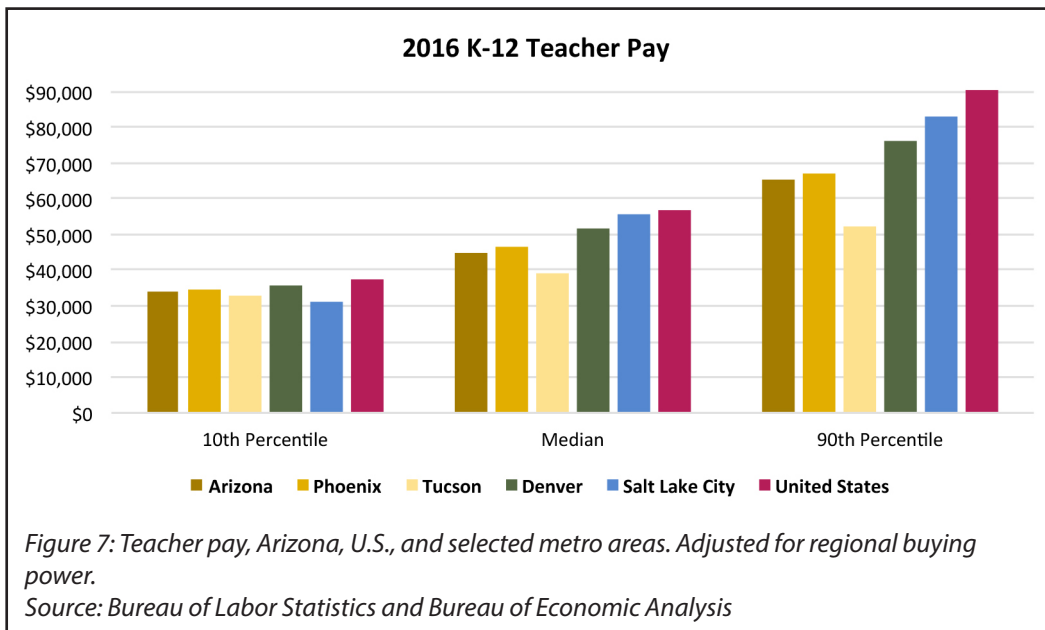


Proposition 123, passed by the voters in May 2016, is a temporary measure to divert about \$300 million each year to education from state land trust revenues. Districts are free to distribute this money in whatever manner they choose. Many districts have used the Prop 123 funding for modest bonuses or raises to teachers, but the funding is not sufficient to pay for substantial increases in pay.

Also on the horizon is the expiration of Proposition 301, a 0.6 percent sales tax approved by Arizona voters in 2000. There have been no concrete plans announced for a continuation of this measure, leaving the state's education system facing the prospect of losing \$624 million in annual revenue. Over 80 percent of Proposition 301 funding is directed to K-12 education, with the remainder going to community colleges and the three state universities.

Arizona teachers are paid less than those in comparable regions – The low wages paid in Arizona for teaching as well as other occupations have sometimes been explained by the state's low cost of living. However, when teacher wages are adjusted for local cost of living, they still fall below both the national average and that of competitor regions. Accounting for regional cost of living actually lowers Arizona's position in state rankings for teacher pay. Raw numbers from the Bureau of Labor Statistics show Arizona at 49th in the nation for elementary teacher pay, just slightly ahead of last-place Oklahoma. When Oklahoma's lower cost of living is factored in, Arizona drops to 50th in the nation.¹⁰ Arizona ranks 49th in the nation for secondary teacher pay.

The chart in Figure 7 highlights a particular trend that may affect both attraction and retention of teachers. Note that pay for Arizona, Phoenix and Tucson teachers is less at the 10th, 50th, and 90th percentiles than in comparison areas but that the gap increases at higher pay levels.



The 10th percentile teachers (those who make as much as the bottom 10 percent of all teachers), likely represent newcomers to the field with the least amount of experience and sitting at the bottom of the pay scale. In Arizona, such teachers are paid less than their peers in Denver, Salt Lake City and the nation as a whole, but not dramatically less. Tenth-percentile pay for Arizona teachers is 9 percent below the national average, while Phoenix teachers can expect 8 percent less and those in Tucson 11 percent less. This will certainly be discouraging to people considering whether to enter the profession in the state.

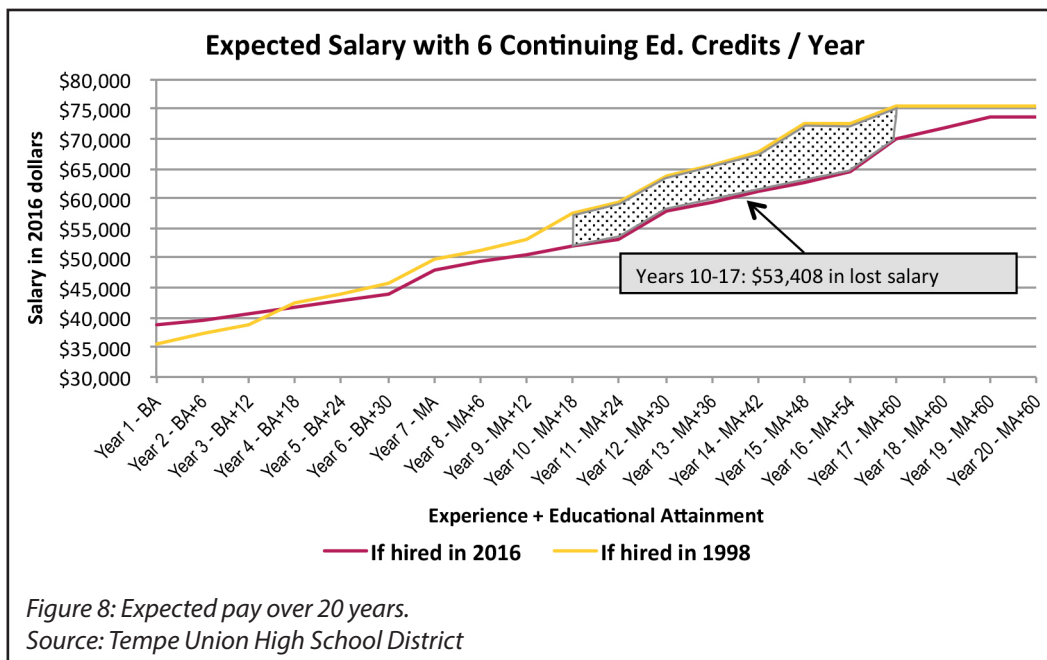
However, this disparity becomes even more pronounced at the 90th percentile of pay. These are the highest-


paid teachers, making more than 90 percent of their peers – they can reasonably be assumed to be veteran teachers who have been in the classroom for years. On this metric, Arizona’s 90th percentile teachers make 28 percent less than the national average, while those in Phoenix make 26 percent less and those in Tucson 43 percent less. A veteran, 90th percentile teacher in Tucson will on average make over \$38,000 less annually than the national average. Differences of this magnitude may be large enough to either prompt an experienced teacher to seek other employment or to move to another, higher-paying state.

Teacher Pay Over a Career

As seen in Figure 6, median teacher pay has declined over the past 15 years. But this says little about what a teacher’s salary looks like over the length of a career. For many years, teachers could rely on a salary schedule that included annual raises, often up to a maximum of 15 years’ experience. In addition, teachers were given raises dependent on their education level, with a bump in salary for additional college classes beyond the initial bachelor’s degree. This system rewarded teachers for extending their education and training to a master’s degree and beyond, while the yearly raises helped schools hold on to experienced, veteran teachers. A novice teacher might start out with a modest salary, but with increases in experience and education could expect to move up the salary chart and eventually achieve a more comfortable middle-class lifestyle.

This model began to break down during the Great Recession. Facing tough financial times, school administrators realized that a large number of experienced teachers in a district represented a fiscal liability on the spreadsheet. Not only were they more expensive for a current year’s budget, but they’d be even more expensive the next year when their salary got bumped up, and yet more expensive the year after that. In a time of squeezed budgets, this model was deemed unsustainable. Annual “step-pay” raises were reduced or capped. At the same time, starting pay was raised to attract new teachers.





Comparing the salary schedules from 1998 and 2016, while adjusting figures for inflation, Figure 8 shows how a typical teacher's pay over a 20-year career might progress in a Tempe Union High School District. The chart assumes that a teacher will acquire six units of continuing education credit per year beyond the bachelor's degree. Over a 20-year career, a teacher working under the 2016 formula would make \$62,465 less than if the 1998 schedule were in place.

Starting pay for teachers hired today in this district is somewhat higher than for those hired in 1998. After four years this advantage disappears and teachers working under the old schedule would make significantly more. In years 10 through 15 of this career model, the 2016 schedule pays an average of \$6,668 less per year than under the 1998 system. The yearly increase for experience in this district is just about equal to the average rate of inflation, so the real purchasing power of these teachers will not increase except for when they receive a larger increase the first year after earning a master's or Ph.D. degree.

Under either pay schedule, pay eventually plateaus. In most professions, a promotion to a more senior position comes with the promise of increased salary in the future. Classroom teachers are reliant upon these yearly step increases in pay and occasional adjustments to the base pay to increase their income levels. In recent years, however, these increases often have not been greater than the 2 percent or 3 percent annual inflation rate, meaning that teachers have seen a decrease in their real wages. In these cases, the only way to get ahead financially was either by becoming an administrator, such as a school principal, or leaving the educational field entirely.

A Nine-Month Job?

One of the traditional perks of teaching has been generous amounts of time off for holidays and over the summer months. This benefit has attracted people to the profession even though salaries have been lower than in other careers that require similar levels of education. Long summer breaks figure prominently in the reasoning of those who feel that teachers are actually overpaid for their work.¹¹

"I actually had a student teacher one time say that he wanted to be a teacher because he gets summers off. I'm like, 'Oh, dude, that's not going to work.' We're training all summer."

– From Phoenix Focus Group

The benefit of summers and holidays are often an important benefit for young parents who teach. Pregnancies are often timed to fit around these breaks. Families with school-age children will find summer and holiday childcare arrangements much easier to manage if one parent is a teacher who has similar breaks.

The Morrison Institute Education Workforce Survey found that 42 percent of teachers work an additional job, either during the school year or over the summer, to earn extra money. An additional 27 percent have held second jobs in past, but not currently. Interviews with school principals revealed that summer school teaching

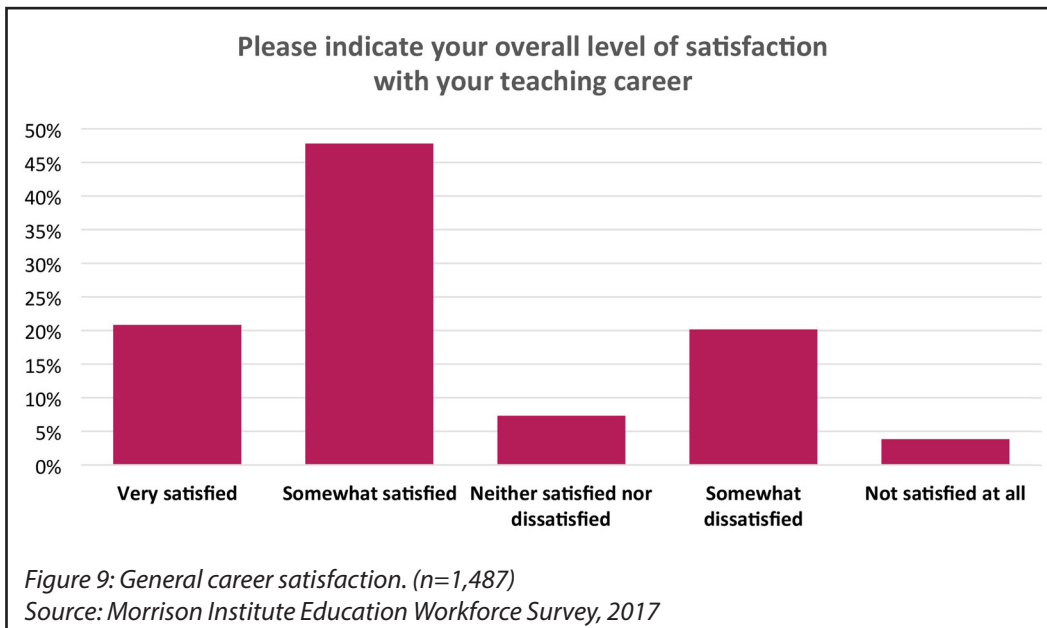
positions are always easy to fill, indicating that most teachers do not use the summer break as an extended vacation period, but rather seek out opportunities for additional employment.

The school year calendar is a benefit that helps explain the low salaries traditionally paid to teachers compared to professions requiring similar education. However, the decrease in real wages seen in recent years (Figure 6) has coincided with steep increases in university tuition, which leaves many college graduates with considerable debt. The decrease in wages coupled with increased costs of acquiring the education needed for certification may have tipped the economic scales so that teaching no longer is a desirable career choice even with generous time off for breaks.

Teachers Are Satisfied, But Frustrated

With education budgets under constant scrutiny and increased pressure to perform, it is not surprising that teachers feel stressed. National surveys reported a 10-percentage point decrease in teachers who said they are satisfied or very satisfied with their jobs between 2009 and 2013.¹² Large-scale standardized tests, which were originally developed to gauge student progress, have increasingly been used to gauge teacher effectiveness and can figure prominently in determining pay, further increasing stress on teachers.¹³

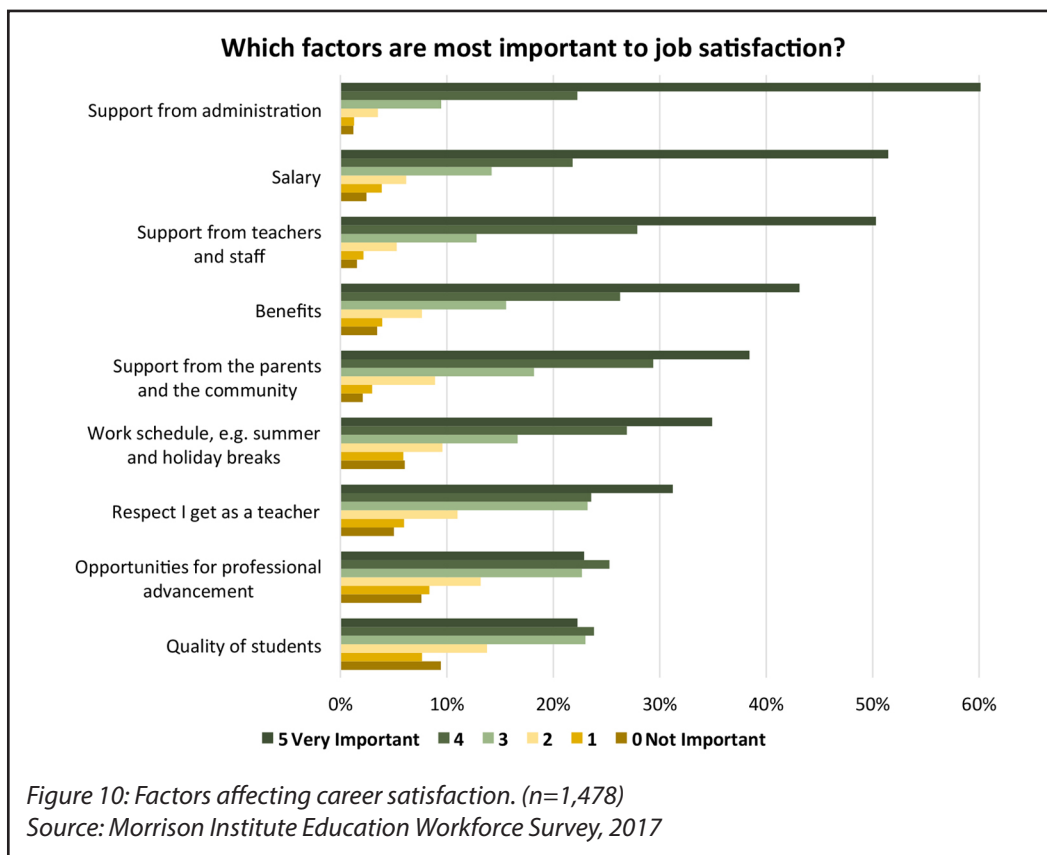
Despite these trends, a majority of Arizona teachers (69 percent) indicated they are very satisfied or somewhat satisfied with their careers. Twenty-one percent said they were very satisfied with their careers (Figure 9).



The Morrison Institute Education Workforce Survey also found that 62 percent of respondents believe they would still be teaching in three years. About a quarter of those who answered “no” to this question said they would be leaving due to retirement. These soon-to-be retirees are happy in their careers, with 76 percent saying they are somewhat or very satisfied. Somewhat surprisingly, 39 percent of those who said they were

leaving teaching but not retiring were somewhat or very satisfied with their careers. This indicates that there is a level of frustration that is driving a good percentage of teachers out of a career in which they are otherwise satisfied.

To better understand job satisfaction, teachers were asked to rank the importance of a number of factors that might affect them (Figure 10). Overwhelmingly, support from administration, teachers and staff were chosen as the factors most important to job satisfaction. Support from administration ranked as very important or important by 85 percent of the 1,478 teachers responding to the question, with 78 percent choosing support from teachers and staff. Salary was next, with 73 percent naming it as either very important or important.





A Two-Part Shortage

Seventy-four percent of administrators in the online survey said their schools are currently experiencing a shortage of teachers.

The labor supply for our education system is being squeezed from all angles. **Teachers of the baby-boom generation are approaching the end of their careers and will soon exit the profession as they retire, mid-career teachers are leaving the classroom, and there are fewer young teachers taking up the profession. In addition, over 20 percent of the new teachers hired each year do not return to the classroom the following year.**

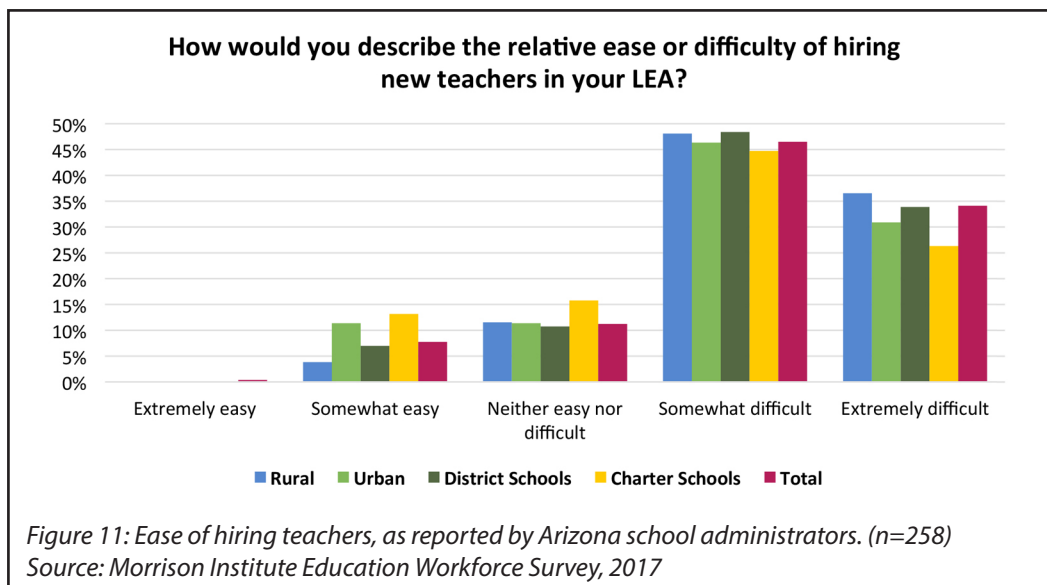
A 2016 survey of 159 school districts and charter schools by the Arizona School Personnel Administrators Association found 2,166 vacant teacher positions and an additional 2,221 positions where the teacher did not meet standard teacher certification requirements.

Twenty-one percent of the 62,379 teachers in the ADE database who were teaching in 2016 were age 55 or older and will be moving toward retirement in the next decade or so. Mid-career teachers have seen their wages stagnate while their workloads have increased. Many say they are contemplating moving out of the classroom and into administration or into altogether different careers. Finally, low pay and lack of prestige appear to be discouraging young people from entering the field.

These problems combine to create a continuing shortage of teachers, leaving schools to scramble to find and keep teachers while denying students the benefits of having a well-trained, consistent presence in the classroom. If unaddressed, the problem could spill out of the classroom and into the economy as Arizona as a whole suffers the long-term consequences of a poorly educated workforce.

Hiring New Teachers

The Morrison Institute Education Workforce Survey revealed widespread concerns by administrators about the difficulty of hiring for their Local Education Agencies (LEAs).^{*} Hiring new teachers was reported as “somewhat difficult” or “extremely difficult” by 81 percent of the 258 administrators taking the survey (Figure 11). **Rural administrators expressed more difficulty, with 85 percent of 104 administrators reporting somewhat or extremely difficult hiring.**

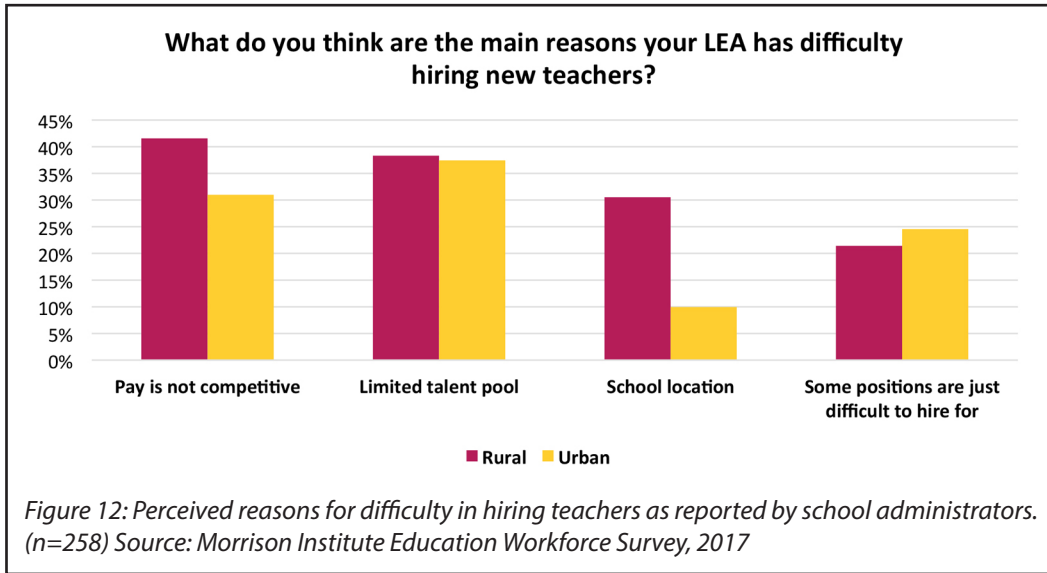


Pay is perceived to be the most critical factor hindering hiring of new teachers in rural areas, but urban administrators say their challenge is compounded by a limited available talent pool of teachers (Figure 12). As expected, location is an impediment to hiring in rural districts, where it may be difficult to recruit teachers to remote towns that are far from urban attractions. A rural hiring manager interviewed for this project used a strategy of targeting applicants who showed an interest in outdoor recreation. Those with an appetite for mountain biking and hiking, for example, sometimes can be enticed to teach in rural Arizona if they value weekends filled with bountiful outdoor recreation.

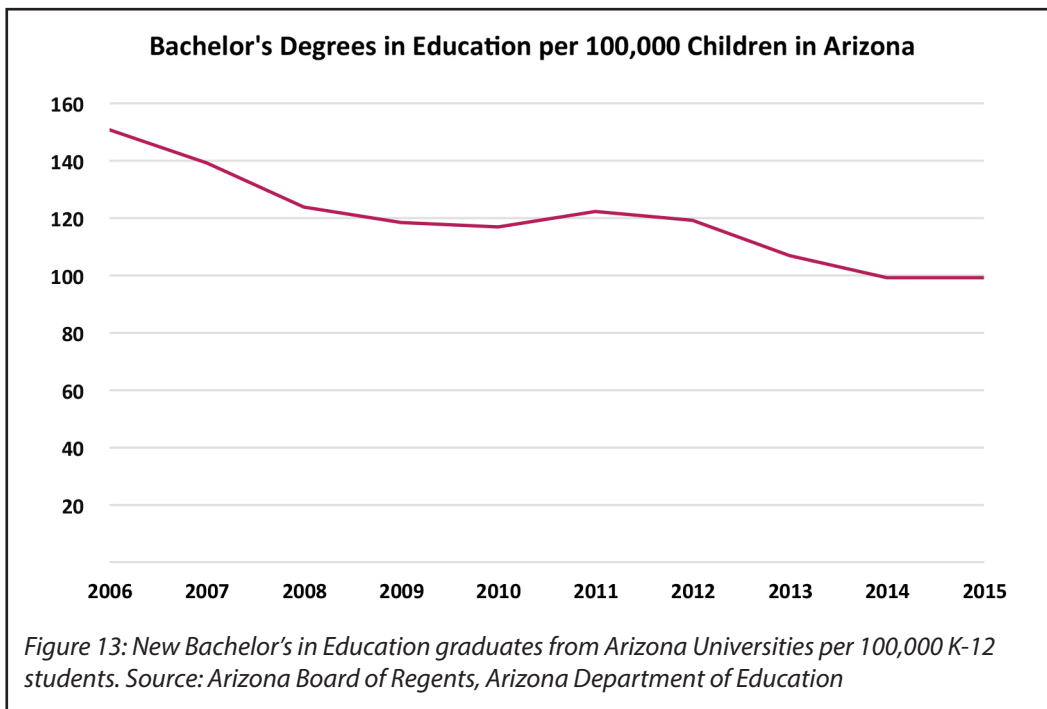
“Recruitment problems have increased dramatically over the last five years, especially in the last two or three years. Ten or 15 years ago there was no problem hiring teachers. In fact, positions rarely came available.”

– Interview with rural school board member

^{*} Local Education Agencies are generally synonymous with school districts, but also include charter school organizations.

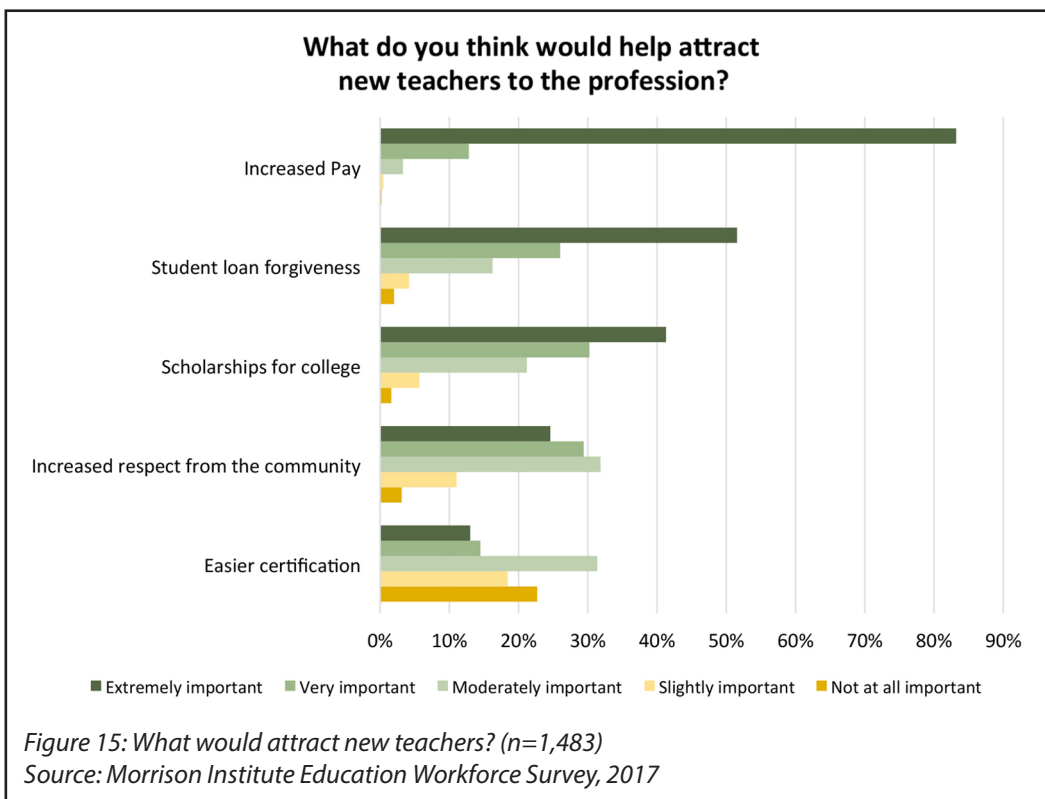
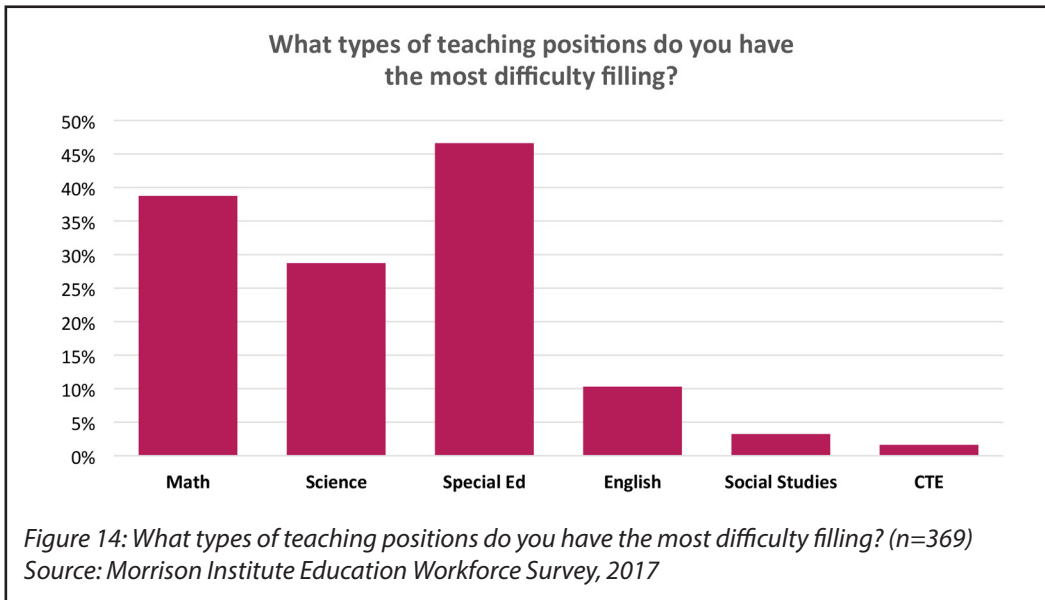


The limited talent pool may be explained by the fact that despite an 8 percent increase in the number of K-12 schoolchildren between 2006 and 2015, the number of people graduating with bachelor’s degrees in education dropped by 25 percent over that period. The result is a 31 percent reduction in the number of new teachers produced annually per 100,000 students. (Figure 13).



In 2015, there were 1,601 bachelor’s of education degrees granted by the three state universities, yet 8,358 teachers left the Arizona Department of Education teacher database that year. **Finding qualified teachers is**

difficult in specialized areas such as math, science and special education (Figure 14). Special education teachers are needed to serve the 12 percent of Arizona schoolchildren who qualify for Individualized Education Programs. The problem becomes even more pronounced in rural areas, where administrators reported higher levels of difficulty in hiring specialist teachers. Not surprisingly, teachers say that increased pay would be the best way to attract new teachers, followed by help in paying off student loans (Figure 15).



Rural Schools

Have you had trouble recruiting teachers for your district? “Yes, we’re in a rural area. So with recruiting, it’s usually with the young people and they want to be in a metropolitan area.”

– Interview with rural school superintendent

Recruiting new teachers for Arizona’s rural schools is particularly challenging. Hiring of new teachers was reported as somewhat or extremely difficult by 85 percent of rural school administrators, compared to 77 percent of those from urban districts. The human resources manager of a rural district described attending job fairs and having prospective teachers pass by his table without showing any interest, looking for jobs in metro Phoenix and Tucson instead.

“I think we have trouble recruitment wise because it’s a rural area. We are about two hours, depending on which way you go, from the nearest big city. And so if you’re, in my opinion, if you’re young and single and you’re looking for someone you’re not going to want to come to a rural area.”

– Interview with rural school principal

Some Arizona communities have partnered with state universities to “grow their own” teachers. A partnership between Arizona State University and Eastern Arizona College in Thatcher allows students in the Gila Valley to earn a bachelor’s degree in education or other field without having to leave their hometown to take classes in the city. All three of Arizona’s state-supported universities have similar programs to develop local teachers for rural communities.

Research supports the idea that districts in rural areas experience lower turnover rates when they employ people who already have strong ties to the community, and that these teachers are more successful in the classroom because they understand the particular challenges of the area.¹⁴

“We’ve stopped recruiting out of state because they only stay a year or two unless they find a reason to stay.”

– Interview with rural school superintendent

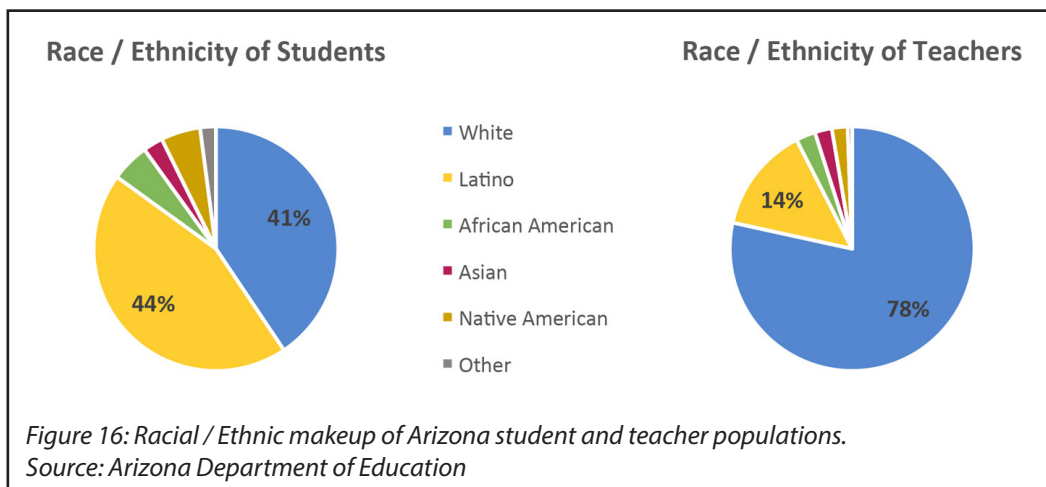
Arizona is attracting teachers from other states but they’re not staying. According to teachers in a rural focus group, many graduates from Midwestern colleges are unable to get jobs in their home states without prior experience, so they come here to gain experience. Once they’ve logged two or three years of experience, they leave Arizona and return to their home state. These short-term teachers may temporarily alleviate a shortage here, but Arizona effectively serves only as a training ground for them. **Rural Arizona districts may be importing inexperienced teachers and then exporting high-value veteran teachers back to the Midwest.**

California, Nevada, and New Mexico have been addressing their own teacher shortages by luring away educators in Arizona's border communities. Median salary for California teachers is \$30,000 more annually than in Arizona, even adjusted for the higher cost of living in California, so teachers in Yuma can be enticed into commuting across the border. Median pay in Nevada and New Mexico is \$10,000 - \$15,000 higher than in Arizona, so towns adjacent to those states are vulnerable to losing their teachers, as well.


Low-Income and Minority Schools

Schools serving low-income and minority populations in urban areas have much in common with rural schools. Low-income schools are especially vulnerable to high turnover. These schools have a far more difficult time replacing lost teachers with quality instructors, forcing schools to hire less-experienced and less-qualified teachers. Continued high turnover rates in lower-performing and minority schools could result in students falling behind at higher rates than students in higher-income schools with lower turnover.¹⁵

The state's schools are at the leading edge of an ongoing demographic shift. Already, the number of Latino school children surpasses the number of non-Latino Whites in the system. **The demographics of the teaching profession look more like the state did a generation ago. Just 14 percent of Arizona teachers are Latino, compared with 44 percent of K-12 students** (Figure 16). This disparity may have profound effects for Arizona's educational future. Academic research has found that there appears to be a connection between cultural awareness of teachers and involvement of Latino parents in advocating for their children.¹⁶ With parental involvement a major factor in educational success, increasing the percentage of Latino teachers may be an important facet of Arizona's educational and workforce future.



Research indicates that the student-teacher relationship is particularly important for the success of Latino students.¹⁷ This research suggests that strong relationships between teachers and Latino students result in a strong positive influence not only on school behavior but also on satisfaction with the school. These factors, in turn, drive student achievement. A better ethnic match between students and teachers may benefit teachers as well as students. There are indications that teacher retention issues would be helped by a closer ethnic match between teachers and their students.¹⁸



Schools with the majority of students in lower socioeconomic and minority demographics are more likely to lose teachers of all types, in particular losing teachers with exceptional credentials, such as degrees from high-ranking educational institutions and national board certification. Wealthy schools with low minority populations have an advantage in all aspects of recruitment and retention of teachers. They hire better qualified first-year teachers, attract better-qualified teachers away from other schools and districts, and retain teachers of all types more consistently throughout their career.¹⁹

Teachers in more-affluent schools, supported by a tax base that affords higher pay and better student-teacher ratios, are likely to find themselves in a more favorable work environment. Their students will come to school more prepared to learn and will have parents with the time and resources to support their children's educational path, improving the likelihood for academic achievement.²⁰

Finally, teachers in low-income schools must cope not only with the academic needs of their students, but also their burden of living in poverty, often in chaotic households and neighborhoods. At the same time, educational accountability policies call for these students to catch up with their better-situated peers on standardized tests, graduation rates and other measures. This puts additional stress on teachers and may well contribute to high turnover rates in these schools.²¹

Retaining Existing Teachers

Once teachers are hired, the problem becomes one of retaining them. Teaching is as much an art as a science and even the most well-trained novice teachers will experience difficulty in their first few years in the classroom. Nationally, over 40 percent of new teachers leave the profession within five years.²²

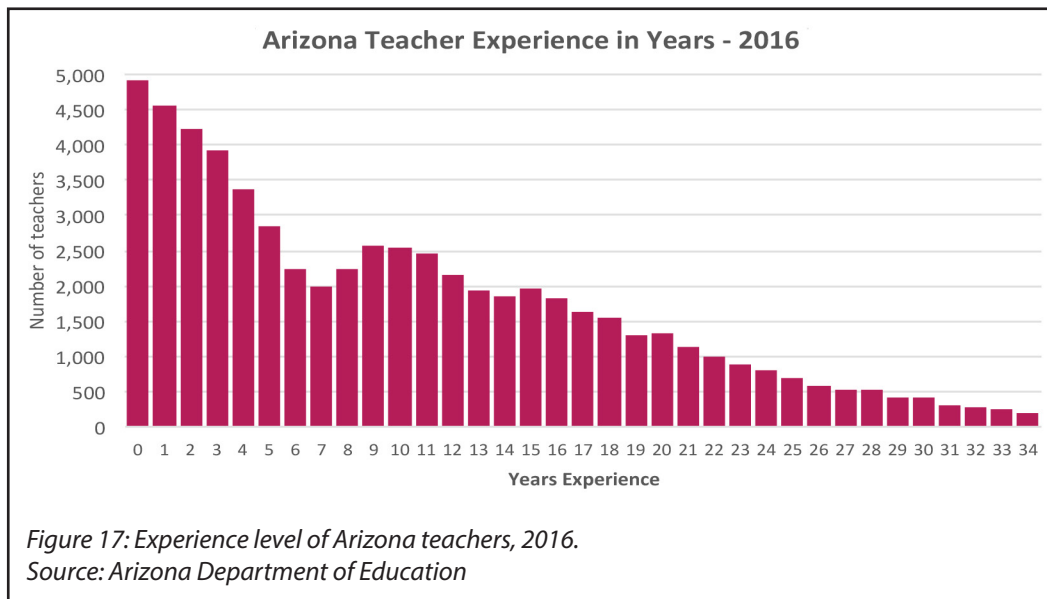
Data from the Arizona Department of Education shows that since 2013, 42 percent of Arizona teachers left three years or less after being hired. Charter schools had a significantly higher attrition rate at 52 percent over that period. Rural counties (44 percent) lost more teachers than urban counties (41 percent). Turnover in Cochise County schools was 55 percent, while Graham County showed a comparatively modest three-year turnover rate of 32 percent.²³

Why do you think teacher recruitment and retention have been an issue in your district? "Increased accountability, without an increase in salary to match that requirement."

– Interview with school superintendent

On a year-by-year basis, an average of 22 percent of the teachers hired in 2013, 2014 and 2015 lasted only one year in the profession. Rural counties (24 percent) and charter schools (22 percent) had higher turnover rates. Data also show that men (23 percent) are somewhat more likely than women (21 percent) to leave teaching after their first year. African American (28 percent) and Native American (29 percent) teachers also were more likely to leave after a year than their peers.

In Arizona, over one-third of the state's teachers have been in the classroom four years or less (Figure 17). Over one-third of the administrators in the online survey reported that at least one teacher did not report for work at the start of the school year in their school or LEA.



The high degree of teacher turnover has a side effect of keeping Arizona's educational expenditures low. When an experienced teacher leaves a school, the teacher hired as a replacement will likely be brought in at the bottom of the pay scale. All things being equal, a district full of veteran teachers will have much higher labor costs than one staffed with novices.

Millennials and the First Career

A significant portion of people entering the education profession straight out of college may view teaching as a "first career." Especially if teaching credentials are secured through alternative means, many entering the profession view it as short term, or view the profession as a steppingstone to something else within education or unrelated to education. Past generations were content to spend their entire working lives in one career, but now it has become common for people to have several varied occupations throughout their work life.

Teaching may have seemed like an attractive career at the start of their college studies, but the realities of the classroom are often a shock even to new teachers who have spent four years at a university training for the job. Furthermore, if teachers see that their pay and opportunities for advancement have stagnated, they may be tempted to switch careers, especially if there are opportunities in other fields.

A report from Gallup suggests that 21 percent of all workers born between 1980 and 1996 have changed jobs in the past year.²⁴ This is very nearly the one-year turnover rate found in the data from Arizona Department of Education. However, there's a key difference in these findings. The Gallup study looked at the entire millennial generation workforce. We know that two-thirds or more of that workforce do not have four-year degrees.



These non-degreed workers may freely bounce from one job to another, looking for the one that suits them best. A young worker might move from waiting tables to retail sales to selling insurance, for instance. If they don't have much in the way of training and the jobs that they are moving to do not require much in the way of credentials, they can move from one job to another with ease.

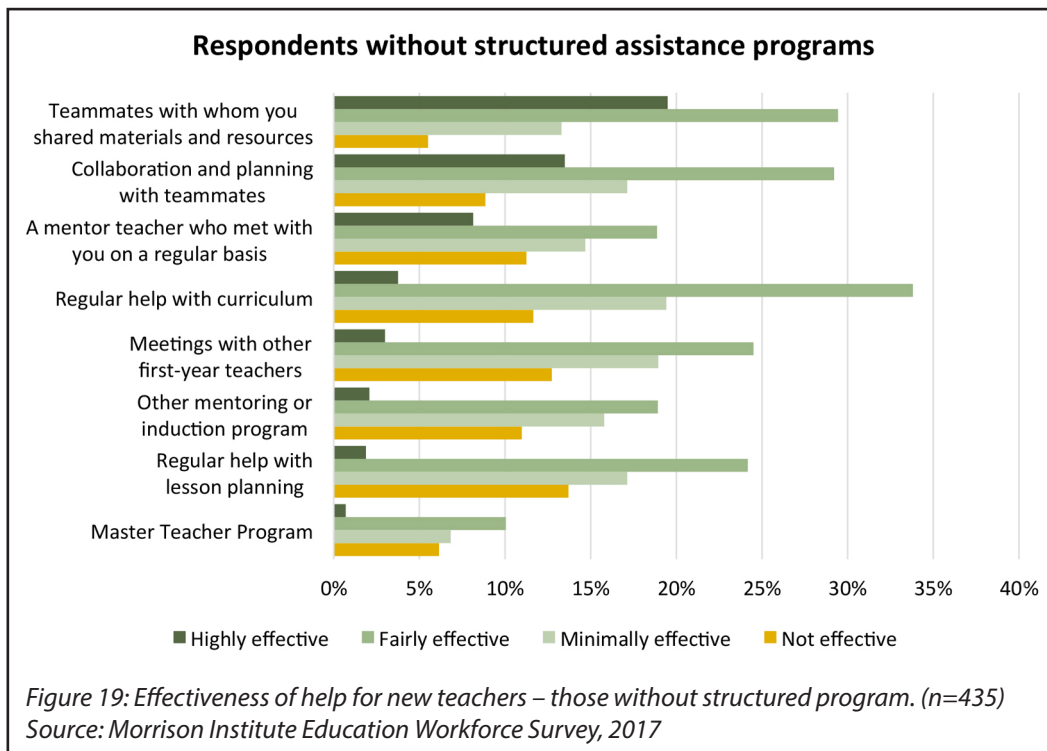
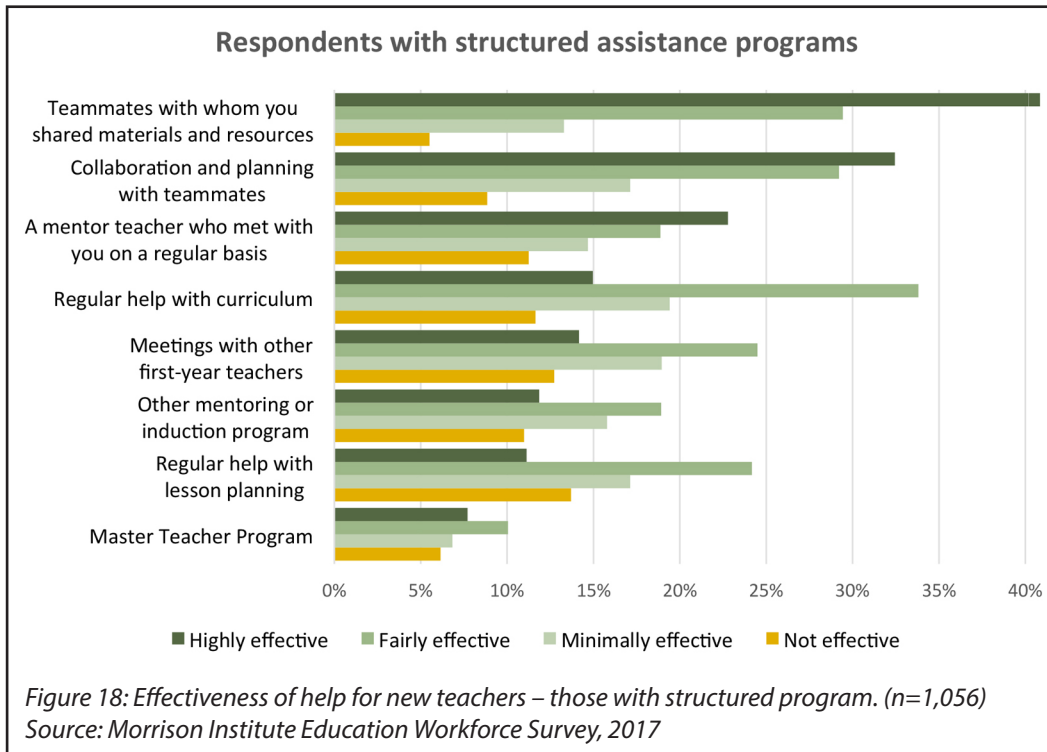
The millennial teachers are in a different position. They already have completed four years of higher education to become certified to teach. Their bachelor's degrees will be of some help in securing a career outside of teaching, but leaving the field still means that they've invested four years of education for just one year of employment in their chosen field.

"Teaching in general is a challenging, yet exceptionally rewarding job if you love kids. It takes a remarkable skill set to do well. The problem is that people who have that skill set also have the skill set to be tremendously successful in any industry, and most industries that require a college degree reward their employees much better than we do."

– Interview with school superintendent

Retention of teachers in the classroom may be significantly improved if they are given adequate support and guidance early in their employment. Teachers who had been in a structured professional development program at the start of their current job were more likely to report being satisfied with their careers by a small but statistically significant margin. Likewise, those who were not part of such a program were more likely to state on the survey that they are unsatisfied with their careers.

When asked to rate the availability and effectiveness of programs that were available to teachers when they began their current jobs, those who participated in structured programs were more likely to rate a variety of strategies as highly effective. All teachers rated programs that involve working closely with others as the most effective in transitioning to a new job (Figure 18, Figure 19).



Themes From The Classroom

“Teacher retention requires a balance of workload, pay, and respect for the profession.”

– Survey response from a rural Arizona elementary teacher

Analysis of hours of focus groups and interviews and thousands of survey responses reveals four prominent recurring themes. These themes may play out differently from one school to the next and present themselves differently in rural versus urban areas. But four topics were raised over and over across the course of this study:

- **Pay** – The numbers don’t lie and Arizona’s teachers are feeling the pain.
- **Workload** – Demands for accountability and ever-greater responsibilities in and out of the classroom are an increasing burden.
- **Support** – Teachers need support from their colleagues, school administrators, parents and government if they are to succeed and be satisfied in their careers.
- **Passion** – Arizona’s teachers want to be the best they can be for their students. They are committed to their careers and devoted to their calling as educators.

“My love for teaching is steadily diminishing because of the workload and lack of pay/support.”

– Survey response from Early Childhood Special Education teacher

None of these factors by itself is enough to either attract a new teacher into the field or drive an experienced one from the classroom. But they can come together in ways that can either create a satisfying, long-term career or finish it before it really gets started.

Teachers have been willing to accept a somewhat lower salary in exchange for doing something they love in a stable work environment where they are valued and respected. This has been the model for decades. But what happens if the pay doesn’t keep up with inflation? If parents and administrators constantly second guess classroom decisions? If teachers are asked to perform extra duties in the name of accountability or efficiency?

“People truly don’t understand what it means to be a teacher, and how hard the work truly is.”

– Survey response from elementary teacher

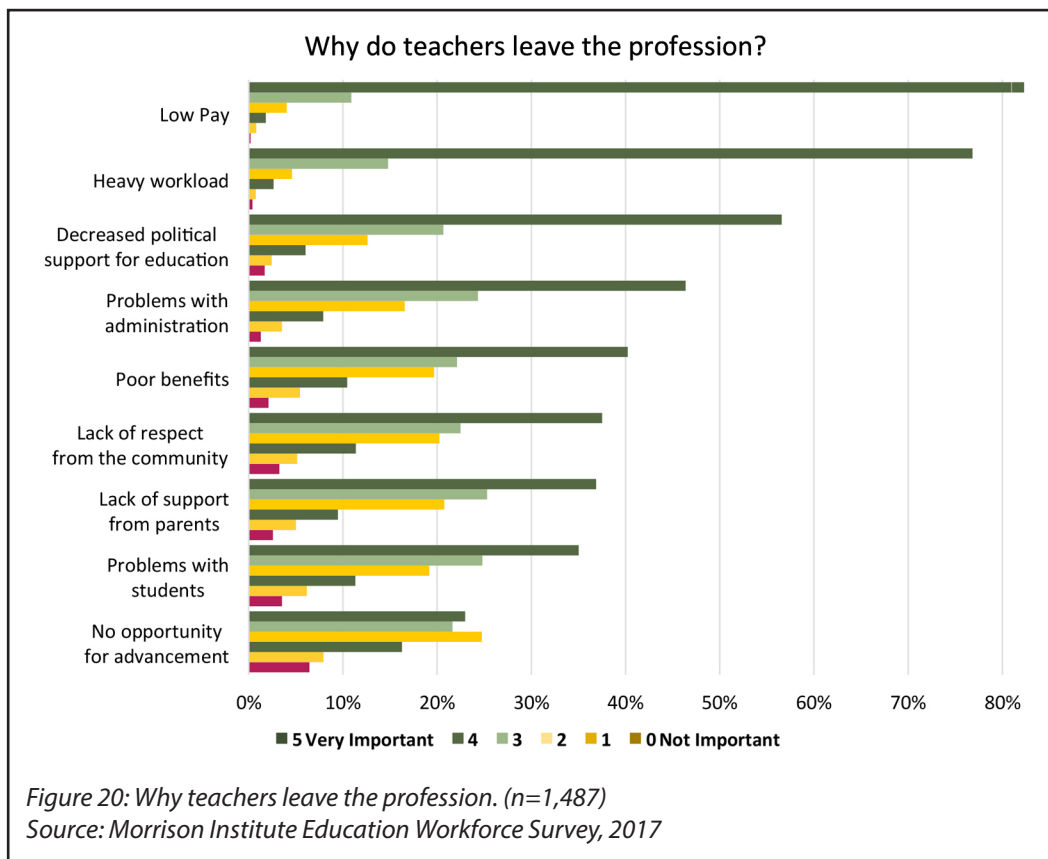
There comes a point at which the equation doesn’t balance anymore. Each of these themes has the potential to either attract or repel teachers from the profession, depending upon choices that are made in the future.

Professional Pay

“I don’t do it for the money, but I’d sure like more.”

– Charter school teacher in focus group

Low pay is a major factor that prevents people from entering the teaching profession and eventually may drive them from it. There are certainly other factors at work, but without some attention to this issue, real progress will be unlikely. Teachers are simply doing the math: There is a sense that the pay has eroded to the point where the salary no longer can support a family. Low pay was cited as the primary reason teachers leave the profession (Figure 20).



“The pay is extremely minimal, so much so that I can hardly afford living in a small apartment and paying my bills, including student loans.”

– Survey response from Tucson elementary school teacher

Younger teachers may feel especially squeezed, trapped between student loan debt tied to steep increases in university tuition over the last decade, and low salaries with little prospect for meaningful pay raises in the future.

“Pay must increase to retain quality faculty. I am forced to work two jobs and summer school to make ends meet. This is on top of the heavy workload, rude parents and indifferent community. I am always exhausted, regularly frustrated and perpetually worried about my finances, my future and retirement. I love the idea of giving back to the community and engaging my students. But the cost to my personal life is high. I hold a master’s degree from a highly selective university and have been teaching 10 years. It does not get better with time.”

– Charter high school teacher in an online survey

Historically, teachers have accepted modest starting pay with the unspoken agreement that in return they would receive good employee benefits, predictable salary increases for experience and education, and time off over the summer. This arrangement allowed generations of teachers to buy homes, start families and live a middle-class lifestyle. That bargain has changed. In light of decreasing funding from both state and local sources, Arizona schools have had to alter salary schedules, reduce benefits and ask teachers to do more with less.

There was a sense from many teachers that the low pay they receive, especially when compared to other professions that require similar levels of education, is not commensurate with what is being asked of them. In the rest of the workforce, those with four-year and advanced degrees are well compensated, but educators are paid not much more than low-skill workers.

“I barely found a place that I can afford, and I’m still going to beg my mom to put food in my fridge because the pay I get for two weeks is \$75 more than my rent.”

– Rural teacher in focus group discussion


Although higher pay is a priority for teachers, it is an oversimplification to say that pay and pay alone will reduce turnover and attract new teachers to the profession. Pay is just one of four factors that shape how teachers feel about their careers and how likely they are to remain in the profession.

Increasing Workload

“More and more is added to my workload and nothing is taken off for the same pay.”

– Survey response from rural elementary teacher

The gradual increase in accountability and responsibility expected of teachers is taking its toll. Often what little pay increases are available are tied to student test scores, adding to the pressure to perform. As districts have economized on administrative and support staff, teachers are being asked to spend more time on non-classroom chores such as lunchroom duty. The necessity of increasing test scores may mean after-school tutoring sessions, and financially strapped teachers may make a little extra money coaching the tennis team. It all adds up to increasing demands on time and attention. These extra demands often take teachers



away from their classrooms and students – the very things that attracted them to the profession in the first place.

Efforts to move money into the classroom from administrative and support services may have the unintended effect of increasing the workload on teachers. If an assistant principal in charge of tracking attendance is let go so that his salary can go directly to classroom expense, his duties will likely get parceled out to teachers, further increasing their workload as they now fill out attendance reports. Similarly, removing librarians from the system may transfer their duties to classroom teachers.

“People can deal with stress and rigor in any job if they feel that they are being fairly compensated. If they don’t, they look elsewhere because no matter how much you love what you do, you have to be able to survive financially.”

– Survey response from elementary school teacher

Teachers have no illusions about their jobs ever being cushy and relaxing. They know full well that they’ve committed to a career that demands a lot of them. Good teachers expect to be fully engaged in the education of their students and they realize that will require hard work, but there’s a sense that the workload has become crushing and unsustainable.

“While an increase in pay would help, I feel a lighter workload and more respect from the community, students, and political leaders would be more beneficial.”

– Survey response from rural elementary teacher

Support for the Work

“We’re always caught in the crosshairs of political debate about what to do about our money. And Governor Ducey threw a bunch of money at teachers last week, but it boils down to \$15 a month.”

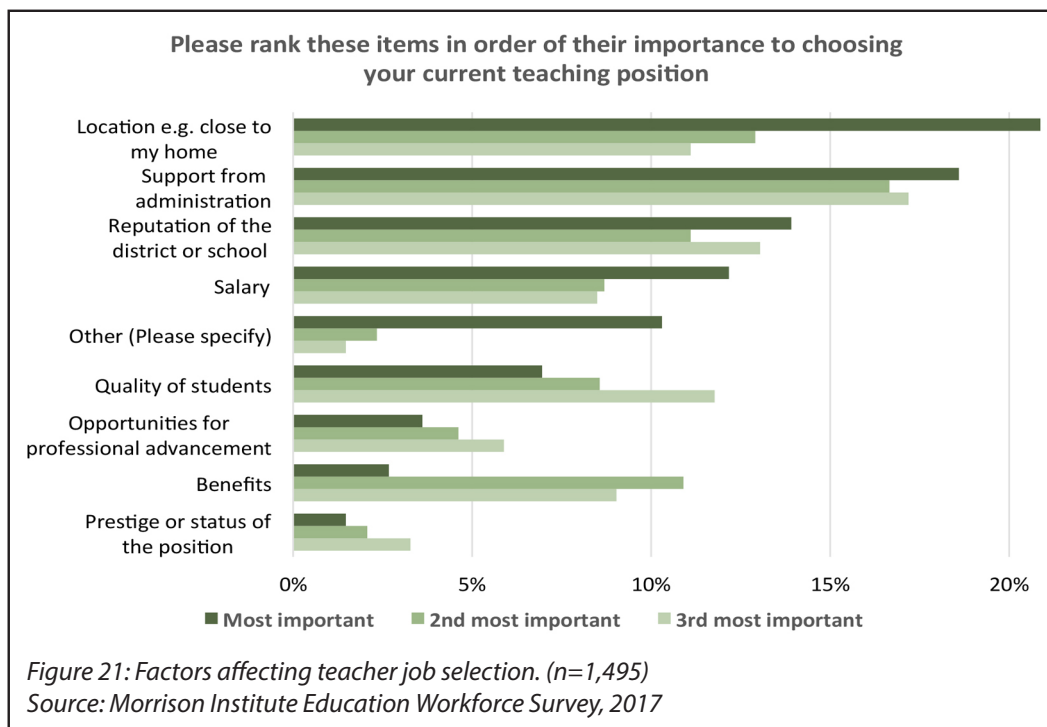
–Focus group discussion with elementary school teacher

Today’s classroom teachers can feel pressed on all sides. Parents and children may treat them like hired help instead of professionals. School administrators are concerned with meeting their budgets and accountability goals. And over all of that looms a state government that vows educational support, but as yet haven’t been committed enough to increasing funding at a level to make a significant difference.

“Education is talked about so negatively in Arizona and it starts at the top. The legislature constantly tells the public what a failed system we have, yet the schools I see are absolutely amazing. The public perception is wrong. The media portrays schools as failing our kids. No one is failing our kids.”

– Survey response from metro Phoenix teacher

Support from school administration was frequently cited as a key to teacher satisfaction. Principals that are seen as allies rather than paper-pushing adversaries were often mentioned as essential to job satisfaction. The presence of a strong social network and supportive administrators has been shown to protect against teacher burnout and teachers quitting the profession.²⁵ Over half of survey respondents (52 percent) cited support from administration as one of the top three considerations when choosing a teaching job. (Figure 21).



New teachers need ongoing, job embedded, professional development and mentoring support since lack of assistance and supportive teaching conditions are the most common reasons teacher leave schools or the profession as a whole. These issues are magnified in schools with high poverty rates, and a large number of English Language Learner (ELL) students.²⁶

“We try to provide health benefits and the best leadership possible. A strong support staff such as the superintendent and for sure principals really helps support and nurture teachers and that increases the likelihood that teachers will stay.”

– Interview with rural school board member

When asked what can be done to keep young teachers in the profession, veteran teachers were nearly universal in their recommendations for support from administrators and fellow teachers to get them through the difficult first few years in the classroom. University education programs have made efforts to get education majors in front of the classroom early in their training, but nothing can replace the experience of being alone in a class full of students, solely responsible for them. The transition from college student to fully competent classroom teacher takes two or three years to complete. During that time it is essential to have caring and

supportive peers to rely on. This support is especially critical in disadvantaged schools where new teachers must deal with more difficult working conditions.²⁷

“I read the other day the governor’s budget rewards teachers like \$999 until 2022. That was almost like an insult. I thought, ‘You can’t be serious.’ It made it sound like a reward, when you’re thinking, ‘How demeaning can that sound?’”

– Focus group discussion with rural high school teacher

Parents also form a crucial part of the support network for teachers. When parents call, angry about the grades of their children or questioning a disciplinary action, there often is a presumption that the teacher is at fault. When teachers come to view parents as adversaries rather than collaborators in education, their workplace becomes very difficult. And things get worse when parents view teachers not as skilled professionals like the family doctor, but rather as simple personal service providers like their barber.

Teaching, once viewed as an honorable profession, has come to be seen as a career of last resort for those just smart enough to get into a state university, but not clever or ambitious enough to make it through business or engineering school. Teachers care deeply about their work and expect to be treated like the professionals they are.

“I didn’t really feel like I was prepared for everything, the onslaught of things in the classroom. I mean, no one showed you how to use the grade book. No one shows you how to run the copy machine and things like that. So you’ve got 150 kids, plus the time management and all these new forms and everything like that. So I felt like I was ready to go, and then found out the truth. So in that, it was very difficult, I think, the first couple years.”

– Focus group comments from veteran Phoenix teacher

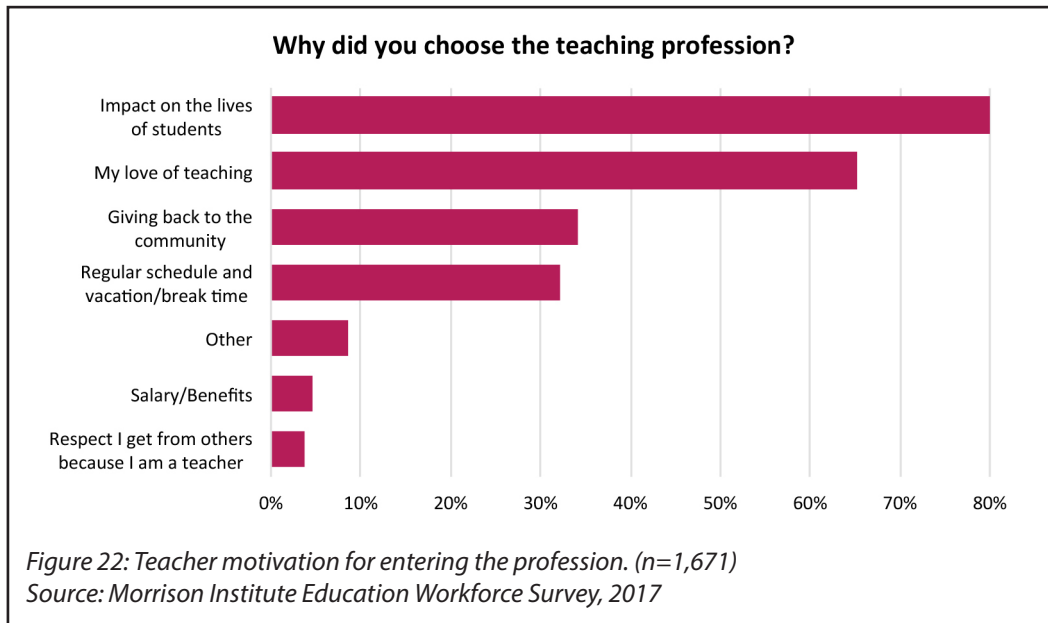
Finally, teachers say that government and business leaders have little respect for their work. They have heard promises to support education for years, but have come to realize that there is no real commitment of resources to make any real change.

Passion For The Profession

“It’s not a job. You can’t see it as a job. Those are my kids. I’m invested in everything about them.”

– Teacher in focus group

Teaching is not a transactional profession where workers punch a clock in the morning and leave the cares of work behind when they head home eight hours later. The top reasons for entering the teaching profession are “impact on the lives of students” and “love of teaching” (Figure 22).



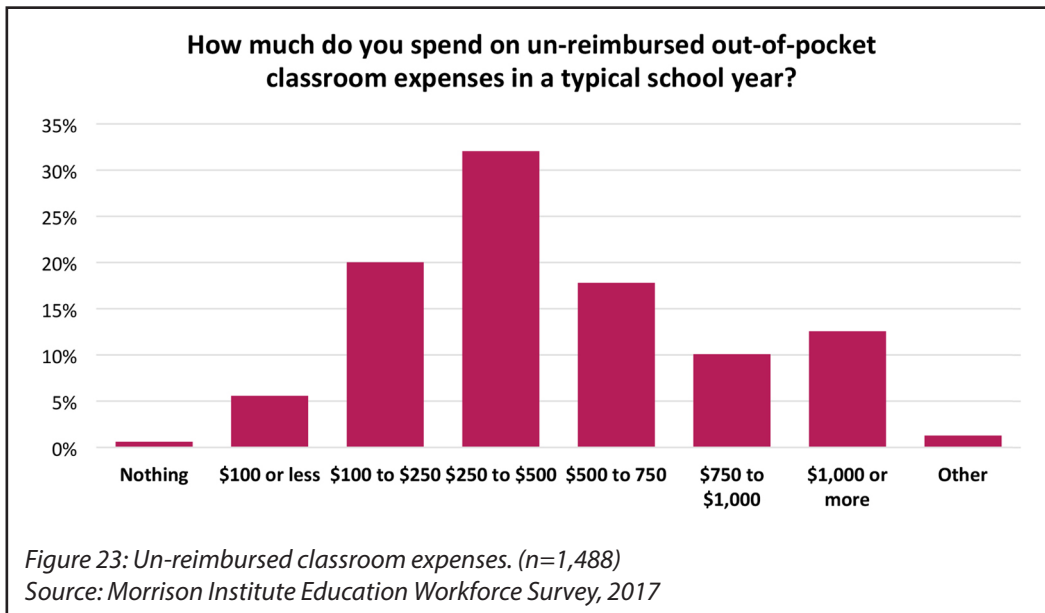
“I love to see students and teachers grow and succeed. It’s a calling.”
– Survey response from rural Special Education teacher.

Successful teachers view the profession as a calling, not just a job. They will freely admit that there is a percentage of teachers who no longer have their heart in the task and aren’t performing as well as they should be. They’ll also acknowledge that when there is a shortage of teachers, schools may have to hire whoever they can get and hope for the best instead of holding out for a star who is truly committed to the profession.

“Even though we technically have summers ‘off,’ we work on school work all through summer, and during the school year we work evenings and at least 8 hours of lesson planning and grading every weekend! We are highly educated, and carry a tremendous load of responsibility on our shoulders. We love what we do, but also have families to support and deserve to be compensated for the amount of our workload and level of responsibility.”
– Survey response from elementary school teacher

The passion for education and helping youth helps these successful teachers weather the many difficulties of the job. Many talked of wanting to be a teacher since early childhood but also of growing weary putting up with low pay and long hours for the sake of their students.

“People leave because of the stress and pressure. I know there are times I have thought, ‘I don’t make enough to deal with this!’ Increased compensation is merited when a profession like this entails so much stress, pressure, and responsibility with SO FEW RESOURCES!!”
– Survey response from elementary school teacher



When asked about young teachers leaving the profession early, veteran teachers often said that some people are just not cut out for the job. Despite years of education and progressive exposure to the classroom, many first-time teachers discover that the job requires more commitment than they can muster. It's not a job with regular hours and long, lazy summers off.

“Teachers long for the opportunities to teach students and impact their year, however with insufficient salaries and benefits, and severe student behaviors in the class this becomes much more difficult. Teacher’s passion for what they do is slowly chipped away due to the lack external and internal reward system.”

– Survey response from elementary school teacher

Best Practices

Arizona's school systems and civic institutions are well aware of the challenges facing the profession and what they mean for the future of education in the state. They have been working for years to solve the riddle of how to provide students with a solid education in an environment of scarce resources. There is no easy cure-all for the difficulties of teacher attraction and retention. But districts and non-profit organizations throughout the state have come up with innovative programs to cope. Below are a few examples of ideas that hold the promise of being part of the solution:

National Board Certification

There are over 1,200 National Board Certified Teachers (NBCT) in Arizona. National Board Certification is a national program that allows educators to earn an advanced teaching certificate above and beyond the standard state license. To earn this credential teachers must demonstrate, over a three year program, their knowledge of their content area and document their effectiveness in the classroom. Studies indicate the presence of NBCTs has a measurable impact on schools. The Arizona K-12 Center supports teachers seeking this advanced credential in Arizona. Districts often offer salary bonuses to Board-certified teachers.

Mentoring

The Arizona K-12 Center also leads the Arizona Master Teacher program that assigns experienced teachers to act as mentors to teachers in their first three years of teaching and coaches for experienced teachers in Language Arts and Mathematics. There are nearly 300 Master Teachers in districts throughout the state. The Arizona K-12 center trains master teachers through mentor academies and mentor forums to build their capacity as leaders. They also provide funding to schools to create or support an existing program.

Many individual districts also operate their own mentoring and induction programs, such as the one offered by Tucson Unified School District (TUSD). The TUSD Induction/Mentoring Program includes a four-day orientation program for newly hired teachers, an assigned mentor teacher, and professional development seminars throughout the first two years of employment. The Sahuarita teaching fellows program, is a partnership with the Sahuarita Unified School District and the University of Arizona. Their program helps college students and classified employees from Sahuarita complete their teaching degrees with financial support and mentoring. Prospective teachers can receive up to \$4,800 for completing their teaching certification and teaching in a Sahuarita school for three years.

Teacher Support

The Arizona Educational Foundation sponsors the Arizona Teacher of the Year program, which spotlights the contributions of outstanding public school leaders throughout the state. In addition to the Teacher of the year, five Semifinalists and five Ambassadors for Excellence are honored annually. These high-profile awards come with cash prizes of up to \$15,000.

Tucson Values Teachers (TVT) is a business and education partnership focused on moving southern Arizona beyond talking about the importance of education to taking concrete actions to attract, retain and support teachers. Encouraging a culture of admiration and respect for educators is seen as a key component of this. TVT honors local businesses and organizations that invest in education and also supports teachers with gift cards to purchase classroom supplies. They also run the teacher discount program where more than 90 local businesses offer discounts to teachers.

Recruiting and retaining Special Education teachers is especially difficult as indicated in Figure 14. The Teacher Retention Project provides support to Arizona Special Education teachers and also those considering a career in the field. The goal of this program is to help teachers make a long-term commitment to special education.

Next Steps

The difficulties with teacher attraction and retention didn't develop overnight, and it will take some time to remedy the problem. Those looking for a simple solution are likely to be disappointed. The problems facing the teaching profession are complex and don't lend themselves to a single, simple solution. Solving the teacher retention problem requires more than a simple tweak to policy. Meaningful change requires not only policy changes, but also the political will to make those changes and the resources to implement them. More subtly, societal changes in the attitude toward teachers are needed.

The four broad themes that arose from this study suggest some areas where improvements can begin to be made:

Pay – Increased salaries alone will neither solve the problems of teacher shortage nor dramatically increase student achievement. However, increasing teacher salaries is one area where policy makers could actually make a concrete change to the system.

Workload – Teacher workload is closely tied to pay. Reducing the load on a teacher means that someone else has to pick up those duties, which incurs additional expense. Also, plans to support teachers by directing funds away from administration and support services to the classroom may have the unintended effect of increasing workload. The duties now performed by assistant principals, librarians and others will be transferred to teachers if those positions are eliminated.

Support – Reinforcing the support system around teachers is a complex task. Devoting more resources to schools would allow for better mentoring of new teachers and free up administrators to help those in the classroom. A more difficult problem is addressing how teachers are viewed by parents, the community and political figures. These are societal changes that are much more difficult to engineer.

Passion – It is difficult to know what might inspire a passion for teaching in a bright, young student. For someone who has the potential to be an outstanding teacher, however, the decision to commit to the profession would be a lot easier to make if they could see that existing teachers are paid reasonably, have an appropriate workload, and receive the support they need to be successful.

It is likely that even if teacher salaries are not raised, reducing teacher turnover will increase educational expense. The constant churn of teachers through the classroom means that a large percentage of the state's teachers continue to be at the bottom of the pay scale. Any progress in improving retention rates will mean more experienced teachers in the system, getting paid higher salaries. Presumably, these will be more effective teachers who will be worth the extra expense, but there will be a cost associated with a higher percentage of veteran teachers in the classroom.

Teachers in the state have been doing a remarkable job under difficult conditions. Arizona is the only state to show significant gains in all areas of the National Assessment of Educational Progress. Those scores are still somewhat below average, but things are clearly headed in the right direction, despite chronically low funding. This success is due largely to incredible devotion to the work shown by Arizona's teachers – a devotion made clear in the interviews and survey reports compiled for this project.

Appendix: Methodology

This research has pulled together data from many sources:

- Federal data on labor markets and educational statistics.
- Employment data on 89,605 individual teachers who taught between 2012 and 2016. From Arizona Department of Education (ADE).
- An online Education Workforce Survey of over 300 Arizona school administrators and over 1,600 teachers from all areas of the state, including district and charter schools.
- Focus group discussions with top-performing teachers throughout the state.
- Interviews with superintendents and hiring managers around Arizona.

Morrison Institute for Public Policy, a statewide resource of Arizona State University, developed an online survey that registered a total of 2,093 responses. Teachers and administrators throughout the state were encouraged by email solicitations to complete the survey.

Expect More Arizona distributed the survey to its education partners representing schools across the state, education nonprofits whose focus is engaging and supporting educators (such as Tucson Values Teachers), and to other key stakeholders for distribution, including the Arizona Public Engagement Task Force, ADE's Educator Recruitment and Retention Task Force, and other groups. Expect More Arizona also asked the educators in its network to complete the survey and share it with their colleagues.

This survey does not represent a random sampling of teachers and administrators, but it does capture the sentiments of a large share of the Arizona education workforce. Respondents were presented with questions targeted to teachers, administrators, or both, depending upon their answers to questions about their qualifications.

Over 300 respondents identified as either school- or district-level administrators in the survey, with over 1,600 identified teachers. There was some overlap in these populations as administrators may also teach in the classroom. 160 respondents that could not be associated with either an Arizona school district or charter holder were dropped from the analysis.

Responses were received from all 15 Arizona counties and from 160 different school districts and charter holders. Charter schools made up 22 of the teacher responses and 36 of the administrator responses.

Arizona Department of Education Data

Morrison Institute for Public Policy signed a data agreement with Arizona Department of Education (ADE) to gain access to teacher-level data for the years 2012-2016. Data was drawn from the department's Teacher Input Application (TIA) form, formerly known as the Highly Qualified Teacher Application. This form is a requirement of the federal Every Student Succeeds Act (ESSA), and provides data for required reporting.

The dataset contains 428,188 records on 89,605 unique teachers in Arizona. This data represents nearly all teachers in traditional district and charter schools in the state. There are 190 traditional school districts represented in the data and 354 charter LEAs. These LEAs serve 98 percent of Arizona's K-12 students.

Below is a summary of the five year dataset, showing its distribution across charter and district schools, and the highest level of education listed.

Summary of Data from Arizona Department of Education										
	LEAs	Count of Unique Teachers	Has 2012 Data	Has 2013 Data	Has 2014 Data	Has 2015 Data	Has 2016 Data	No Deg Listed	Bach	Masters or Doc
Elementary	75	20,515	11,727	13,432	13,971	14,130	14,112	228	14,673	5,614
High School	15	6,873	4,208	5,157	5,193	5,210	5,114	188	4,344	2,341
Unified	100	47,988	29,431	34,520	34,589	34,300	33,948	954	32,274	14,760
<i>Subtotal Dists.</i>	<i>190</i>	<i>75,376</i>	<i>45,366</i>	<i>53,109</i>	<i>53,753</i>	<i>53,640</i>	<i>53,174</i>	<i>1,370</i>	<i>51,291</i>	<i>22,715</i>
Charter	354	13,296	5,125	6,710	7,643	8,267	8,746	3,712	7,032	2,552
Other	17	933	408	545	619	501	459	142	415	376
Grand Total	561	89,605	50,899	60,364	62,015	62,408	62,379	5,224	58,738	25,643

Teachers first appearing in the data in 2013 were assumed to be new hires to the system. Their unique identification numbers were tracked across the years to observe the flow into and out of the public school system.

Teachers Entering the Database in 2013										
	LEAs	New Teachers To db,2013	Exited db,2014	Exited db,2015	Exited db,2016	Total Exits	% Left 2013-2016	No Deg Listed	Bach	Masters or Doc
Elementary	65	3,258	686	367	361	1,414	43%	33	2,120	1,105
High School	15	1,346	192	133	116	441	33%	71	714	561
Unified	95	8,460	1,519	992	867	3,378	40%	298	4,887	3,275
<i>Subtotal Dists.</i>	<i>175</i>	<i>13,064</i>	<i>2,397</i>	<i>1,492</i>	<i>1,344</i>	<i>5,233</i>	<i>40%</i>	<i>402</i>	<i>7,721</i>	<i>4,941</i>
Charter	302	2,532	602	370	340	1,311	52%	725	1,321	486
Other	15	237	55	77	36	168	71%	32	93	112
Grand Total	492	15,833	3,054	1,939	1,720	6,713	42%	1,159	9,135	5,539

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End Notes

¹ This study used Arizona Department of Education (ADE) data from the Teacher Input Application (TIA), formerly the Highly Qualified Teacher Application, for FY 2012-16. The TIA database, maintained by ADE, represents self-reported data submitted by public charters and districts. These data do not contain information about where teachers were employed after leaving the TIA database. While extensive, the data is more complete for districts schools, and less complete for charter schools.

² Arizona School Personnel Administrators Association data.

³ Arizona Department of Education, p 3.

⁴ Darling-Hammond & Sykes, p 17.

⁵ Darling-Hammond & Sykes, p 17, Ronfeldt, Loeb, & Wyckoff, p 7-8 & 24.

⁶ Watt, p 13-18.

⁷ 2014 Public Elementary–Secondary Education Finance Data, State-level tables, Table 6.

<http://www.census.gov/govs/school/>

⁸ 2014 Public Elementary–Secondary Education Finance Data, State-level tables, Table 11.

<http://www.census.gov/govs/school/>

⁹ 2014 Public Elementary–Secondary Education Finance Data, State-level tables, Table 11.

<http://www.census.gov/govs/school/>

¹⁰ Bureau of Labor Statistics and Bureau of Economic Analysis.

¹¹ Richwine & Biggs, 2011, p 12.

¹² MetLife Surveys, 2010 & 2013.

¹³ Thibodeaux, p 228.

¹⁴ Goodpaster, Adedokun & Weaver, pp 3,20.

¹⁵ Guarino, Brown, & Wyse, p 974.

¹⁶ Woolley, Kol, & Bowen, p 66.

¹⁷ Woolley, Kol, & Bowen, p 67.

¹⁸ Guarino, Brown, & Wyse, pp 964.

¹⁹ Guarino, Brown, & Wyse, pp 962-3.

²⁰ Darling-Hammond & Sykes, p 21.

²¹ Kraft, et al, p 755.

²² Baker-Doyle p 3 and Rinke p 13.

²³ This study used Arizona Department of Education (ADE) data from the Teacher Input Application (TIA), formerly the Highly Qualified Teacher Application, for FY 2012-16. The TIA database, maintained by ADE, represents self-reported data submitted by public charters and districts. These data do not contain information about where teachers were employed after leaving the TIA database. While extensive, the data is more complete for districts schools, and less complete for charter schools.

²⁴ Gallup, p 8.

²⁵ Baker-Doyle p 7-8.

²⁶ Arizona Department of Education, p 4.

²⁷ Darling-Hammond & Sykes, p 21.



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