

Utah Educators

Election Brief

The Kem C. Gardner Policy Institute in Spring 2016 convened focus groups to identify important issues in the 2016 election. Supporting and valuing the educator workforce was identified as an important topic. This Election Brief provides a concise analysis of many of the critical issues associated with Utah educators so that voters, candidates, and ultimately, elected officials can make informed decisions.

Summary

Educators are at the foundational core of all levels of education and a primary factor in student achievement. With a continuously increasing student population, Utah is experiencing growing demand for educators amidst widespread concern of an impending teacher shortage. It is critical to both recruit and retain highly-qualified individuals to lead our schools and classrooms. In order to be successful, educators must have access to a variety of support factors, which

influence their satisfaction and retention. These supports include effective leadership at all levels, developing teachers through a robust induction program, meaningful mentoring, ongoing professional learning and opportunities for growth, manageable working conditions in schools, and compensation that is competitive with other professions. This election brief is a review of the importance of educators, the supports they need, and potential policy solutions.

The Kem C. Gardner Policy Institute and Hinckley Institute of Politics, in partnership with the Deseret News and KSL, are pleased to present INFORMED DECISIONS 2016, a series of election products and events that will help voters make informed choices in 2016.

This year promises to be a banner election year in Utah. The state will elect a governor, four U.S. congressmen/women, a U.S. senator, and nearly 90 percent of the Utah Legislature, as well as many other state and local officials. INFORMED DECISIONS 2016 will help voters navigate this important election year with analysis of critical issues impacting our state. It will also provide candidates with an opportunity to explain their views on these and other issues.

Major components of INFORMED DECISIONS 2016

Focus Groups

The Gardner Policy Institute convened focus groups drawn from the general public and issue experts in urban and rural Utah to identify important issues and potential policy options. These snapshots provide a summary of the focus group discussions.

Election Briefs

Analysts from the Gardner Policy Institute, Hinckley Institute, and the Utah Education Policy Center have prepared policy briefs on the major issues identified in the focus groups. These briefs include information on why the issue is important, an analysis of key topics, and potential policy options for consideration. Election Briefs will be released in Fall 2016.

Candidate Conversations

The Hinckley Institute, in collaboration with our media partners at the Deseret News and KSL, will lead a series of Candidate Conversations on targeted races. These forums will be hosted "town-hall style," similar to the CNN Town Hall format hosted by Anderson Cooper in the presidential elections. The Candidate Conversations will be hosted at the Gardner Policy Institute and the Hinckley Institute. The first of these conversations was in June 2016 prior to the primary election. Later conversations will follow in October 2016.

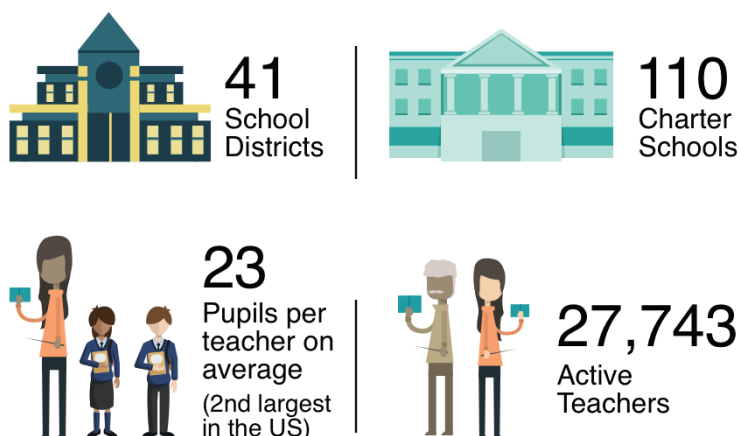
Election Brief

Utah is a recognized leader in several policy areas that contribute to a robust economy. The state is regularly acknowledged as a leader in the areas of business and transportation planning and coordination.^{1,2} When many states grappled with unfunded retirement liabilities in their public pension systems, Utah preemptively addressed the issue with a fiscally prudent yet aggressive overhaul of its retirement and post-retirement benefits.³ Similar proactive leadership can be applied to the state's education system. In recent years, stakeholders have joined the efforts of educators to make Utah a recognized leader in education as well. These efforts have led to increased interest and initiatives focused on strengthening educators in the state. This election brief provides a summary regarding educators and their importance to our state, needed supports for educators, and potential policy considerations.

Importance and Impact of Educators on Student Learning

Educators are at the foundational core of all levels of education. Teachers matter more to student achievement than any other factor in the school. State statute in Utah, which establishes teacher licensing, recognizes the importance of teachers: "Quality teaching is the basic building block of successful schools and, outside of home and family circumstances, the essential component of student achievement."⁴

Many factors contribute to a student's academic performance and growth. Evidence consistently demonstrates that highly-qualified and competent teachers and leaders in a school greatly affect the achievement and educational outcomes for students at all levels.⁵ Moreover, research suggests that among all school-related factors, teachers are the most critical for predicting student outcomes.⁶ In particular, both a teacher's content expertise and pedagogical skills, or how they teach, make significant differences in student achievement.⁷



Source: State Board of Education

Indeed, teachers are largely responsible for creating conditions in the classroom for students to engage in learning, which also has been directly linked to student outcomes.⁸

There has been a negative dialogue and tone prevalent in media headlines across the country, decrying the state of education and educators in America.⁹ Given educators' preeminent role in improving schools and student learning, it is critical to see beyond the current rhetoric to invest in teachers.

Educators in Utah

In 2015, Utah had over 27,000 teachers in its classrooms. Between 2010 and 2015, there was a 9 percent increase in classroom teachers in Utah, which was slightly less than the student enrollment growth (10 percent) over the same time period.¹⁰ Teachers face some challenging working conditions. In the fall of 2013, Utah had the 2nd largest pupil to teacher ratio at 23 pupils per teacher on average, compared to a national average of 16.¹¹ Because this statistic is a state-wide average, it does not indicate the number of classrooms in which a teacher may be teaching a much larger or smaller class size.

Additionally, teachers across the country are facing challenging salary conditions. In 2015, the national average starting salary for college graduates with a bachelor's degree was estimated to be \$50,000, while the starting salary for those in education was projected to be only \$34,891.¹²

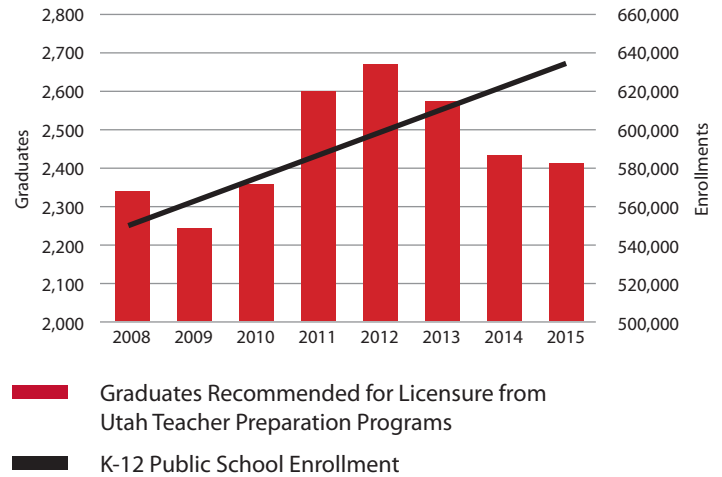
Relatively large class sizes and low teacher pay reflect the fact that Utah has one of the highest numbers of young children per capita and spends the least dollars per pupil.¹³

National Average Starting Salary for College Class of 2015



Source: National Association of Colleges and Employers (2015). Salary Survey 2015.

Increasing Imbalance between Student Enrollment and Potential Teachers








Source: State Board of Education

Teacher Demand and Teacher Shortages

Ongoing teacher demand in Utah is largely driven by a growing student population. Utah has experienced significant population growth and saw the fastest growing student population of any of the states in recent years, reaching over 633,000 in 2015.¹⁴ In Utah and many other states across the country, impending teacher shortages are widely reported and discussed. While Utah's student population continues to steadily increase, the state is experiencing declines in enrollments and graduates from teacher preparation programs, indicating the potential risk of greater teacher shortages in the future. At this time, there is insufficient empirical evidence to explore precisely what is causing the teacher shortage in Utah; data are unavailable on the supply and demand of educators and the reasons individuals do not enter or choose to leave the profession.

Persistent Shortages. Teacher shortages at the state level are difficult to quantify without uniformly-collected data on teacher supply and demand. While the total number of teachers available in a state may be numerically sufficient to cover the demand statewide, there are specific geographic areas in the state and specific disciplines that routinely experience greater teacher shortages than others. Teachers in special education, speech language pathology, mathematics, some foreign languages, and certain disciplines of science tend to be in higher demand than other types of

Persistent Teacher Shortages in Utah: 2011-2016

Chemistry & Physics	
Mathematics (Level 4)	
Foreign Language (Chinese & Dual Immersion)	
Special Education	
Speech Language Pathology	

Source: US Dept. of Education. Teacher Shortage Areas Nationwide Listing 1990-1991 through 2015-2016

teachers. Labor market forces are sometimes a factor in these persistent shortages. For example, often an individual with a degree and skill set in mathematics or science can earn a higher salary outside of teaching, making it hard for schools to attract them.

Educator Preparation in Utah

Teachers. Teachers in Utah's public schools are typically licensed by the State Board of Education and employed by a school district or charter school. The majority of teachers complete a state-approved teacher preparation program and pass a standardized pedagogy and content exam. Currently, there is an ongoing debate about how best to meet future supply of teachers (through traditional and alternative preparation programs), and how to identify the necessary skills of a qualified educator.

In 2016, the Utah State Board of Education added an additional option for teacher licensure to allow local education agencies (e.g., districts or charter schools) to hire individuals who do not have a traditional preparation background or who haven't completed the state's Alternative Route to Licensure (ARL) program.¹⁵ This option has created tension for educators and stakeholders alike who seek the most qualified and highest quality educators for students.

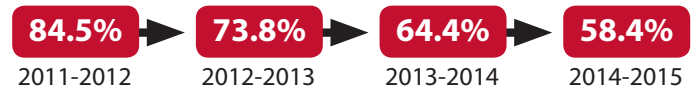
Leaders. The Utah State Board of Education grants an Education Leadership License Area of Concentration to individuals and also approves education leadership licensure preparation programs in the state. Generally, an applicant for the Education Leadership License Area of Concentration needs to have at least a master's degree, pass a Board-approved leadership test, and complete an approved education leadership preparation program. Local school districts and charter schools have the ability to designate which positions require this administrative credential and may allow individuals with professional experience and accomplishments to forgo the general requirements.

Educators in the Field: Retention

The idea of retaining educators should begin prior to their placement in the field. Improving retention begins with asking three essential questions: *what is necessary to recruit educators to the field?*; *what is necessary to retain educators in the field?*; and *what is necessary to provide support and growth in the field for educators?* An investment in educators along their career trajectories can yield greater returns within the workforce than we have seen historically.

Teacher Retention. High turnover among educators is a challenge in Utah, illustrated by data on the 2011 cohort of new teachers. Roughly 15 percent of Utah's teacher labor force who began teaching in 2011 did not return to a Utah classroom after the first year of teaching. The retention rates continued to decrease in subsequent years, and by the end of the 5th year in the classroom, roughly 40 percent of the 2011 teachers were no longer teaching in Utah classrooms.¹⁶ These rates are similar for previous cohorts of teachers analyzed by the State Board of Education. As in other industries, high turnover is expensive for employers who must constantly recruit and train employees to replace those that leave. In education however, this high turnover rate has implications beyond these costs. For instance, schools with high turnover rates often have a lack of instructional cohesion, which may negatively impact student achievement.

Retention of New Utah Teachers, 2010-11 Cohort



Source: Utah State Board of Education and Utah Education Policy Center

Principal Retention. Principal turnover may be desirable if it can result in a better match between the leader and the school, can facilitate the infusion of new ideas, or result in the dismissal of an ineffective principal.¹⁷ However, frequent principal turnover can have negative effects on students and their academic outcomes, and can result in high costs for recruitment and additional development to compensate for the lack of principal experience.¹⁸ Frequent principal turnover is associated with a loss of historical knowledge of the specific school culture and goals, lower teacher commitment, and increased teacher turnover.¹⁹ In particular, principal turnover is detrimental to low performing schools and schools serving high poverty populations because the schools may be less likely to attract and hire effective, qualified principals. Utah trends mirror national evidence that a greater percentage of charter school principals leave their positions than principals in traditional public schools. Additionally, Utah data further reflect the trend that these principals don't just change schools, they leave the profession all together.²⁰

Educators in the Field: Support

Educators, particularly new educators, need robust support from multiple levels and actors; this can result in improved practices, increased retention and satisfaction, and ultimately improved student outcomes. Educators are experiencing shifting demands and contexts, as well as changes in the students being served. Sometimes they lack adequate knowledge and skills to adapt to these shifting demands and changes as they advance throughout their careers. In Utah, data on educators' reasons for either leaving the field, or not entering to begin with, are not currently collected or reported consistently or in a centralized manner. However, a larger body of research indicates that the reasons educators leave include:

- insufficient salary
- frustration with increased and rapidly changing demands
- lack of a supportive professional environment and erosion of a culture that values high levels of trust and collaboration
- limited professional growth opportunities
- a political climate that can appear to blame teachers
- other occupational interests
- personal commitments or obligations

Important Factors for Support of Educators

In order to improve retention, a variety of supports may be needed, including higher-quality preparation programs, effective leadership at all levels of the education system, more robust induction programs, mentoring, ongoing professional learning and opportunities for growth, competitive compensation, and favorable school and working conditions (e.g., teacher decision making, collaboration, available resources to support instruction, and safety).



Effective Leadership at All Levels

School and district leaders are imperative to a school and to teacher success.²¹ Evidence indicates that a leader's influence on student outcomes is indirect. The leader establishes values and conditions (e.g., learning-centered school culture, high expectations for all, professional feedback for improving teaching and learning, acquiring needed resources) for effective teaching and learning to occur,²² including the recruitment and retention of quality teachers. Leaders also provide direction for coherent, long-term school improvement. Successive turnover among principals often results in negative effects on student outcomes.²³ Similar to teachers, recruitment and development of new principals becomes an added cost. Research indicates that in addition to inconsistencies in school goals, policy, and culture, teacher commitment and turnover may also be negatively impacted.²⁴

Induction, Mentoring, and Ongoing Professional Learning

Induction. Teacher induction, which is often designed to increase teacher retention, describes an ongoing, systematic support system provided to novice teachers in the early stages of their career, beginning before the first day of school and continuing throughout the first two or three years of teaching. Induction involves assisting beginning educators along a continuum of professional growth, orientation to the workplace, mentoring, and guidance through beginning teacher practice.

Often, our newest teachers are assigned to work in the hardest-to-staff schools, and in areas where students are most in need of an experienced teacher. The result has been an alarmingly high number of new teachers leaving the profession, particularly in the highest areas of need, long before completing their fifth year.²⁵ Schools and districts with comprehensive, years-long induction programs for new teachers and newly-hired teachers have less turnover and better prepared educators. A growing body of research demonstrates that implementing a quality comprehensive induction program is one of the most effective methods for retaining quality teachers and improving their instruction; such programs can cut teacher attrition rates by 50 percent.²⁶ It has been proven that programs that are less comprehensive, mentoring-only, or summer-only professional development, do not result in significant improvement of teacher effectiveness or student learning.

Beginning educators who participated in some kind of induction system performed better at various aspects of teaching, such as keeping students on-task and using effective student questioning practices, developing

workable lesson plans, adjusting classroom activities to meet students' interests, maintaining a positive classroom atmosphere, and demonstrating successful classroom management. Students of beginning teachers who participated in some kind of induction had higher scores, or gains, on academic achievement tests.

Mentoring. Mentoring is personal guidance provided by experienced teachers to beginning teachers. Mentoring can be a component of teacher induction. The overall objective is to provide new teachers a mentor to meet with for support, assistance, resources, information, and feedback. Mentoring programs may take many forms, ranging from informal systems with volunteer mentors, to formal, intensive models with highly trained mentors, and can involve one meeting or several throughout the school year.²⁷ High-quality mentor programs fully prepare mentors, provide common planning time, and pair first- and second-year teachers with mentors in similar grades and content areas.

Studies have shown positive effects of mentoring. Benefits of mentoring include reflective practice, psychological and emotional support, and collaboration. In some mentoring programs, beginning teachers with mentors from the same field were less likely to leave after their first year. Mentoring, in and of itself, is not enough. Just as orientation is only a small component of an overall structured induction process, mentoring is just one of many components of a successful induction program. Studies indicate that only providing a new teacher with a mentor without combining it with a rigorous induction program is less effective. Instructional coaching as a part of an overall mentoring program is the most effective approach.²⁸ Districts that strategically place teacher leaders who can be strong mentors in high needs schools are also not only more effective themselves, but produce more effective mentoring and induction outcomes for all teaching staff.

Professional Learning. As in other professions, it is important for educators to engage in professional learning opportunities. One-day professional development workshops and trainings that include receiving a lecture from a speaker, reading theory, and seeing a demonstration, are popular forms of professional development, but are not as effective as professional learning, which encompasses long-term, job-embedded practices, and build professional communities of practice.

Effective professional learning standards are based in research and present in the Utah Code.²⁹ For professional learning to ensure continuous improvement of practice that results in improved student learning, research evidence highlights the importance that it be job-embedded, content focused, linked to student learning needs, coherent, and

involve collective participation. This also involves analyzing student performance data, identifying targets to increase educator knowledge and skills, identifying results-based staff professional learning interventions aligned with target areas, designing and implementing professional learning interventions and evaluation, and providing ongoing support for implementation of new knowledge and skills.³⁰ The most effective support system involves a system of practice that includes peer and collegial coaching or mentoring.

Mentoring and Professional Learning in Utah. Similar to other educational circumstances in Utah, teacher induction, mentoring, and professional learning are locally-driven and vary throughout the state. For instance, Utah law requires a trained mentor be assigned to every provisional educator.³¹ The degree to which this requirement is funded and supported throughout the state can vary from a mentor occasionally checking in with a provisional teacher, to having a support system established that allows the mentor to observe, co-teach, model, and reflect with the provisional teacher on a regular basis. Moving from a mentor relationship that mostly exists on paper to a mentor relationship that is truly meaningful typically involves leadership support and funding. In order for a mentor teacher to leave the classroom and perform mentoring duties, it is necessary to fund another teacher, aide, or other teaching arrangement for the mentor's own class. Additionally, schools or districts can create new mentor teacher positions. There are numerous examples of good teaching and good mentoring going on in Utah classrooms, but not at the level needed to provide support for every new or experienced teacher who needs the support.

In 2002, the Utah Legislature began appropriating money for professional development of educators through Quality Teaching Block Grants awarded to local education agencies. During the recession years, this funding was cut, and the grant program has not received any funding since FY2009, when it was \$78 million.³²

Educator Salary

Evidence suggests that salary is an important factor in reducing attrition, particularly for experienced teachers, but also for beginning teachers.³³ As teachers gain more experience, low salary is one of the key reasons why they choose to leave the teaching profession. Teachers face a large salary gap compared with their peers in the workforce with similar levels of education. Recent analyses reiterate this point and also find that the gap has widened over the last few decades. Weekly wages in 2015 "were 17 percent lower than those of comparable workers—compared with

just 1.8 percent lower in 1994.”³⁴ In Utah, teachers receive 70 percent of the salaries paid to other bachelor’s degree recipients in the state. This gap is evident in early years, which is important to address if the state expects to attract high-quality candidates into the profession, but the gap is even more evident for senior teachers with more experience.

One of the reasons that the gap has widened is that overall, the salary for teachers has largely been stagnant since 1990, while other professions have seen increases. Additionally, the widening gap is influenced by the dominance of women in the field, and how we consider the value, prestige, and respect for the education workforce.³⁵

Policy Considerations

To support educators in the state and create a positive culture of collaboration, policymakers can continue to increase resources and contribute to a productive and positive climate for educators. Specifically, policymakers may consider:

- **Increasing Funding and Support for Professional Learning.** Increasing state support for professional learning opportunities for educators can ultimately result in better academic outcomes for students. This includes resources and time for educators to engage in job-embedded, regular (e.g., daily, weekly) professional learning and collaboration. It is also important to support other professional learning opportunities, including enhanced supports for new teacher and

leader induction and mentoring, instructional coaching, post graduate degrees, and endorsements.

- **Celebrating and Highlighting Educator Success.** Utahns are aware and concerned with the often negative dialogue involving educators and the teaching profession. By highlighting and recognizing educator successes, decision makers and stakeholders will contribute to a positive dialogue around educators in Utah.
- **Strengthening Educator Shortages Data.** Given that educator shortages differ by area of specialization, sometimes school type, or geographic location, systematic statewide data is needed on teacher shortages at the local level in order to guide future decisions. Additionally, to best understand the reasons why teachers are leaving, Utah could establish and administer a statewide survey to Utah educators that would help inform decisions.
- **Addressing Educator Salaries.** In order to attract and retain high-quality educators, increases in educator compensation levels will be needed in order to compete with other jobs that require similar amount of education and training.

Endnotes

- 1 CNBC. (2016). *America’s top states for business 2016: A scorecard on state economic climate*.
- 2 Kavinoky, J. Communication with Utah Education Policy Center 6/18/2016. Eno Center for Transportation, U.S. Chamber of Commerce. (n.d.). *Utah: What’s the secret sauce?* Washington, DC: Author.
- 3 McGuinn, P. (2014). *Pension politics: Public employee retirement system reform in four states*. Brown Center on Education Policy at the Brookings Institute.
- 4 Utah Code Subsection 53A-6-102(2)(a)(i).
- 5 Goldhaber, D., Lavery, L., & Theobald, R. (2015). Uneven playing field? Assessing the teacher quality gap between advantaged and disadvantaged students. *Educational Researcher*, 44(5), 293-307.
- 6 Darling-Hammond, L. (2010). *Evaluating teacher effectiveness: how teacher performance assessments can measure and improve teaching*. Washington, DC: Center for American Progress.
- 7 Kyriakides, L., Christoforou, C., & Charalambous, C. Y. (2013). What matters for student learning outcomes: A meta-analysis of studies exploring factors of effective teaching. *Teaching and Teacher Education*, 36, 143-152.; Muijs, D., & Reynolds, D. (2011). *Effective teaching: Evidence and practice*. London: Sage.
- 8 Stronge, J. H., Ward, T. J., & Grant, L. W. (2011). What makes good teachers good? A cross- case analysis of the connection between teacher effectiveness and student achievement. *Journal of Teacher Education*, 62(4), 339-355.
- 9 DuFour, R. (2015). *In praise of American educators: And how they can become even better*. Bloomington, IN.: Solution Tree Press
- 10 Utah State Board of Education (USBE). 2010-2015 Superintendents annual reports. Retrieved from: <http://schools.utah.gov/data/Superintendent-s-Annual-Report.aspx>
- 11 National Center for Education Statistics (NCES) (2013). *Digest of education statistics*. Table 208.40. Public elementary and secondary teachers, enrollment, and pupil/teacher ratios, by state or jurisdiction. 2000-2013 http://nces.ed.gov/programs/digest/d15/tables/dt15_208.40.asp
- 12 National Association of Colleges and Employers (NACE) (2015). *Fall 2015 NACE salary survey*.
- 13 U.S. Census Bureau (June 2, 2015). *Per pupil spending varies heavily across the United States*. Release number: CB15-98.
- 14 NCES (2015). *Digest of education statistics*. Table 203.20. Enrollment in public elementary and secondary schools, by region, state, and jurisdiction. 1990-2025.
- 15 Knox, A. (June 14, 2016). One answer to Utah’s teacher shortage – hire people who aren’t teachers. *The Salt Lake Tribune*.
- 16 State Board of Education (2015). *Utah New Teacher 5-Year Retention Data*. October 2015.
- 17 Baker, B. D., Punswick, E., & Belt, C. (2010). School Leadership Stability, Principal Moves, and Departures: Evidence From Missouri. *Educational Administration Quarterly*, 46(4), 523–557.
- 18 Beteille, T., Kalogrides, D., & Loeb, S. (2012). Stepping stones: Principal career paths and school outcomes. *Social Science Research*, 41(4), 904-919.

- 19 Fink, D & Brayman, C. (2006). School Leadership Succession and the Challenges of Change. *Educational Administration Quarterly*, 42 (1), 62-89.
- 20 Ni, Y., Sun, M., & Rorrer, A. (2014). Principal turnover: Upheaval and uncertainty in charter schools. *Educational Administration Quarterly*, 51(3), 409-437.
- 21 Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). Executive summary: How leadership influences student learning. *Learning from Leadership*. Ontario and Minneapolis: The Center for Applied Research and Educational Improvement, and The Ontario Institute for Studies in Education, for The Wallace Foundation.
- 22 Ni, Y., Sun, M., & Rorrer, A. (2014); Heck, R., & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal*, 46(3), 659-689.
- 23 Baker, B. D., Punswick, E., & Belt, C. (2010). School leadership stability, principal moves, and departures: Evidence from Missouri. *Educational Administration Quarterly*, 46(4), 523-557.
- 24 Beteille, T., Kalogrides, D., & Loeb, S. (2012).
- 25 Goldrick L., Osta D., Barlin D., Burn J. (2012). Review of state policies on teacher induction: Santa Cruz, CA: New Teacher Center.
- 26 Ingersoll R., & Strong M. (2011); Smith T., & Ingersoll R. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681-714.
- 27 Ibid; Ingersoll, R., & Kralik, R. (2004). The impact of mentoring on teacher retention: What the research says. Research Review, *Teaching Quality*. Denver, CO: Education Commission of the States.
- 28 Blazer, D. & Kraft, M.A. (2015). Exploring mechanisms of effective teacher coaching. *Educational Evaluation and Policy Analysis*, 37(4), 542-566.; Kane, T.J., & Staiger, D.O. (2012). *Gathering feedback for teaching: Combining high-quality observations with student surveys and achievement gains*. Seattle, WA: Measures of Effective Teaching Project, Bill and Melinda Gates Foundation.; Maier, A., Cellini, K., & Grogan, E. (2012). *Fast start: Jumpstarting early teacher career effectiveness through targeted training and coaching*. Paper presented at the Association for Education Finance and Policy annual conference, New Orleans, LA.
- 29 Utah Code 53A-3-701; Learning Forward (2016). Standards for professional learning. Retrieved from: <https://learningforward.org/standards-for-professional-learning#V79T5PkJpg>
- 30 Killion, J. (2002) *Assessing impact: Evaluating professional development*. Oxford, OH: National Staff Development Council (NSDC); Killion, J., (2010). Teachers leading: Teamwork is not enough. *Journal of Staff Development*, 6(2), pp. 8-9.
- 31 Utah Code Annotated. Section 53A-8a-408
- 32 Utah Office of Legislative Research and General Counsel (2015). *Educator professional learning in Utah: History and policy options*. Presentation. <http://le.utah.gov/interim/2015/pdf/00002897.pdf>
- 33 Borman, G., & Dowling, N. (2008). Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of Educational Research*, 78(3), 367-409.
- 34 Economic Policy Institute (August 9, 2016). *The teacher pay gap is wider than ever*. Washington, DC: Author.
- 35 Levanon, A., England, P. & Allison, P. (2009). Occupational feminization and pay: Assessing causal dynamics using 1950-2000 U.S. Census data. *Social Forces*, 88(2), 885-892.

Kem C. Gardner Policy Institute

The Kem C. Gardner Policy Institute at the University of Utah enhances Utah's economy by placing data-driven research into the hands of decision makers. Housed in the David Eccles School of Business, its mission is to develop and share economic, demographic and public policy data and research that help community leaders make informed decisions.

The Hinckley Institute of Politics

The Hinckley Institute of Politics at the University of Utah is a nonpartisan organization dedicated to engaging students and community members in governmental, civic, and political processes; promoting a better understanding and appreciation of politics; and training ethical and visionary students for careers in public service. Since its

founding by Robert H. Hinckley in 1965, the Hinckley Institute has provided a wide range of impactful programs for students, public school teachers, and the general public.

Utah Education Policy Center

The Utah Education Policy Center (UEPC) at the University of Utah is a leader in providing valid and reliable research to support evidence-based decision-making. The UEPC engages in research and evaluation, professional learning, and technical assistance to help bridge research, policy, and practice through providing empirical and balanced information. Our work contributes to increasing educational equity, access, and opportunities for all children and adults in Utah, particularly for those who have been historically marginalized.