Preface

The College of Education at the University of Nevada, Las Vegas is in a particularly unique and promising position to affect and inform education locally, regionally, nationally, and internationally. The College produces more new educators for Nevada’s schools than any other provider—nearly as many as all other providers combined. Situated in the fifth largest school district in the U.S., the College is deeply and collaboratively engaged with the school district in research of and in urban settings. As the largest college of education in the state, the College’s faculty comprises the largest single, non-partisan source of information, models, and new ideas associated with educational practice, research, and policy, and understanding the unique needs of education in Nevada is a top priority for us. This publication is a concrete product that demonstrates these attributes.

The papers that constitute this volume have been prepared with the intent of informing thoughtful policy development around particularly acute educational issues in Nevada. The faculty who prepared these papers sought to provide policy makers with trustworthy and meaningful summaries on which policy decisions can be made, and legislation can follow, that allows for sustainable, high quality education in Nevada.

You are invited to contact the College of Education’s communications and outreach coordinator should you seek further information or detail about any of the issues we have addressed:

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We hope that those who develop education policy, as well as those responsible for implementing educational policy, will find these papers and the availability of the researchers who prepared them to be of benefit.

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University of Nevada, Las Vegas
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Vision Statement

The College of Education will achieve prominence locally, nationally, and internationally as a leading source of significant knowledge and innovative models to inform and affect policy, practice, and research.

Did You Know?

UNLV’s drive to rise among the nation’s top public research universities took a major step forward when it was elevated to R1 “very high research activity” status by the Carnegie Classification of Institutions of Higher Education in December 2018. R1 is the gold standard for university research classifications, and out of 4,000 institutions nationwide, UNLV now is one of just 130 with the distinction.

The College of Education enrolls nearly 1/3 of all academic graduate students at the University of Nevada, Las Vegas.

Historically, the College of Education has been one of the largest producers of Ph.D.s in the University, graduating roughly 1/5 of all academic doctorates.

Committed to growing the teacher pipeline with highly capable, quality teachers in Nevada and beyond, the College of Education produces more newly licensed teachers than any institution or agency in Nevada.

Approximately 98 percent of students who graduate from the College of Education’s teacher preparation programs go to work in the Clark County School District.

College of Education graduates working in the Clark County School District’s highest needs schools are retained by these schools at a rate of 2.5 times higher than the district average.
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Supporting High Quality Early Childhood Experiences for Children with and Without Disabilities and Their Families in Nevada

Jenna Weglarz-Ward, Ph.D., Cyndy Ang, M.Ed., and Robin Gaynes, M.Ed.

It has become common for young children to be enrolled in some form early care or education programs before entering kindergarten (Whitebrook, McLean, & Austin, 2016). These experiences can encompass a range of programs and many families use multiple programs to meet their needs (U.S. Census Bureau, 2013). According to the U.S. Departments of Health and Human Services and Education (DHHS/DOE; 2014) early care and education includes programs that:

- provide early care and education to children birth through age five, where the majority of children in the program are typically developing. These include, but are not limited to, private or publicly funded center or family-based child care, home visiting, Early Head Start, Head Start, private preschool, and public school and community-based pre-kindergarten programs, including those in charter schools. (p.1)

Quality early childhood programs help to promote children’s learning and development across all domains of development and prepare them for kindergarten. For children with disabilities, being meaningfully included in early care and education programs can support positive gains in development and learning. Furthermore, these early childhood programs have become vital for parents of young children to seek out employment, further education, and respite from the demands of parenting (Shonkoff & Phillips, 2000). However, families of young children with and without disabilities continue to struggle with access to affordable programs that meet the complex needs of families and support high quality and evidence-based early childhood education. As with the rest of the country, Nevada has been working to further the quantity and quality of early care and education experiences for its youngest residents and their families. However, as early childhood programs cross multiple sectors, departments, funding streams, and state and federal policies as well as challenges to serving children in urban, rural, and tribal areas of the state, moving ideas into action has been difficult.

Key Nevada Facts and Statistics
- It is estimated that approximately 136,000 children under the age of 6 in Nevada are in need of early education and care programs (Child Care Aware, 2017). However, across the state it is estimated that we only have the capacity for 60,000 children. In particular, there is limited public preschool programs therefore the burden of quality early education and care experiences fall to a variety of child care programs and access to quality program in low-resource areas. Nevada ranks 48th in enrollment of 3-4 year old in pre-K programs.
- Currently in Nevada, approximately 3 percent of the infant/toddler population receive Part C Early Intervention Services through IDEA. This is similar to the population across the US (i.e., range 1.8-9 percent). Since 2008, there has been a 70 percent increase in these very young children receiving services. For preschool children 3-5 years old, approximately 8 percent receive services through Part B. This is a 47 percent increase since 2008.

Recent Actions in Nevada
- The Office of Early Learning and Development was created in 2014 to administer state and federal funds for multiple early childhood programs across the state including:
  - Nevada State Pre-K
  - Pre-K Development Grant
  - Head Start State Collaboration Grant
  - Early Childhood Comprehensive Systems Grant
- Continued development and implementation of Silver State Stars Quality Rating Improvement System (QRIS) to support programs in increasing or maintaining high quality programs.
- Increased subsidy programs for low incomes families.
- Support for Early Childhood Advisory Council to develop a strategic plan to address the needs of young children, their families, and professionals.
- Nevada has engaged in technical assistance with the Early Childhood Personnel Center (starting 2016) and National Center on Pyramid Model Innovations (starting January 2019).
Considerations for Future Actions
• Increase family access and affordability of quality early childhood programs.
• Increase professional competence to support quality early childhood programs.
• Increase program quality state-wide.

Statewide Benefits of Future Action
• Provide quality early childhood experiences for more Nevada children that will support positive short-term and long-term academic outcomes and reduce the need for and duration of remedial or special education.
• Provide increased employment opportunities for those interested in early childhood education.
• Provide families with increased choices and access to meet their families’ preferences and needs related to early care and education. This may allow parents to seek more regular or increased employment or continue education that may positively contribute to the local and state economy.

Implications of Maintaining Status Quo
• Continued disproportionality of children of color, children living in poverty, and children with disabilities to begin school lacking appropriate readiness to succeed and impact long-term academic outcomes.
• Increase need and costs for specialized services and special education for children.
• Impact parents’ and families’ ability to maintain employment or seek out continuing education in order to contribute to local and state economy.

Introduction
It has become common for young children to be enrolled in some form early care or education program before entering kindergarten (Whitebrook, McLean, & Austin, 2016). In order to meet their needs, many families use multiple programs at the same time or change programs throughout the children’s first five years of life (U.S. Census Bureau, 2013). The number of children in child care has quadrupled since 1990 with infants and toddlers being the fastest-growing group seeking care (Kagan & Neuman, 2000). According to the U.S. Departments of Health and Human Services and Education (DHHS/DOE; 2015) early care and education includes programs that provide early care and education to children birth through age five, where the majority of children in the program are typically developing. These include, but are not limited to, private or publicly funded center or family-based child care, home visiting, Early Head Start, Head Start, private preschool, and public school and community-based pre-kindergarten programs, including those in charter schools. (p.1)

Quality early childhood programs help to promote children’s learning and growth across all domains of development and prepare them for kindergarten (Schilder, Kholopsteva, Oh, & Shonkoff, 2015; Vivanti et al., 2014; Wall, Kisker, Peterson, Carta, & Jeon, 2006). Furthermore, these early childhood programs have become vital for parents of young children to seek out employment, further their education, and gain respite from the demands of parenting (Shonkoff & Phillips, 2000). For children with disabilities, being meaningfully included in early care and education programs can support positive gains in development and learning. Positive experiences in early education impact short-term academic outcomes as well as contribute to positive adult outcomes (e.g., college completion, employment) and reduce the likelihood of negative experiences (e.g., incarceration, substance abuse, unemployment; Reynolds, Temple, Ou, Arteago, & White, 2011).

However, families of young children with and without disabilities continue to struggle with access to affordable programs that meet the complex needs of families and support high quality and evidence-based early childhood education. Similar to other states, child care is one of the most significant costs for families in Nevada. The annual average cost of childcare in Nevada ranges from $8,000 to $13,000. For single-parent families at 100 percent of the poverty level with one child in childcare, this constitutes up to 70 percent of a family’s income (Child Care Aware, 2017, NICPR, 2018). Maintaining high quality staff with appropriate education, training, and experiences remains a challenge. Currently, professionals working in early childhood programs receive low compensation, often without benefits, reducing the pool of educated professionals in early childhood settings (Whitebrook et al., 2016). Finally, developing high quality programs that are available in all geograph-
ic areas, providing care during varied hours, and meeting the needs of culturally and linguistically diverse families is challenging (NICPR, 2018; Rivera, 2008).

Families of young children with disabilities also struggle to find care for their children from professionals that are able to meet the needs of their children, willing to coordinate among child care and special education services, and create an engaging and safe experience for their children to interact with peers (Knoche, Peterson, Edwards, & Jeon, 2006; Wall, Kisker, Peterson, Carta, & Jeon, 2006). Notably, young children, particularly children with disabilities, children of color, and boys, are being suspended and expelled from early care and education programs at alarming rates (U.S. DHHS/DOE, 2016). Children with these negative educational experiences early in life are at increased risk for academic failure later in life (U.S. DHHS/DOE, 2016). “These students often need the support that high-quality early learning programs may provide to level the playing field and address opportunities gaps between them and their peers” (U.S. DHHS/DOE, 2016, p.12)

The evolution of practices and policies related to young children in early care and education settings have been dramatic over the past 20 years. The passing of legislation in child care, education, and special education with the development of child care licensing, professional development programs, and Quality Rating Improvement Systems (QRIS) have responded to the increasing needs of families to find high quality early care and education for all children. It is also suggested to increase program quality through providing developmentally appropriate curriculum, increased staff training, and increased family engagement to support the inclusion of young children with disabilities in early childhood programs and eliminate early childhood suspension and expulsion (DEC/NAEYC, 2009; U.S. DHHE/DOE, 2015; U.S. DHHS/DOE, 2016).

Despite attention to early childhood education in the state over the past several years, Nevada continues to rank near the bottom of the country on educational opportunities and child outcomes (NICPR, 2018). The purpose of this paper is to discuss the importance of early childhood educational experiences for young children with and without disabilities including the benefits and challenges to providing high quality early childhood experiences to all children, review of national trends, current efforts in Nevada, and provide recommendations to continue to support Nevada’s youngest citizens and their families.

**Benefits of High Quality Early Childhood Education**

Most children will enroll in some form of early childhood educational program before entering kindergarten. Therefore, in order to maximize the benefits of these experiences, providing the highest quality of programs is essential to supporting positive outcomes for children, their families, and communities at large. For young children, those who attend early childhood programs demonstrate stronger academic outcomes later in life, have strong social and emotional skills, and reduced challenging behavior and school discipline issues (Schilder et al., 2014). Additionally, children with developmental delays in quality early childhood programs are more likely to be identified early and receive special education services earlier. This reduces long-term intensity and need for special and remedial education (Biven, Garcia, Gould, Weiss, & Wilson, 2016).

Families must seek employment in order to meet their families’ needs. Employment provides income to cover housing, food, transportation, healthcare, and personal satisfaction for parents. For many families, seeking employment or education needed for preferred employment requires some form of early care and education. In addition to finding programs that meet the location, budget, and hours of the family, parents desire programs that are safe for their children and foster children’s school readiness (Mereoiu, Bland, Dobbins, & Niemeyer, 2015). Having reliable and trusted child care allows parents to focus on their employment and contribute to the local and state economy.

By providing these experiences early in life, we increase the likely success of children both in short-term school readiness and academic outcomes and also increase their ability to grow into contributing adults to the community. This benefits families as well, allowing them to contribute financially to society, reduce their likely use of public aid programs and better meet their families’ needs. These results of early childhood education help to support states in reducing the need for later special and remedial education for children, public support services for families, and provides increased employment opportunities for those wishing to work in early childhood education.
childhood settings. By investing in early childhood education, the rate of return for states economically is 13 percent (NICPR, 2018).

**Barriers to High Quality Early Childhood Education**

Early childhood programs continue to develop and evolve to meet the needs of current children, families, and professionals. Many barriers continue to exist that prevent all families from accessing high quality early childhood education, including coordination among systems, inadequate funding at federal, state and local levels, and professional qualifications and training of providers (Donoghue, 2017).

When looking at the definitions of early care and education programs from the U.S. DHHS/DOE, one can note that many different types of programs exist in the early childhood education context. These programs are overseen by differing state agencies, funded in different ways, have different eligibility for participation, and use different professional qualifications for staffing. For example, pre-K programs in public schools hire only fully state-licensed teachers with university degrees, as opposed to community childcare programs that may require staff to have a high school diploma or equivalent. Head Start programs are funded through grants available from the U.S. Department of Health and Human Services and supported by state offices, early childhood special education programs are funded through a combination of U.S. funds through the Individuals with Disabilities Education Act and state departments of education, and private, for-profit child cares are funded by parent tuition. These differences in foundational structure of programs makes consistent quality challenging. Statewide QRIS programs aim to level the quality field of early childhood programs regardless of these factors.

Driven by the National Academies of Science, Engineering, and Medicine’s (2018) report on *Transforming the Workforce for Children Birth Through Age 8*, the Center for the Study of Child Care Employment and NAEYC Power the Profession Initiative have identified a struggle in recruiting high quality professionals to the field of early childhood. In order to have well-educated and experienced professionals in early childhood programs, programs need to be able to compensate professionals appropriately. However, currently the average salary for employees in child care is $9 per hour. Many professionals are unable to afford college courses or repayment on educational loans. Furthermore, those professionals in early childhood with educational licensure also struggle with financial compensation comparable to their peers teaching in older grades (Whitebrook et al., 2016). For these reasons, many professionals do not enter or leave the early childhood profession. The constant turnover of staff and professionals lacking appropriate education to support the unique needs of young children impact the quality of early childhood programs.

For families of children with disabilities, coordinated care for their children has been especially challenging. Children with disabilities are eligible to receive services through the Individuals with Disabilities Education Act. Infants and toddlers receive services in natural environments such as family homes and child care centers. Services are usually provided by individual professionals specific to a child’s needs (e.g., speech-language pathologist, applied behavior analyst, physical therapist) in 1-hour visits. Preschool age children typically attend a half-day program in a school district setting to receive their special education services. For families in need of full-time care, this mean that children are involved in multiple programs.

Numerous barriers to including children with disabilities in early care and education settings have been reported by professionals as well. In a recent study of childcare and special education providers, most significant barriers were related to program policies in collaboration across child care and special education and professional training of both child care and special education professionals (Weglarz-Ward, Santos, & Timmer, 2018). Despite the Americans with Disability Act and recommendations leading federal agencies and organizations, children with disabilities are still denied enrollment or expelled from programs. Often this is because programs do not feel they are physically equipped to serve these children and their staff does not have adequate education and training to support their development and learning (Child Care Aware, Division for Early Childhood, Ounce, 2017; Weglarz-Ward et al., 2018).
National Trends in High Quality Early Childhood Education

As with Nevada, early childhood education has been a focus across the nation. Every Student Succeeds Act (ESSA), the most recent reauthorization of the Elementary and Secondary Education Act, includes Preschool Development Grants that provide states with funding to promote the coordination of existing early childhood programs to improve the access and quality of programs for children in low-resource areas. This encourages collaboration between existing early childhood programs (e.g., Head Start, center-based child care, public pre-K). Additionally, ESSA provides opportunity to support Title I programs for children at-risk of academic failure, developing or expanding charter schools, considerations for children who are experiencing homelessness, supporting children who are dual language learners, and Native American children. Several pieces of federal legislation guide how states approach early childhood education including:

- **Head Start Act/Head Start Improvement Act** provides children from low-income families with comprehensive early childhood education, health and nutrition services, and parent support.

- **Child Care Development Block Grant** provides block grants to states to help provide financial assistance to low-income families for early childhood education; established resource and referral offices to support families in selecting child care programs and providing professional development for providers; supports health and safety requirements for programs.

- **Individuals with Disabilities Education Act** provides child identification, evaluation, and intervention to infants and toddlers in natural environments (under Part C) and preschoolers (under Part B Section 619) in the least restrictive environments.

- **Americans with Disabilities Act, Title II/Title III** stipulates that child care programs must not exclude children from their programs based on the presence of a disability; programs must make reasonable accommodations and physical modifications in order for the child to participate.

- **Rehabilitation Act Section 504** prevents discrimination of persons with disabilities from any program receiving federal funding.

**Position Papers and Guidance Documents**

In recent years, the U.S. Departments of Health and Human Services and Education worked together to develop policy papers and guidance documents to help summarize existing literature and make suggestions for states and programs to promote quality experiences aligned with legislation, current research, and professional recommendations. The following topics were included:

- Inclusion of Young Children with Disabilities
- Family Engagement
- Suspension/Expulsion Prevention
- Collaboration and Coordination of Maternal, Infant, and Early Childhood Home Visiting (MIECHV) and Part C Programs
- Dual Language Learners
- Early Childhood Career Pathways
- Monitoring
- Homelessness
- State Advisory Councils
- Data
- Technology Use

Additionally, federal agencies have established technical assistance centers to support states in providing high quality early childhood experiences for young children with and without disabilities such as the Early Childhood Personnel Center, Early Childhood Technical Assistance Center, National Center on Pyramid Model Innovations and the DaSy Center.

**National Association for the Education of Young Children (NAEYC) Power to the Profession**.

NAEYC has been leading a national collaboration among key early childhood stakeholders to define the early childhood profession including developing a unified framework for career pathways, professional competencies and standards, and professional compensation. By establishing a strong, national understanding of the early childhood profession can increase the access to high quality early childhood experiences for young children and their families.

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2 See https://www.naeyc.org/our-work/initiatives/profession
**Professional Standards.** Across early childhood programs, professional qualifications vary from state to state and program to program. Regardless, professional standards from leading professional organizations express clear areas of knowledge needed to best support the learning and development of young children. Additionally, professional standards closely align with national accreditation components and often guide state licensure. All standards stress the importance of developmentally appropriate experiences for children birth to 8 years old in order to enhance their learning across all domains of development (e.g., cognition, language, physical, social, emotional). In addition to instructional content, child assessment, and designing appropriate learning environments, the following areas are included across professional standards:

- Engaging and partnering with families;
- Including children with disabilities and those from culturally and linguistically diverse backgrounds; and
- Collaborating with other professionals.

**Current Nevada Efforts to Support Early Childhood Education**

In the past five years, Nevada has devoted great attention to young children and their families. In the past legislative session, numerous bills passed to increase funding for early childhood education, specify childcare regulations, and continue support committees such as the Nevada Early Childhood Advisory Council, Part C Interagency Coordinating Council, and Early Childhood B-3 Council. The Nevada Early Childhood Advisory Council developed a policy statement on pre-k suspension in 2016 and adopted a strategic plan in 2018. This plan focuses on providing excellent early learning systems, ensuring strong family-professional partnerships, and supporting child and family health.

Nevada has also received technical assistance to develop a comprehensive system of professional development with the Early Childhood Personnel Center and will begin technical assistance with the National Center on Pyramid Model Innovations to support the social and emotional development Nevada’s young children.

In order to help coordinate programming for children 0-8 years old across Nevada, the Office of Early Learning and Development was created in 2014 to administer state and federal funds for multiple early childhood programs across the state including:

- Nevada State Pre-K
- Pre-K Development Grant
- Head Start State Collaboration Grant
- Early Childhood Comprehensive Systems Grant
- Child Care Development Funds funding QRIS Silver State Stars, Nevada Registry, Pre-K Standards & Early Learning Guidelines, Early Childhood Substitute Network, and TEACH Early Childhood Scholarship Program

The Nevada pre-K programs through Nevada Ready continue to serve young children and promote school readiness in Nevada. The program currently enrolls approximately 2 percent of 3- and 4-year-olds across the state. Evaluations of the program indicate promising gains for participating children including long-term academic benefits (e.g., CRT reading, math; Nevada Department of Education, 2018). It is estimated that approximately 136,000 children under the age of six in Nevada are in need of early education and care programs. Across the state, it is estimated that we have the capacity for 60,000 children (Child Care Aware, 2017). Nevada enrolls approximately 3,300 children across 56 Early Head Start and Head Start Programs. This is estimated to serve 6 percent of eligible infants and toddlers and 17 percent of eligible preschoolers. Currently, 11,600 preschool children receive Part C Early Intervention Services through IDEA (Child Care Aware, 2017; U.S. Department of Education, 2017). Since 2008, there has been a 70 percent increase in these very young children receiving services (U.S. Department of Education, 2017). For preschool children aged 3 to 5, approximately 5,300 or 8 percent receive

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3NAEYC Professional standards can be found at https://www.naeyc.org/our-work/higher-ed/standards; Division for Early Childhood standards can be found at https://www.cec.sped.org/Standards/Special-Educator-Professional-Preparation-Standards/CEC-Initial-and-Advanced-Specialty-Sets

services through Part B (Child Care Aware, 2017; U.S. Department of Education, 2017). This is a 47 percent increase since 2008 (U.S. Department of Education, 2017).

In Nevada, there are approximately 4,000 people in the child care workforce. The majority (63 percent) of staff in early care and education programs have no high school or a high school diploma as their highest educational attainment and only 13 percent have a bachelor’s degree or higher (Child Care Aware, 2017). The average pay for these professionals is $11 per hour, or up to $23,000 annually, with few programs offering any benefits (e.g., health insurance, paid leave; Child Care Aware, 2017, 2018). The annual turnover rate was most recently 22 percent (Child Care Aware, 2017). Data specific to early childhood professionals in IDEA Part C and Part B 619 programs is not currently available. However, employees of local school districts and Nevada Early Intervention Services are paid competitive salaries with full benefits and are required to have state licensure.

As with the rest of the country, Nevada has been working to further the quantity and quality of early care and education experiences for its youngest residents and their families. The state has implemented a comprehensive Quality Rating Improvement System (QRIS) (i.e., Silver State Stars) including professional development opportunities and supporting facility licensing and professional qualifications. Nevada most recently had just under 1,000 licensed early care and education programs. Of those, about one-quarter have begun or completed QRIS process. Participating programs have increased each year, with the majority of participating programs in Washoe and Clark Counties. Currently 84 have star ratings, with most programs achieving 2 out of 5 stars in the rating system (5 stars indicating excellence). Eleven programs have achieved the highest rating, again mostly in Washoe and Clark Counties. Approximately 50 programs across the state have achieved accreditation from a national entity (Child Care Aware, 2017).

Nevada does participate in the Child Care Development Block Grants (CCDBG) and provides financial subsidy to families in need via the Children’s Cabinet and Las Vegas Urban League. In 2015, 5,300 children received subsidies to enroll in early childhood programs. These subsidies serve approximately 6 percent of the families living in poverty in Nevada and are not provided at market rate, requiring either families or programs to cover remaining costs (NICPR, 2018). In 2017, 1,300 requests were made to Nevada’s Child Care Resource and Referral for information about care during non-traditional hours and 155 requests were made about caring for children with disabilities (Child Care Aware, 2018).

The Nevada Registry tracks professionals’ competencies and provides training for professionals across the state, including collaborating with NevAEYC for an annual conference. Additionally, the Nevada Early Childhood Advisory Council and Nevada Institute for Children’s Research and Policy have established a network of professionals, researchers, and family members to begin conversations on how to reflect on past policies and procedures, integrate existing efforts, and plan for the future.

Considerations for Future Actions

When reviewing work in other states, Nevada has begun similar steps to improving early childhood education. In order to maintain the momentum related to early childhood education, state support for the development of activities for families, professionals, and programs is needed, as well as research conducted to identify persistent issues in access, affordability, and quality programs for Nevada families. Specifically, we need to address the challenges to enrolling more low-incomes families in Early Head Start and Head Start programs, applying for subsidy opportunities, and recruiting and retaining quality professionals. With these increased efforts, young children can experience high quality programs that make them ready to learn and succeed in kindergarten, including reading comprehensively by third grade and developing social and emotional competence. In addition to already discussed state committees, potential collaborators to support early childhood programing include Nevada Medical Center’s Global Science of Play Initiative, NevAEYC, Nevada DEC, Early Childhood Technical Assistance Center, Public Broadcasting Service and its local affiliates, and library systems. The following recommendations build on current efforts across the state:

1. Increase family access and affordability of quality early childhood programs.
   - Develop public awareness campaigns to raise awareness of early childhood programs, subsidy availability, and indicators of quality child care.
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• Increase CCBDG subsidy rates to match market rates.
• Encourage employer support for families’ child care needs (e.g., leave to care for sick children, child care reimbursement, flexibility to attend school meetings).

2. Increase professional competence to support quality early childhood programs.
• Support professional development of early childhood professionals through on-going pre-service and in-service education. Provide funding and expertise to create integrative and flexible systems such as online and in-person degree programs.
• Support development of blended early childhood education and early childhood special education licensure and degree programs at all levels (e.g., associate, bachelor, and masters) in order to provide appropriate, inclusive programs for children with and without disabilities. This could be done by supporting workgroups with key stakeholders and experts through dedicated staff, space, and funding for meetings.
• Require disability-related training for all early care and education professionals.

3. Increase program quality statewide.
• Provide increased staff and funding to support QRIS, professional development, and licensure efforts.
• Develop methods to share statewide early childhood suspension and expulsion policy with early childhood programs and support administrators’ ability to adhere to policy.
• Support development of statewide policy for including children with disabilities in early care and education programs.
• Continue to support collaboration across sectors and stakeholders (e.g., state agencies, higher education, practitioners, families) by providing meeting space, travel expenses, technology, and staffing for regular meetings.
• Include early childhood program plans for professional teaching schools to provide clinical master’s degree programs, expert mentors and professional teaching partnerships, and state of the art clinical residency programs for pre-service professionals.

References


**Additional Resources:**


**Nevada Resources:**

Children’s Cabinet: http://www.childrenscabinet.org

Nevada Early Childhood Advisory Council: http://nvecac.com/

Nevada Registry: http://www.nevadaregistry.org/

Nevada Silver State Stars (QRIS): http://www.nvsilverstatestars.org/
Supporting the Identification and Referral of Young Children with Disabilities and Developmental Delays in Nevada

Jenna Weglarz-Ward, Ph.D., Nicole Atwell, M.Ed., Heike Rüdenauer, M.Ed. and Pricella Morris, M.Ed.

Children develop in a predictable sequence across skills in communication, physical, cognitive, social, emotional, and adaptive domains. However, there are many factors that impact a child’s growth and learning that may delay their development or cause disabilities. Some children may be identified before or at birth with conditions that cause developmental delays (e.g., children with Down syndrome, premature infants, babies born with addiction). Other children may present developmental disabilities and delays later in early childhood due to neurological or genetic conditions (e.g., autism, Rhett’s syndrome, communication delays) or experience environmental risk factors such as housing instability, toxic stress, injury, or maltreatment. Other children still may present changes in development for unknown reasons. These delays in meeting developmental milestones are often missed or overlooked by parents, child care providers, and physicians leading to late referrals into specialized services and education (McLean, Hemmeter, & Synder, 2013).

The Individuals with Disabilities Education Act (IDEA) includes mandates for coordinated early intervening services (CEIS) to help identify children in need of evaluation for specialized services such as speech-language pathology, applied behavior analysis, or mental health services. However, despite IDEA mandates and professional recommendations (i.e., American Academy of Pediatrics, Division for Early Childhood, National Association for the Education of Young Children), it is estimated that less than 50 percent of children with developmental delays and disabilities are identified before entering kindergarten (Bricker et al., 2013). Early identification can reduce the cost and needs for special education and services in the future. The value of early identification for developmental delays and disabilities can have many benefits for children, families, and programs.

Key Nevada Facts and Statistics
• Currently in Nevada, approximately 3 percent of the infant/toddler population receive Part C Early Intervention Services through IDEA. This is similar to the population across the US (i.e., range 1.8-9 percent). Since 2008, there has been a 70 percent increase in these very young children receiving services. For preschool children aged 3 to 5 years, approximately 8 percent receive services through Part B. This is a 47 percent increase since 2008.
• Project ASSIST is a statewide service to provide information, resources, and referral services to inform and educate families of infants and toddlers with disabilities or special health care needs, and the general public.
• Ten of 14 school districts have Child Find information available on their websites. Information ranges from referral and evaluations processes, references for Part B and Part C, to minimal contact information for special education departments. Four districts do not have clear information about Child Find, referral and evaluation, or special education.

Recent Actions in Nevada
• The Part C Interagency Coordinating Council, Child Find Subcommittee supports efforts to increase awareness of Child Find offices and Project ASSIST through flyers to new parents and in medical offices.
• Nevada offers Maternal, Infant, and Early Childhood Home Visiting (MIECHV) programs, Early Head Start/Head Start, and Pre-K programs through Nevada Ready and Title I programs to provide families of children with identified disabilities, delays, and those at risk for delays (e.g., families with low incomes) with services.
• The Nevada Registry provides child care providers with training in child development and developmental screening.
• Nevada PEP provides assistance to families in understanding special education services.
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Considerations for Future Actions
• Supporting parents’ and families’ knowledge of child development.
• Developing professionals’ understanding of available services.
• Increasing public awareness of available services.

Statewide Benefits of Future Action
• Reduces special education costs across the state and for school districts by increasing the need for later and longer enrollment in special education.
• Reduces health insurance and Medicaid services needed, including applied behavior analysis, occupational therapy, physical therapy, and speech-language pathology.
• Increased equity of services to underserved populations across the state.
• Supporting positive child outcomes across domains of development including academic outcomes.
• Supports positive family outcomes that may increase parent employment and reduce the use of welfare services.

Implications of Maintaining Status Quo
• Continues and may increase special education costs across the state and for school districts by increasing the amount of teachers and classrooms needed to serve children in elementary and secondary schools.
• Continues and may increase health insurance and Medicaid services needed including applied behavior analysis, occupational therapy, physical therapy, and speech-language pathology.
• Continued challenges for families (e.g., increased stress, challenges to maintaining employment and education) may impact parents’ ability to contribute economically and increase reliance on welfare programs.

Introduction
Most children develop in a predictable sequence across skills in communication, motor, cognitive, social, emotional, and adaptive domains. However, it is predicted that up to 25 percent of children may experience a developmental delay or disability at some point (Centers for Disease Control and Prevention & National Center for Health Statistics, 2012). Many factors impact a child’s growth and learning that may delay their development or cause disabilities. Some children may be identified before or at birth with conditions that may cause developmental delays (e.g., children with Down syndrome, premature infants, babies born with addiction) through prenatal or newborn testing. Other children may present developmental disabilities and delays later in early childhood due to health experiences (e.g., chronic ear infections, injury), environmental factors (e.g., lead exposure, toxic stress, maltreatment), or neurological conditions with characteristics not apparent at birth (e.g., autism, Rett’s syndrome, apraxia). These delays in meeting developmental milestones are often missed by parents, child care providers, and physicians leading to less than 50 percent of children with developmental delays and disabilities being identified before entering kindergarten (Bricker, Macy, Squires & Marks 2013; McLean, Hemmeter, & Synder, 2013). Early identification of developmental delays and disabilities through regular developmental screening is vital to positive outcomes for children, families, and communities.

All areas of development contribute to academic success for children indicating that delays in development early in life most likely will impact future academic outcomes (AAP Council on Early Childhood, 2016). Children who present a delay in one area of development often experience delays in other areas well. For example, a child with challenges in language skills may in turn struggle in playing with other peers, expressing his needs, earning letter sounds, and properly decoding words while reading. In light of current Nevada initiatives including Read by Grade Three and social/emotional learning goals, addressing delays as soon as possible will help more children succeed once in elementary and secondary school.

There has been a particular focus on early identification of children with autism spectrum disorder, learning disabilities, and emotional/behav-
ioral disabilities across the country. Often young children with these disabilities may be under- or misdiagnosed, resulting in lack of and ineffective interventions. Delays in communication and challenging behavior without proper identification may lead to inappropriate discipline procedures including suspension or expulsion from programs (U.S. Department of Health and Human Services & Department of Education (DHHS/DOE), 2016). These experiences early in life contribute to continued struggles in school, including increased likelihood of future suspensions and lower academic achievement. These experiences also impact how families interact with school programs (U.S. Department of Health and Human Services & Department of Education, 2016). Addressing delays or disabilities early supports children’s ability to learn in school and promotes the inclusion of children with disabilities in general education programs (DHHS/DOE, 2015).

Finally, appropriate identification and referral is important. Although referring a child that is suspected of a developmental delay or disability is important and should be done regularly, proper assessment is important for reliable results that can lead to meaningful intervention. During evaluation, professionals conducting assessments and screenings should be well trained to appropriately identify children in need of specialized services. Children from underrepresented groups, including those who speak languages other than English need to be appropriately assessed with culturally responsive tools to accurately identify developmental levels (Division for Early Childhood, 2014). This is particularly important to address the needs of Nevada’s diverse population. Furthermore, evaluation and assessment procedures should align with current professional recommendations of the field including considering multiple sources of information, partnering with families, and using valid and culturally appropriate instruments (American Academy of Pediatrics, 2006; Copple & Bredekamp, 2009; Division for Early Childhood, 2014).

The purpose of this paper is to provide information on early identification and developmental screening of young children with developmental delays and disabilities. This paper will provide background information on this topic, including the current benefits and challenges to early identification, national trends and activities, recent efforts in Nevada and other states, and recommendations for future steps. By systemically addressing early identification of young children with developmental delays and disabilities, we can support successful futures for the children of Nevada.

What is Early Identification and Developmental Screening?

Early identification aims to identify children in need to specialized intervention such as special education or medical services. The Individuals with Disabilities Education Act (IDEA) includes mandates for coordinated early intervening services (CEIS) to help identify children in need of evaluation for specialized services, such as special instruction, speech-language pathology, applied behavior analysis, or mental health services. This is often referred to as Child Find programs. These programs must define a target population by establishing criteria of children eligible for IDEA services or those in at-risk populations; develop a public awareness of available services including public media campaigns and materials for common locations families visit; develop referral and screening procedures to provide accessible and free screening for all children; track state efforts; and collaborate with related agencies. States may determine specific screening and assessment tools used for eligibility and professional qualifications to provide reliable child identification. In addition to identifying children in need of support, programs also provide professional development, training, and coaching for professionals in understanding the special education process and using evidence-based instructional strategies.

Developmental screening is a process used to identify children who are in need to further evaluation for developmental delays or disabilities (McLean et al., 2014). Screening is a brief method completed by a parent, caregiver, or professional to quickly understand how the child is achieving early childhood milestones. Commonly used tools include Ages & Stages Questionnaires, Brigance Screens, and the Modified Checklist for Autism in Toddlers (MCHAT). IDEA includes 13 categories of disabilities including:

- autism spectrum disorder
- deaf-blindness
- deafness
- emotional disturbance
- hearing impairment
- intellectual disability (formerly mental
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- multiple disabilities
- orthopedic impairment
- other health impairment (may include attention-deficit-hyperactivity-disorder)
- specific learning disorder
- speech or language impairment
- traumatic brain injury
- visual impairment including blindness

States and school districts may also determine eligibility for children with developmental delays or children who are at-risk for developmental delays and disabilities. Physicians may also identify medical conditions that may impact development and learning, refer families to IDEA services, collaborate with early care, education and special education professionals. Once children are identified and evaluated, if found eligible, an Individual Family Service Plan (IFSP) and Individualized Education Program (IEP) will be developed to guide intervention. Children will be assessed regularly for developmental progress. It is recommended that multidisciplinary teams are developed that include the children’s families and all key professionals to guide planning, implementation of plan, and progress monitoring.

Benefits of Early Identification and Developmental Screening

The value of early identification for developmental delays and disabilities can have many benefits for children, families, and programs. Children are able to receive support for their learning, growth, and development early thus reducing the need, duration, or intensity of specialized services in the future, increasing social, emotional, and behavioral outcomes and building friendships, and increasing the likelihood of positive academic outcomes. Children who receive services earlier are more likely to make more significant developmental gains than children who do not receive or received later services (McLean et al., 2014) and may need fewer or less intense services in the future or not need services in elementary and secondary school.

Families benefit by increasing their understanding of child development and available services to support their children and family outcomes and reducing stress and risk for mental health issues. They are able to build their confidence as parents and learn to advocate for child and family needs (Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2015). Additionally, medical and transportation costs (e.g., specialized equipment, additional physician visits) can be reduced. Supporting families’ access to services, including inclusive child care, is important as many families with children with disabilities report more irregular employment, lower incomes, and higher levels of stress (Goudie, Havercamp, Rambon, & Jamieson, 2010).

Early identification leading to timely access to effective intervention also reduces the cost and need for medical and special education services in the future and promotes school readiness (Boyd, Odom, Humphreys, & Sam, 2010). Programs and states benefit by reducing the long-term need for services (e.g., special education, medical care). Resources spent on early identification greatly reduce overall education and other service costs both short-term for families and long-term for programs and states (Centers for Disease Control, 2018). Additionally, supporting quality early identification and developmental screening programs with highly qualified professionals will develop trust between professionals and families. This public trust will help families feel comfortable in seeking assistance for their children and help identify more children earlier.

Challenges to Early Identification and Developmental Screening

Regardless of federal mandates and professional recommendations, Bricker et al. (2013) concluded that early detection of young children with delays and disabilities is overall inconsistent, incomplete, and inadequate. There remains a disconnect between federal and program mandates and rates of early identification as at least half of children with developmental delays and disabilities are not identified before entering elementary school. Challenges related to family knowledge of child development and available services, professional practice, and training are significant barriers contributing to low rates of early identification.

In a recent study of families conducted by Zero to Three (2016), results indicated that many parents of young children did not have an understanding of sequences of child development. For example, 34 percent of participants underestimated the amount of development that occurs in the first year of life and the impact of relationships, experiences, and environments have on young children. This finding suggests that parents are unaware of the child’s
developmental stages and thus are unable to identify when a delay may be present and a need for intervention. Additionally, if a family has concerns about their children’s development, accessing and navigating the referral and evaluation process may be challenging. For example, Child Find processes can vary from state to state, school district to school district, and by the age of the child. Many parents may not know the Child Find program is available to all children in the state under the age of 21—especially for infants, toddlers, and children not attending public school. Access for families who are culturally and linguistically diverse, living in poverty or rural areas, those with limited education, and those who may be uninsured may particularly find understanding and accessing early identification systems challenging (Silver et al., 2017).

Professionals may also find carrying out early identification and screening programs difficult. Professionals need to receive adequate training on using screening tools with fidelity and understanding current guidelines for screening schedules for children. Additionally, screening tools may be lengthy and difficult to complete and discuss with families during regular doctor’s visit or during busy early care and education programs. Parents can help to complete screening tools as well but professionals need to also observe children to complete reliable evaluations.

**National Trends in Early Identification and Developmental Screening**

Across federal regulations and professional recommendations, the following components should be followed:

- Regular developmental screenings should be conducted with young children using research-based and validated screening tools;
- Screenings should include multiple sources of information including parent-report, observation, and professional evaluation;
- Screenings should be done in the child and family’s primary and preferred language and using culturally responsive screening tools;
- Professionals should receive initial and ongoing training on using screening tools with fidelity; and
- Children in need of further evaluation should be referred to appropriate agencies in a timely manner.

**American Academy of Pediatrics.** In addition to regular well-child visits that include monitoring of height, weight, head circumference, and interaction with caregivers, a research-based developmental screening tool should be administered at nine months, 18 months, and 30 months, a screening for autism at 18 and 24 months, and one for lead exposure at 12 and 24 months. Furthermore, children and families should be monitored for risk factors related to vision, hearing, and behavioral development that may initiate additional evaluation. Families should also be screened for parental depression regularly during the first year of the child’s life. Despite regular reaffirmation of these screening recommendations, it has been challenging for pediatricians to follow through consistently (American Academy of Pediatrics, 2006).

**Child Care Programs.** The 2014 updates to the Child Care Development Block Grant (CCDBG) encourages agencies to develop clear policies and procedures to provide universal access to developmental screenings in child care settings. This includes states and programs providing families with appropriate and culturally respectful information on developmental screenings; supporting professionals’ capacity to perform developmental screenings and referring children to appropriate resources; and including universal screening of children in Quality Rating Improvement Systems standards.

**Early Head Start and Head Start** programs serve low income families and provide family-centered services to children, families, and communities. Programs are required to conduct a research-based, standardized developmental screening tool on each child within 30 days of the child’s enrollment and then maintain regular progress monitoring.

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2 More information about CCDBG and early identification can be found at https://www.acf.hhs.gov/occ/resource/im-2016-01

3 More information on Early/Head Start programs can be found at https://eclkc.ohs.acf.hhs.gov/policy/45-cfr-chap-xii/1302-33-child-screenings-assessments
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throughout the child’s participation in the program. Children identified during regular screening and monitoring should be referred to appropriate IDEA programs and medical professionals, as needed.

**Centers for Disease Control and Prevention and Administration for Children and Families.** Campaigns including *Birth to 5: Watch Me Thrive!* and *Learn the Signs. Act Early* provide family-friendly information about child development, developmental screenings, and activities to promote development; professional training modules and resources; and professional recommendations. Materials are available for free in print, online, and via apps on smartphones. The centers/programs recommend that healthcare providers:

- Complete developmental screenings at each check-up visit;
- Collaborate with community child care providers to facilitate the use of developmental resources to monitor a child’s developmental progress, and
- Refer children with failed developmental screenings for further evaluation through the local or state early intervention agency.

Recommendations for early childhood educators include:

- Complete free online training modules that review the importance of developmental monitoring and screening and how to address family concerns;
- Discuss concerns with parents regarding their children’s development; and
- Refer children and families as needed to medical professionals and early intervening systems.

**The National Association for the Education of Young Children (NAEYC) and Division for Early Childhood (DEC)** are responsible for establishing professional standards and recommended practices that guide program accreditation, pre-service training programs, and professional development competencies. It is recommended that early identification and screening include the use of regular developmental screenings and progress monitoring to identify and refer children in need of further evaluation, inform curriculum decisions, and individualize educational strategies to support child outcomes. Professionals should receive initial and ongoing training in these areas. Programs seeking NAEYC accreditation must include regular screening, formal assessments, and progress monitoring.

**Hearing and Vision Screenings.** Approximately 25 percent of children have a significant vision problem (e.g., nearsightedness, strabismus) that can impact learning and academic outcomes. Furthermore, mild hearing loss and communication delays are the most common reason for referral to early intervention. States are beginning to require examinations by licensed professionals in hearing, vision, and dental before kindergarten (e.g., Illinois, Kentucky, New York, Oregon). Some states also provide routine hearing and vision screenings during preschool and early elementary grades in public schools (e.g., California, Illinois, Utah).

**Current Efforts in Nevada Early Identification**

Nevada has several direct and indirect efforts in place to support the early identification of young children with delays and disabilities.

**Newborn Screening.** Nevada state law requires that all newborn children be screened for over 30 conditions and hearing impairment that are likely to cause some developmental delay, disability, or specialized medical need. These include:

- Amino acid metabolic disorders
- Bioinidase deficiency
- Cystic fibrosis
- Endocrine disorders
- Fatty acid oxidation disorders
- Galactosemias
- Organic acid metabolic disorders
- Severe combined immunodeficiency
- Sickle cell disease/trait
- Thalassemia disease/trait

**Professional Qualifications and Licensure.** Through the Nevada Department of Education licensure, those seeking licensure in early childhood education and early childhood special education must complete a course in assessment and other courses related to serving children with disabilities. Therefore, professionals working in public schools

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4 https://www.acf.hhs.gov/ecd/child-health-development/watch-me-thrive
5 https://www.cdc.gov/ncbddd/actearly/index.html
6 More information about Nevada’s newborn screening can be found at https://med.unr.edu/nsphl/newborn-screening/disorders
(e.g., public pre-K, Title I, special education) and in IDEA Part C early intervention providers should have an understanding in this area. Those working in early care and education are required to have at least one course in child development and engage in regular continuing education. Professionals with degrees in early childhood education have most likely completed coursework in this area. Content specific to developmental screening, assessment, and special education services are not currently required for professionals in early care and education settings such as child care.

**Project ASSIST** for Infants and Toddlers provides early intervention services for children under 3-years-old, through the Nevada Department of Health and Human Services. This program “provides information, resources, and referral services to inform and educate families of infants and toddlers with disabilities or special health care needs, and the general public” (Nevada Department of Education, 2018, paragraph 3). Families or other primary referral services (e.g., physicians, child care providers) have access to a 24-hour voicemail and email services to connect families with local services across the state, primarily through Nevada Early Intervention Services (NEIS) for evaluation. Additionally, family resources are available online and a state family resource coordinator is available to assist families through the referral process.

Currently in Nevada, approximately 3 percent of the infant/toddler population receive Part C Early Intervention Services through IDEA. This is similar to the population across the US (i.e., range 1.8-9 percent). Since 2008, there has been a 70 percent increase in these very young children receiving services.

**Child Find for Older Children.** For children over 3-years-old, Child Find offices have been established in local school districts across each of the 18 school districts in Nevada. Families in need of information about referral, evaluation, and information, must contact a centralized office for each district. In reviewing information available in each school district, it was concluded that information is inconsistent across districts. For example, some districts (e.g., Clark, Elko, Washoe) have ample information about what Child Find is, the process of evaluation, and contact information. Other districts (e.g., Humboldt, Mineral, Storey) had no clear information regarding what families can do when they have a developmental concern about their children. In addition to information on who to contact when seeking information, content about the process of referral and evaluation is missing from most district websites. Much of the information can only be found by looking at special education areas of the websites. Many districts require families to contact a specific person by phone during traditional business hours or attend pre-determined evaluation periods. For preschool children aged 3 to 5 in Nevada, approximately 8 percent receive services through Part B. This is a 47 percent increase since 2008.

**Early Care and Education Programs.** It is estimated that most children will attend an early care and education program such as child care before entering kindergarten (U.S. Census, 2013). As many families interact with these programs, they are an ideal setting to identify children in need of further evaluation. Nevada child care regulations through the Division of Public and Behavioral Health in the Department of Health and Human Services require that children enrolled in these programs have a developmental screening within three months of enrolling and biannually thereafter. Developmental information can be collected with portfolios, observations, checklists, rating scales, and screening tools. Regulations also stipulate that children in need should be referred for further evaluation by medical professionals and/or Project ASSIST or Child Find. Currently, we do not have data on if these regulations are followed or how many children have been identified through these regular screenings. Nevada’s 56 Head Start programs that serve approximately 3,000 young children also follow screening and referral procedures as stipulated by Head Start regulations. It is estimated that Early Head Start serves 6 percent of eligible infants and toddlers and Head Start serves 17 percent of eligible preschoolers in Nevada (Head Start, 2018). For early childhood programs in public school, in addition to the requirement of licensed teachers, children must be screened using a research-based, validated tool within the first 30 days of enrollment and prior to the end of the school year. Programs should also complete formal assessment and regular progress monitoring.

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7 Information on Project ASSIST and NEIS can be found at http://dhhs.nv.gov/Programs/IDEA/ProjecttASSIST/
Quality Rating Improvement System (QRIS)\(^8\) and Nevada Registry. Nevada has a Quality Rating Improvement System (QRIS; Silver State Stars) to help improve the quality of early childhood programs across the state through the Office of Early Learning in the Department of Education. Voluntary for programs, a ranking system is used to indicate the program’s current level of quality. For other early care and education programs to achieve higher levels in the QRIS system, they must engage in ongoing child assessment, including at least one formal method of data collection and a percentage of children have been screened using a research-based, validated screening tool. Currently, approximately 8 percent of child care and public early childhood programs have star ratings, with the majority of programs receiving two out of five stars and 5 percent of programs achieving national accreditation (Child Care Aware, 2016, 2018).

The Nevada Registry\(^9\) supports the professional development of early education professionals across the state. To support early childhood professionals’ understanding of child development and referral processes, the Nevada Registry regularly offers free and low-cost trainings on screenings for child care providers. These trainings are not required but encouraged for programs participating in QRIS and/or NAECYC accreditation.

Other Efforts. The IDEA Part C Interagency Council maintains a subcommittee dedicated to Child Find efforts specific to infants and toddlers. Meeting quarterly, this subcommittee discusses ideas and efforts to share developmental milestones and the referral process through Project ASSIST with families. Some current efforts include providing newborn parents with developmental milestone brochures from the Center for Disease Control and Prevention, brochures for Project ASSIST/Part C, and early literacy. In the past, public service announcements have been included on local radio and television stations. These efforts are mostly funded and implemented through individual agencies and volunteers from the Child Find subcommittee. Additionally, members of the Child Find subcommittee, Part C office, and NEIS attend family-oriented events and professional conferences to disseminate brochures and information. Nevada also implements Maternal, Infant, and Early Childhood Home Visiting (MIECHV) programs. As these programs aim to support children who may be at-risk for developmental disabilities or delays, professionals and families in these programs may be able to identify concerns before kindergarten. As required by IDEA, Nevada PEP serves as a parent information center and helps families navigate specialized services.

Current Efforts in Other States

Early identification efforts vary widely among the United States. Many states have developed comprehensive websites to provide information for families who are concerned about their children’s development. Additionally, some states have used public awareness campaigns, including low tech (e.g., billboards, brochures) and high tech (e.g., social media) strategies to reach families.

Arizona

Arizona has several programs designed to help identify children and families in need. Strong FamiliesAZ\(^10\) is Arizona’s statewide public awareness program that provides comprehensive, family-centered home visiting services and resources for families of children birth to 5 years old. In addition to an easy-to-navigate website in English and Spanish, families can search for programs and information by zip code. This program also provides information via Facebook, Instagram, and Pinterest. Arizona also provides parents of newborns kits to support their children’s health and learning and offers a toll-free statewide helpline staffed by early childhood experts and nurses to provide support and individualized child development information.

First Things First\(^11\) was created by the state of Arizona to ensure school readiness by kindergarten. This site is available in English and Spanish, includes the option to subscribe to a digital newsletter and family-friendly videos, and provides information on developmental screening, including the tool Ages & Stages. The program also provides information via YouTube, Twitter, Instagram, Linkedin, and Facebook.

\(^8\) For more information about QRIS in Nevada see http://www.nvsilverstatestars.org/
\(^9\) For more information about the Nevada Registry, see http://www.nevadaregistry.org/
\(^10\) See https://strongfamiliesaz.com/
\(^11\) See https://www.firstthingsfirst.org/
The Arizona Early Intervention Program (AzEIP)\textsuperscript{12} is the state’s interagency system of services and supports for families of infants and toddlers with disabilities or delays. The website includes family-friendly information in six languages and includes videos. The online referral page provides a direct link to the local school district for families with children three years and older.

\textit{Utah}

Utah Parent Center\textsuperscript{13} is a hub for families seeking information about child development and specialized services. This program has a comprehensive website that is available in English and Spanish and also has information available via Facebook, Twitter, and YouTube. Notably, the website has videos and webinars available online and in DVDs about transitioning among different programs, the IFSP/IEP process, and bullying. Additionally, they offer in-person trainings and resources on numerous topics related to early identification and special education programs. Links to state and local resources are easy to find and navigate.

\textbf{Examples of Other State Public Awareness Campaigns}

\begin{itemize}
  \item \textit{New York:} Docs for Tots\textsuperscript{14}
    \begin{itemize}
      \item Website with videos, text, and links to local and national resources; Email newsletter; Social media profiles
    \end{itemize}
  \item \textit{Michigan:} Early On: Don’t Worry. But Don’t Wait\textsuperscript{15}
    \begin{itemize}
      \item Billboards, radio, television public service announcements, newspaper and/or print advertisements; Printable posters, brochures, Facebook, Twitter, Google+
    \end{itemize}
  \item \textit{Illinois:} Natural Partners in Natural Environments\textsuperscript{16}
    \begin{itemize}
      \item Website, printable handouts, YouTube Channel
    \end{itemize}
\end{itemize}

\textbf{Considerations for Future Actions}

Nevada continues to do many valuable things to support young children and families. Continued efforts to ensure that each child in Nevada has access to developmental screenings conducted by competent professionals and specialized intervention services are vital to long-term academic success for children, family well-being, and cost-effective state and local programs. In particular, efforts are needed to access families not interacting with formal medical or education systems, those in low-resource, rural, and tribal areas, and families from culturally and linguistically diverse backgrounds.

As young children and their families interact with many different systems (e.g., medical offices, libraries, child care centers, public schools), efforts to increase awareness of procedures and resources for the identification of young children with developmental delays and disabilities requires a coordinated effort across numerous departments, offices, committees, and organizations. In addition to state offices, potential collaborators include Nevada Early Child Advisory Council, Nevada Registry, NevAEYC and Nevada DEC, Early Childhood Technical Assistance Center, Public Broadcasting Service (PBS), public radio and its local affiliates, library systems, state chapters of national professional organizations, and medical professionals.

Widely distributing information to these families not yet in formal school settings is important to identifying children in need. Efforts should focus on meeting families where they typically are, including public spaces and the internet. Families interact with the community in many ways including but not limited to libraries, grocery stores, gas stations, barber/beauty shops, recreation facilities, sport venues, doctor offices, dentist offices, police stations, and public aid offices. Particularly to address the needs of current families and their increased use of technology to obtain information (Zero to Three, 2016), many families frequently engage with social media and websites. Information should be disseminated using internet-based formats including use on smartphones.

The following recommendations are based on increasing family and professional awareness of child development, developmental screening, and available services:

\textsuperscript{12} See https://des.az.gov/services/disabilities/developmental-infant
\textsuperscript{13} See https://utahparentcenter.org/
\textsuperscript{14} See http://docsfortots.org/
\textsuperscript{15} See http://earlyon.cenmi.org/products/index.php
\textsuperscript{16} See https://blogs.illinois.edu/view/6039/230963
1. **Increasing public awareness of available services:**
   - Develop and fund public awareness campaigns via billboards, radio advertisements, television advertisements, social media campaigns, and flyers in common areas (e.g., libraries, barbershops, grocery stores) to share common child development milestones and warning signs for autism and other delays as well as IDEA programs.

2. **Supporting parents’ and families’ knowledge of child development:**
   - Provide parents and families with ongoing developmental information throughout the first five years in multiple forms (e.g., written, video, social media, verbally, email) and multiple settings (e.g., child care, libraries, doctor’s offices, public health offices, public aid offices);
   - Provide parents and families with paper, online, and app-based developmental information and screening tools (e.g., CDC Milestones) and support on how to use such tools;
   - Provide funding to produce and distribute materials;
   - Provide funding and expertise to develop apps and social media sites to convey information to families; and
   - Provide funding and expertise to have information available in multiple languages.

3. **Increasing accessibility of information about services:**
   - Provide clear and consistent information about school district Child Find processes across the state;
   - Develop easy-to-find information for families with developmental concerns via website navigation and search functions, including coding to include multiple terms to connect to appropriate webpages (e.g., Child Find, evaluation, delay, concern, ‘what to do if I think my child has a disability’); and
   - Develop templates or guidelines that include: definitions of key terms and processes, expectations for families during the process, accessible contact information and scheduling to meet families’ needs (e.g., phone, email, online form).

4. **Bolster professionals’ understanding of developmental screening, referral, and available services:**
   - Encourage professional development across sectors (e.g., pediatricians, child care, librarians) of available services and the referral process through quality indicator systems and recommended schedules of developmental screening;
   - Encourage professionals across sectors to perform regular developmental screenings of all children, including screenings for autism, through funding for training/mentoring/coaching, and substitute staff to develop skills and conduct screenings; and
   - Support application and implementation of technical assistance available through the U.S. Office of Special Education Programs and Administration for Children and Families through dedicated personnel and funding to build transdisciplinary state teams.

5. **Develop state-wide coordination of developmental screening and referral services:**
   - Collect data on use of developmental screening across sectors and regions of the state;
   - Develop integrated data systems to ensure that all Nevada children access to developmental screening before kindergarten entry; and
   - Consider requiring hearing, vision, and dental screenings for kindergarten entry or during early elementary school to identify children in need of additional evaluation.
References


Autism Spectrum Disorder (ASD) is a neurological disorder that can cause social, communication, and behavioral difficulties in those impacted (American Psychiatric Association, 2013). Often people with ASD experience difficulties in social situations and applying skills to new situations. Many young children with ASD show delays in developing language skills and it is estimated that 30-50 percent of people diagnosed with autism will not develop an adequate communication system (National Research Council, 2001).

Early intervention is key to increasing quality of life for children and families impacted by autism. Not only does early intervention help to improve skills, it also decreases costs associated with autism by up to 66 percent over the course of a child’s life (Järbrink, 2007). As the cost of autism treatment is estimated to be between $40,000 and $60,000 per year, investment in early learning and behavioral intervention programs is critical (Autism Speaks, 2018).

Key Nevada Facts and Statistics
- In 2017, there were 1,281 children ages 3 to 5 (before kindergarten age) receiving services in the schools for ASD and 6,373 school age children receiving services for ASD through the schools.
- From July 2018 through December 2018, NEIS and other Early Intervention providers report 117 children ages birth to 2 identified as having ASD with an average age of 30 months.
- As of November 2018, 662 children were receiving ATAP services, with 442 total children waiting at an average age of 7, with an average wait time of 360 days (ATAP, 2018).
- Nevada is experiencing waitlists for initial evaluations to diagnose autism, then once diagnosed receiving treatment for autism.
- There is a lack of fully certified teachers in the schools teaching children with ASD. As of October 2018, only 37 percent of the teachers in CCSD have been fully trained in autism.
- Currently there are 193 Board Certified Behavior Analysts (BCBAs) certified under the Behavior Analyst Certification Board in Nevada and 732 registered behavior technicians (RBTs). This is not enough to meet current needs.
- Nevada’s Medicaid Reimbursement rate is 5th lowest in the nation at $31.41.

Key U.S. Facts and Statistics
- Rate of autism is estimated at 1 in 59 by the CDC and as high as 1 in 40 by the American Academy of Pediatrics.
- 30 percent of all children remain undiagnosed at 8 years of age.
- The cost of autism over a lifetime is estimated between $1.4 million and $2.4 million. Annually, the cost of autism services in the United States are estimated at $236 to $262 billion dollars (Buescher, Cidav, Knapp, & Madell, 2014).
- Notably, the cost of autism services can be cut across the lifetime by approximately two thirds with early intervention (Järbrink, 2007).
- Synergies Economic Consulting (2013) has estimated the benefit to cost ratio at 11-to-3.

Recent Actions in Nevada
- School districts continue to accept Alternative Route to Licensure (ARL) teacher candidates to build capacity.
- Recently increased funding to the statewide Autism Treatment Assistance program to $9.6 million in the 2017 fiscal year.
- Behavior Analysts will be licensed under a separate professional board in the state of Nevada.
- Insurance companies are required to cover applied behavior analysis therapies for children with ASD while they are of school age.
Considerations for Future Actions

- Support parents’ and families’ knowledge of child development.
- Develop professionals’ understanding of available services.
- Provide incentives to recruit people to the field, specifically for RBTs, BCBAs, special education teachers, and diagnosticians such as clinical psychologists and developmental pediatricians.
- Increase Medicaid rates to be comparable across the country in order to provide more access to treatment and shorter wait times for families.
- Utilize telehealth options for those in rural communities.
- Provide funding for the Nevada Commission on Autism Spectrum Disorders (currently unfunded) to increase ability to provide guidance across the state.
- Continue to work with Pediatricians to conduct autism screeners at 18 and 24 month appointments with referrals made to early intervention services if the screener indicates a need. Discontinue the wait and see approach.

Implications of Maintaining Status Quo

- Long wait times for initial diagnosis and treatment will continue.
- Not building workforce capacity across all service providers wastes time that could be spent on early intervention, risk of decreased long term outcomes, and increased long-term costs associated with autism.
- Risk losing people who are currently working in the field.

Introduction

Autism Spectrum Disorder (ASD) is a neurological disorder that can cause social, communication, and behavioral difficulties in those impacted (American Psychiatric Association, 2013). As a spectrum disorder, no two individuals with autism will have the same experiences; Some people with autism will have a hard time interpreting social situations, some may have a strong adherence to routines and rituals while others may become preoccupied with parts of things. Additionally, there are behaviors and communication challenges associated with autism that make generalizing to new situations difficult. Many young children with ASD show delays in developing language skills and it is estimated that 30 to 50 percent of people diagnosed with autism will not develop an adequate communication system (National Research Council, 2001). This can lead to an increase in behavior challenges and social isolation for the child and family.

The Community Report on Autism (2018) from the Centers for Disease Control and Prevention states that the estimate of children identified with ASD has increased from 1 in 68 in 2012 to 1 in 59 children in 2014. This estimate is based on the findings of CDC’s Autism and Developmental Disabilities Monitoring (ADDM) Network. A most recent study from Kogan et al. (2018) in the Journal of Pediatrics notes the rates of ASD could be as high as 1 in 40 children. ASD currently affects more males than females at a rate of 4-to-1, and the prevalence is growing among all nationalities, races, and socioeconomic classes. Most children identified with ASD under the ADDM Network assessment criteria indicated developmental concerns before 3 years of age. Of most importance, the CDC (2018) also reported that early access to services can impact the developmental progress of a child, but less than 42 percent of children received an evaluation by 3 years of age. Further, CDC (2018) reported that the average age of children in the ADDM Network diagnosed with ASD was 4 years and 4 months and that 30 percent of all children remained undiagnosed at 8 years of age. Although schools can identify children as having ASD, a medical diagnosis is a requirement for health insurance coverage and access to support services (CDC). Factors such as long wait-lists, time-consuming evaluations, cost of care, and a lack of providers can result in a two-year difference between the earliest signs of ASD and mean age of diagnosis (Gordon-Lipkin, Foster, & Peacock, 2016).

Autism is considered a “hidden disability” in that children and adults with ASD do not show any physical signs of the disorder. This can lead to a lack of understanding from the community. Currently, the exact causes of ASD are unknown and there is no cure, however, there is strong evidence to indicate that there is a genetic component to ASD. We do know that early intervention for children and families and individuals with ASD can lead to significantly improved outcomes. This paper will describe the cost of treating autism, current Nevada indicators, the assessment process, funding
and return on investment, and describe who the educational providers are within the state.

Cost of Autism
Currently, the cost of autism services in the United States are estimated at $236 to $262 billion dollars annually (Buescher, Cidav, Knapp, & Madell, 2014). Of these costs, around $61 to $66 billion dollars are earmarked for children while $175 to $196 billion dollars are targeted for adults. (Buescher et al., 2014). Across one’s lifetime, the cost of autism services will be between $1.4 and $2.4 million dollars, depending on the level of autism. Notably, the cost of autism services can be cut across the lifetime by approximately two thirds with early intervention. (Järbrink, 2007). Synergies Economic Consulting (2013) has estimated the benefit to cost ratio at 11-to-3. Early identification and treatment of autism is not only critical for the child’s future success, it also will save money in the long run.

Nevada Indicators
During the 2016-2017 school year there were 8,769 three- to five-year old children receiving special education services in the state of Nevada and of these, 1,281 were diagnosed as having ASD (U.S. Department of Education, 2017). Nationally, there is a trend of an underdiagnosis of autism spectrum disorder, and Nevada falls into this category. Travers and Krezmien (2018) analyzed official count data from the IDEA Data Center from 2014 for students with autism in seven racial categories in all 50 states. When using California as a comparison group, Travers and Krezmien (2018) found that 18 states, including Nevada, significantly under-identified students from every racial group. Travers and Krezmien (2018) determined that the number and percentages of students with autism in Nevada were: American Indian or Alaska Native 40 (0.8 percent), Asian 312 (1.2 percent), Black or African American 439 (1.0 percent), Hispanic (Latino) 1,487 (0.8 percent), Hawaiian or Pacific Islander 2 (0.9 percent), Two or more races 311 (1.2 percent), and White 2,220 (1.4 percent). In a study of ASD comparing the prevalence and characteristics among 4-year old children in sites participating in the ADDM Network, female and non-Hispanic White children were more likely to receive their first comprehensive evaluation by 36 months compared with male and non-Hispanic Black children (Christensen et al., 2016).

Nevada Early Intervention Services and the Autism Treatment Assistance Program (ATAP) in reports to the Nevada Commission on Autism Spectrum Disorders on January 17, 2019 (Nevada Commission on Autism Spectrum Disorders, 2018) provided several relevant statistics:

- From July 2018 to December 2018, 117 children were diagnosed with ASD. The average age of diagnosis was 30 months. This program serves children who are birth through age 2.
- As of November 30, 2018, there were 32 new applications to the program, 662 active children, and 442 total children waiting.
- The average time a child will be on the ATAP waiting list is 360 days with wait time in the north at 213 days, rural Nevada at 260 days, and southern Nevada at 413 days.

These data do not capture all of the children with ASD in the state of Nevada, but provide an overview. Specifically, there are children who are not yet of school age who are not identified. Additionally, there may be children receiving early intervention services who are waiting to meet with a developmental pediatrician or psychologist for an ASD-specific evaluation. Having a formal diagnosis when one has ASD is critical to receiving the necessary intensity of early intervention services that are publicly funded as well as accessing services that are covered by insurance to ensure development during the critical early years.

Identifying and Assessing Autism
The American Academy of Pediatrics recommends that physicians administer an autism specific screening tool at 18- and 24-months during a child’s wellness checks (Johnson et. al, 2007) to catch any early indicators of autism. The pediatrician works with the family to answer a series of questions related to ASD, and if the child shows any indicators of ASD the family should be referred to an early intervention provider. The first point where the system can lose children is if a “wait and see” approach is taken; If there is even the slightest developmental concern, for autism or any other developmental delay, families should be referred to an early intervention service provider. In Nevada, the point of contact is Nevada Early Intervention Services. At the time the family makes contact, the Early Intervention Provider has 45 calendar days to complete the assessment process. However, this assessment is not required to include
an autism specific diagnostic tool. The early intervention provider will complete global assessments that examine social, communication, self-help, cognition, and motor functioning and provide services for children who meet the deficit criteria in any of these areas. This allows the early intervention agency to be in compliance with the letter of the law. Due to a lack of qualified assessment providers, once families are eligible for services, there is often a waiting time to participate in an autism specific comprehensive evaluation. The wait can be as long as eight months, and in some instances even longer, delaying access to intensive early intervention and applied behavior analysis treatment.

Insurance coverage for additional assessment varies and does not always cover qualified providers. Each insurance provider has a credentialing process which can inhibit providers from adding insurance companies. Families can choose to pursue an early assessment from out-of-network providers at an out-of-pocket cost ranging from $1,600 to $2,400. An additional issue to identification of autism can be the “wait and see” approach. Providers and families may choose to see how the child responds to basic early intervention. Using this approach could delay the intensity of intervention that is required for children to maximize the early learning years.

Autism spectrum disorder can be diagnosed by a variety of qualified professionals, e.g. a developmental psychologist, psychiatrist or pediatrician can provide a medical diagnosis of autism. In schools, a school psychologist, along with the parents, teachers, and other professionals may make an educational diagnosis of autism. The educational diagnosis of autism allows the student to receive services through schools, but does not allow children to access services that are covered by insurance companies. Early intervention providers for children ages 0-2 can sometimes be trained in administering the diagnostic tool, but are not able to make a medical diagnosis.

One of the tools utilized frequently is the Autism Diagnostic Observation Schedule (ADOS), which is considered the “gold standard” assessment protocol (Gordon-Lipkin et al., 2016). ADOS is a comprehensive multidisciplinary team approach that can require a lengthy questionnaire-based screening process before an appointment can be scheduled. Clinical testing can then proceed over multiple visits and take up to three hours (Gordon-Lipkin et al., 2016). While time intensive, this tool can provide additional information that can be utilized to make an autism diagnosis and requires that a diagnostician administer the tool with the child. Other tools used to diagnose ASD such as the Childhood Autism Rating Scale or the Autism Diagnostic Interview (Revised) rely more on an interview than an observation. There are benefits and disadvantages to using each tool. Children with autism may behave differently under observation so parent report is a critical component. However, over a series of sessions the assessment is conducted in a way that lessens this impact on children. Conversely, when relying on parent report, there can be over- or underreporting of symptoms. This can be combated by a skilled interviewer. No matter what additional instruments are utilized to gather information as part of the assessment process, all take additional time to complete (typically an additional one-and-a-half to three hours) as well as people qualified to administer the tools—and the autism specific tools are only one component of a complete assessment.

Educational Services for Children with Autism

Once children are diagnosed with ASD, they receive educational services in a variety of ways from a variety of providers. The location and type of service children receive depends upon the age of the child, the needs of the child, and the resources available to the family. Services can be publicly funded educational services, privately funded clinical services or, more often than not, a combination of public and private services. The educational services are described below:

Services for Children ages 0-2. Children before the age of three in the state of Nevada can receive services through an Early Intervention provider as required by Part C of the Individuals with Disabilities Education Improvement Act (IDEIA, 2004). Families must first reach out to Nevada Early Intervention Services for the initial point of contact and then can select a provider in their area. The family works with the provider to develop an Individualized Family Service Plan. Services from this plan typically take place in the natural environment, which means wherever we find children of this age (i.e., home, child care environment). Many parents receive services in the child’s home one to two times a month with additional support from providers, such as speech therapy, occupational
therapy, and possibly behavioral therapy. The focus of these services is to support the family in supporting the child. While the specialists try to work with the family’s schedule, many times the services take place during the typical workday, which can be hard for families to embed in their schedule if they are working.

**Services for Children ages 3-21.** Once children reach the age of 3, if they qualify, they can receive services from the public school system through the Individuals with Disabilities Education Improvement Act (2004). These services for children ages 3-5 years typically take place on school campuses and can be in settings that are fully inclusive, with other children their age, or in settings that are self-contained, meaning only with other children with disabilities. The early childhood special education programs for children ages 3-5 are taught by a teacher with an Early Childhood Developmentally Delayed Teaching License. If the classroom is a self-contained classroom for children with autism, the teacher must have an autism teaching license. Typically, the programs range from two-and-a-half hours, four days a week to six hours a day, five days a week. When children move to the age where they are eligible to attend kindergarten, they can receive educational services in their grade level classroom, in a combination of a kindergarten classroom and a resource room, or in a self-contained classroom with some access to general education or more restrictive settings as needed. The Individualized Education Program team (i.e., teacher, parents, speech therapists, school psychologist, etc.) work together to decide the least restrictive environment for the student.

**Clinical Services.** In addition to publicly funded school programs, to make progress and gain skills, children with autism benefit from intensive behavior interventions. While these intensive behavior interventions are implemented in schools in conjunction with academic interventions, many children benefit from additional support in clinical or home settings. During this clinical intervention, children work one-on-one with an adult to develop a variety of skills as determined by the parent and the intervention team. Different researchers have arrived at varying amounts of intervention, but it is generally accepted that students need between 20-30 hours per week of intensive, intentional intervention (Lovaas, 1987; National Research Council, 2001). Although children may be present in school for this amount of time, not all of that time is spent in intensive intervention. Therefore, families rely on private agencies to increase the intensity of intervention. It is critical that intensive intervention begin as soon as the diagnosis of autism is made.

**Examples of Service Models.** Although more research has been conducted in the past years to show the effectiveness of early intervention (Green, Brennan, & Fein, 2002; Howard et al., 2014; MacDonald, Parry-Cruwys, Dupere, & Ahearn, 2014; Peters-Scheffer, Didden, Kozzilius, & Sturmey, 2011), it is still not a common practice to recommend a single type of intervention for individuals with ASD due to the range of outcomes within each treatment paradigm (National Research Council, 2001; Peters-Scheffer et al., 2011). While the National Research Council (NRC) reports that early intervention was paramount to receiving the best outcome available for children with ASD, the organization merely list all possible early interventions with research support, without endorsing one intervention as being more effective than another (National Research Council, 2001). This lends to confusion as to which services children should be enrolled in. Also, many of the providers vary in intensity, cost, and age of intake—This impacts when children begin the intervention. The lack of information regarding early intervention services hinders enrollment, as well as funding, and the intense nature of the intervention. Without clear recommendations for early intervention services, there may not be successful enrollment in these services.

Both Early Intensive Behavioral Intervention (EIBI) and the Early Start Denver Model have shown promising results and outcomes for young children with ASD (Dawson et al., 2009; Dawson et al., 2012; Eldevik et al., 2009; Estes et al., 2014; Howard, Sparkman, Cohen, Green, & Stanislaw, 2005; Lovaas, 1987; MacDonald, et al., 2014; Peters-Scheffer, et al., 2011; Reichow & Wolery, 2009; Rogers et al., 2012; Vismara & Rogers, 2008). Treatment may begin as early as 12 months old, with children showing increases in IQ scores, increases in adaptive behavior skills, and decreases in autism-like symptoms. Some have even shown a loss of the diagnosis of ASD, or a reduction of the level of autism (Dawson et al., 2009; Vismara & Rogers, 2008). More research is being conducted to address concerns of experimental research designs.
(Reichow & Wolery, 2009), and varying hours of treatment (Eldevik et al., 2009; Peters-Scheffer et al., 2011; Reichow & Wolery, 2009). The Early Start Denver model is currently being utilized by only a few providers in Nevada (e.g., UNLV Medicine Ackerman Autism Center, 2018) with preliminary reports of good outcomes/success.

No matter which method implemented, many researchers believe if all children received early intervention, communities would see an immense reduction in individuals with ASD, in services needed for ASD, in teachers needed for ASD, and in overall supports needed for these individuals (McEachin, Smith, & Lovaas, 1993). Not only would there be a decrease in services needed, it would cost society less, as these individuals do not continue to require life-long care (Howard et al., 2014; McEachin, Smith, & Lovaas, 1993). With intensive early intervention, a majority of individuals make immense gains that impact their quality of life and independence as adults.

Current Status of Qualified Providers

Children with autism typically receive services from a variety of professionals including teachers, board certified behavior analysts (BCBAs), registered behavior technicians (RBTs), paraprofessionals, speech therapists, and occupational therapists. As with many states across the nation, there is a need for more highly qualified providers in order to reduce wait time, increase the quality of services, and improve outcomes for students with autism. More specifics about the providers will be provided below.

Teachers in Nevada. Aligned with a national trend, Nevada continues to experience a shortage of special education teachers, specifically in the area of autism. To provide an example of the shortage, under request for public records, Clark County School District (CCSD) provided information on the current state of self-contained autism programs. As of October 2018, there are 635 programs in CCSD, of which 232 teachers hold a standard or professional license, 251 are listed under the autism option where teachers who have a teaching license in one area teach in a classroom outside of their licensed area, 96 are Alternative Route to License (ARL) teachers and 30 are long term substitutes. This means that only 37 percent of the teachers have been fully trained in autism. Teachers in the autism option typically had a formal mentoring experience of some kind for their initial teaching license (e.g., student teaching, teaching internships). However, teachers who complete ARL programs may have never had intensive mentoring with multiple field experiences and a full-time teacher who teaches with them for a semester. As such, the feedback given to them is by a school district assigned mentor who has multiple teachers and sites to work with as well as their building supervisor who may or may not have knowledge of best educational practices and strategies for students with ASD.

Moreover, the Individuals with Disabilities Education Improvement Act (2004) requires that all students with disabilities have access to the general education curriculum in the least restrictive environment. This means students with autism should also be attending classes with their peers in the general education classroom for at least part (if not most or all) of their school day. Unfortunately, very few teachers in general education have received any training, mentoring, or coaching on working with students with autism. As the state and the nation face a shortage of teachers, this priority has become lessened, but with recent supreme court cases such as Endrew F. v. Douglas County (2017), school districts may face increasing pressure for ensuring meaningful academic outcomes for students with disabilities.

Board Certified Behavior Analysts in Nevada. As previously mentioned, children with autism often require intensive one-on-one clinical services to make meaningful progress. These services are often provided under the direction of a Board Certified Behavior Analyst (BCBA). Currently there are 193 Board Certified Behavior Analysts certified under the Behavior Analyst Certification Board in Nevada. There are 31 BCBA-D’s at the doctoral level, 144 BCBA’s at the Master’s level, and 18 BCaBA’s at the Bachelor’s level. In comparison, Arizona has 363 Behavior Analysts and 441 RBTs certified, while Utah has 383 Behavior Analysts and 926 RBTs (Behavior Analyst Certification Board, 2018). These individuals are necessary to provide services to the growing number of individuals with ASD in the state. Without a BCBA, services based in Applied Behavior Analysis (ABA) will not be covered under insurance, Autism Treatment Assistance Program (ATAP), or Medicaid funding.
**Registered Behavior Technicians (RB Ts)** are the providers in Nevada who work under the supervision of the BCBA, providing the daily one-on-one services for students with autism. The RBT is a relatively new credential as the Behavior Analyst Certification Board began accepting applications for the Registered Behavior Technician (RBT) in 2014, with a requirement of 40 hours of training (BACB Newsletter, 2013). This change was needed as children with autism who are receiving applied behavior analysis services in a clinical or home setting were typically spending most of their time with a tutor (now RBT). Before 2014, no training was required of the tutors who were spending the most time in direct service with children with autism, and as such, children were often receiving services from someone with minimal knowledge and experience. Preliminary research suggests that 40 hours of training for the RBT can lead to at least a basic demonstration of procedures (Fisher et al., 2014).

Currently, there are 732 Registered Behavior Technicians in the state of Nevada that are eligible to provide direct intervention to children (Behavior Analyst Certification Board, 2018), an improvement from 354 in 2016 (Nevada Commission on Autism Spectrum Disorders, 2016). When Nevada numbers are compared to our neighboring states, Arizona has 441 RB Ts while Utah has 926. Although the numbers have improved, the Nevada Commission on Autism Spectrum (2018) disorders reported to the governor in 2018 that more training programs are needed as we could double the number of RB Ts and still not have enough providers.

These needs can be compounded for those in rural and underserved populations without the necessary access to BC BAs or Board-Certified Assistant Behavior Analysts (BCaBAs) to oversee training (Cihon, Cihon, & Bendient, 2016; Carr, Nosik, & DeLeon, 2017; Nevada Commission on Autism Spectrum Disorders, 2016). Currently, there are no RB Ts, BC BAs, or BCaBAs in Mesquite or Laughlin (BACB, 2018). Overton, a rural town approximately 63 miles outside of Las Vegas, has three RB Ts, but there are currently no BC BAs or BCaBAs. There are eight RB Ts and two BC BAs in Elko, Nevada. In places where there are few people, the eligible RBT provider could be a close family friend or even related. Providing services under those conditions can be a conflict of interest but may be the only option. Additionally, it is expensive for those seeking to get the RBT credential, having to spend money to pay for the testing as well as travel to a testing site (Salt Lake City, Reno, Las Vegas). This requires time and money that is expected of the RBT candidate for a position that may pay between $15-20 per hour.

**Related Services.** Children with Autism often require additional support from specialists, such as speech therapists, occupational therapists, and psychologists. We often refer to these providers as related service providers. There are shortages of qualified related services providers in both the private and school sector. Specifically, families are encountering waiting times for diagnostic services, speech services, occupational therapy services as well as other services. Additionally, there are very few providers who deliver mental health services for people with ASD. All of these specialists are necessary to ensure that children are identified and receive services in a timely manner.

**Cost and Funding for Programs**

As previously stated, the cost of providing services for people with autism can be anywhere from $1.4 to 2.4 billion dollars annually for the United States. These costs can be reduced by up to 66 percent over the course of a person’s lifetime with intensive early intervention (Järbrink, 2007). Early identification is the first step, requiring a medical and/or educational autism diagnosis. The educational diagnosis is funded in part by provisions of the Individuals with Disabilities Education Improvement Act (2004), in which states receive funding from the federal government to ensure access to education for students with disabilities. It is important to note the federal government has not fully funded this mandate since it originated in 1975. The Center for Disease Control estimates the cost of Applied Behavior Analysis Therapy to be $40,000 to $60,000 per year (Autism Speaks, 2018). Insurance companies are currently required to cover applied behavior analysis therapies but families are still left with the cost of co-pays and meeting insurance deductibles. To supplement these costs and attempt to provide access to treatment for those who cannot afford it, several programs are in place.

**The Autism Treatment Assistance Program (ATAP)** is a statewide funding source that was created to assist families in accessing ABA-based treatments in the state of Nevada. ATAP provides temporary assistance and funding for families that
qualify for services for children under 20 years old with an autism diagnosis (Aging and Disability Services Division, 2018). For children that do not qualify for Medicaid or private insurance, the 2015 legislature approved a budget of roughly $4.9 million for the 2016 fiscal year to increase the current caseload to 692, and raised again in 2017 to $9.6 million to increase the caseload to 836 cases in the 2017 fiscal year. However, the latest report shows that only 662 children were receiving ATAP services, despite the increased budget given each year, with 442 total children waiting at an average age of 7, with an average wait time of 360 days (ATAP, 2018). Of the children waiting on the list, there are 45 children from northern Nevada, 95 from rural Nevada, and 302 in southern Nevada. The average wait time is 213 days for northern Nevada, 260 days in rural Nevada, and 413 days in southern Nevada.

ATAP has also publicized upcoming changes to the funding process; Starting in January 2019, the program began providing up to $500 a month for families rather than a $6,000 amount that is dispersed during the first of the year. While the amount is the same, the timing of the disbursement can cause many families who have high deductible insurance programs to be forced to significantly reduce services until they meet the deductible. There was an appeal process in place for families currently receiving funding at the start of January to try to individually problem solve this issue. However, the consequences for families who are unable to pay the high deductible “upfront” could cut services for some children by as much as 75 percent. More information and study is needed on this provision as there may be a need to provide different funding options for high deductible insurance plans and other family needs.

**Medicaid.** Medicaid began providing funding for families in Nevada for ABA-based services in 2014. Currently, an estimated 30 percent of the 8,500 children with an autism diagnosis are eligible for Medicaid-based services. There are only 302 cases in which children are receiving Medicaid-based services in the fee for services program, which falls far short of the budgeted allotment for 1,879 cases in the last biennium. Barriers to Medicaid include long wait lists for providers that both diagnose and accept Medicaid (Legal Aid Center of Southern Nevada, 2018). Although providers have petitioned for higher rates to be paid for RBT’s conducting ABA-based services, Nevada remains the fifth lowest rate out of all 50 states. The mean rate for RBT services paid by Medicaid throughout the country is $47.85, however, Nevada falls significantly below this number, paying $31.31 per hour worked by RBT’s, with the highest rate in the country being $76.08 in Alaska (Autism Speaks, 2018). As of June 2017, there were 15 providers enrolled in Medicaid, with 14 of those having a wait list to access services. There are currently 35 service providers in the state of Nevada, meaning that less than half enrolled as Medicaid providers (FEAT, 2018).

**Impact on Families**

Having a child with autism can have a huge impact on families. While parent involvement is a key component of most effective intervention programs, there are times that parents just want to be parents who love and have fun with their child. There is incredible pressure placed on families to constantly seek additional services, manage the financial burden, and then cope with extra challenges that can come with any child who experiences communication challenges. Families have to learn new educational systems beyond what most experience in school—many have to try to master insurance systems and sometimes the social security system. Additionally, families are required to complete paperwork that repeatedly asks for personal information, all of this while sometimes coping with a situation that can seem scary and uncertain. The process can lead to a feeling of isolation and, if they have had to fight for services, many feel frustrated with systems. Research has shown that mothers of children with ASD earn 35 percent less than mothers of children with another health limitation and 56 percent less than mothers of children with no health limitations (Cidav, Marcus, & Mandell, 2012). Additionally, the behavioral challenges associated with autism can lead to less time at work for parents of children with autism (Gould, 2004).

**Current Barriers within Nevada**

As mentioned, there are numerous barriers to implementing intensive early intervention in the state. First of all, more qualified professionals are needed in all areas that provide services to students with autism. Specifically, there needs to be a mechanism to recruit people to diagnose autism, become teachers, BCBA’s, RBT’s, paraprofessionals, and speech
therapists. While there has been an increase in the number of people with the RBT credential, the requirement to make all interventionists RBT’s has led to a lack in the workforce that is not growing at a rate that meets the demand. Moreover, it is not enough to recruit professionals to the field, we also must focus on retaining these professionals to help improve the quality of services provided. By working to recruit and retain more autism professionals, we reduce the amount of time people are on waitlists for services, leading to early implementation of services and better outcomes.

There have been several changes in leadership over the years which have led to difficulties in the provision of services offered by ATAP. Clinical providers have not been able to predict funding for any substantial period of time. Another funding issue is related to the Medicaid rates which are below the national average. Addressing this may help incentivize more providers to accept Medicaid payment, making services more accessible. Additionally, even after receiving a medical diagnosis and funding, families from rural areas may continue to face barriers to accessing services, such as shortages of certified individuals in their area. In summary, as stated by the Nevada Commission on Autism Spectrum Disorders (2018), all workforce goals have been hampered by “insufficient resources across personnel, materials, and time.”

**Areas for Possible Improvement**

While much has been noted about the needs and barriers related to autism education in the state of Nevada, there is also a community of people across the state who are committed to working for the betterment of all. Building on some of the resources that are in place can continue to improve access to services. The following are recommendations that could be considered:

- Provide incentives to recruit people to the field, specifically for RBTs, BCBAs, special education teachers, and diagnosticians such as clinical psychologists and developmental pediatricians;
- Increase Medicaid rates to be comparable across the country in order to provide more access to treatment and shorter wait times for families;
- Utilize telehealth options for those in rural communities;
- Examine whether licensing fees are an impediment for BCBAs/LBAs and then adjust fees accordingly;
- Encourage interagency collaboration (including diagnostic, educational, and behavioral services) amongst public and private agencies;
- Provide funding for the Nevada Commission on Autism Spectrum Disorders to increase the ability to provide guidance across the state;
- Continue to work with Pediatricians to conduct autism screeners at 18 and 24 month appointments with referrals made to early intervention services if the screener indicates a need. Discontinue the wait and see approach;
- Increase funding for early intervention services across the state and consider additional funding for children with ASD who need intensive behavioral interventions;
- Incentivize insurance companies and providers to increase access to providers or provide more opportunity for families that have insurance to receive behavioral intervention services of choice, and reduce wait times; and
- Tap resources through development of training programs including outreach to currently enrolled high school and university students. Examine current training programs at universities across the state to see what resources are needed to increase capacity in these areas.

Early Intervention services for children with autism are not only beneficial to the child’s quality of life, they also provide a return on investment that will reduce costs to society. By acting early, children with autism will need fewer resources throughout their educational career and have better outcomes as adults (Piccininni, Bisnaire, & Penner, 2017). Families will be able to be more productive in the workforce. The cost of not doing so is $1.4-2.4 million dollars over the course of each child’s lifetime. Addressing needs now is better for the interests of all stakeholders.
References


Retaining Nevada’s Teachers: Issues and Solutions
Iesha Jackson, Ed.D., Lois Paretti, M.Ed., Linda Quinn, Ph.D., Dana Bickmore, Ph.D., and Matthew Borek, Ph.D.

Teacher attrition and retention present an immediate, undesirable challenge for education in Nevada. While an increase in enrollment in the student population necessitates an increase in teachers, teacher retention rates across the state of Nevada range from 14 percent in Pershing County to 30 percent in Clark County and 75 percent in Mineral County from 2012-2015. In addition to the disadvantages to students when teachers leave the profession, there is also a substantial cost to districts. Research in urban settings suggests that replacing a new teacher in a district can range from $12,000 to more than $26,000.

Factors that help retain teachers include strong professional collegial environments, supportive leadership, professional development aligned with present teaching contexts, induction programs that provide new teachers with mentoring and coaching from experienced teacher leaders, reduced teaching loads, positive personal support from administrators, and collaborative experiences with colleagues. In addition, teacher pay has always been a factor in retaining quality teachers. Teaching is a demanding profession, but low pay can leave teachers feeling undervalued and contribute to their attrition.

Key Nevada Facts and Statistics
• During 2017-2018 there were nearly three million students enrolled in Nevada schools and approximately 1,000 teacher vacancies.
• Less than 60 percent of the statewide demand for teachers was met in 2017.
• Between 2012 and 2017 nearly 20 percent of the Nevada teaching force left the profession.
• While Nevada school districts have a large number of substitute teachers, many classrooms still go without a qualified teacher; in CCSD alone nearly 900 jobs a day go unfilled.

Key U.S. Facts and Statistics
• Teachers in the U.S. comprise the largest organizational group in the nation.
• Approximately 42 percent of new teachers are estimated to leave the profession in five years.
• The national average of teachers leaving the profession is 14.2 percent and the number of candidates entering the teaching field has dropped since 2004.

Recent Actions in Nevada
• Numerous teacher education programs have been approved in Nevada in an attempt to address the teacher shortage.
• Some districts offer monetary incentives for teachers who commit to work in lower-performing schools.
• The Great Teaching and Leading Fund has provided professional development opportunities for teachers and administrators.

Considerations for Future Actions
• Fund professional learning for principals in developing a school culture that supports teacher retention.
• Fund coaching, mentoring, and networking opportunities for administrators and teachers.
• Institute programs for timely and meaningful professional development for all teachers.
• Increase teacher pay.
• Establish a framework for paying teachers serving in residency or internship programs as they work alongside an experienced teacher or teachers over an entire school year.

Implications of Maintaining Status Quo
• The population of Nevada is projected to increase to 3.5 million by 2020, stressing the existing educational system already struggling to recruit and retain the teaching force necessary to serve a growing and diverse student population.
• The educational vitality of Nevada’s communities will be inhibited by the absence of teachers and programs that support them.
• Education has a direct effect on workforce and whether that workforce has the skill sets sufficient to attract the industries Nevada’s economic development leaders want to attract.
• Nevada’s status as last in the nation for “student chance of success,” cannot be improved without increased focus on improving teacher retention and professional development for Nevada’s teachers and administrators.
Introduction
This paper presents an overview of challenges the Nevada Department of Education faces regarding the attrition and turnover of Pre-K-12 classroom and special education teachers. This paper asserts that for children and schools, the distinction between attrition and turnover is not as important as the fact that teachers leave schools. After describing the problem of teacher attrition and turnover, the paper addresses the cost of this problem to Nevadans, school districts, and the Nevada Department of Education, lists probable causes, and recommends possible solutions as identified through a review of literature on teacher attrition and turnover.

Statement of the Issue
Teachers in the U.S. comprise the largest organizational group in the nation (Bureau of Labor Statistics, 2011). While the number of teachers who are beginners has dramatically increased, more than 41 percent of new teachers are estimated to leave the profession within five years (Perda as cited in Ingersoll, 2014). The loss of new teachers hampers the ability to adequately staff schools with highly qualified teachers. In the May issue of Educational Leadership, Ingersoll, Merrill, and Stuckey (2018) provide data on trends in public school teacher turnover that indicate the following: Public school retirements have increased, the teaching force has become less experienced and less stable, and departures from teaching are far higher for beginning teachers than for their experienced colleagues.

Throughout the U.S. teachers leaving the profession, defined as attrition, occurs at higher rates in the South and lowest in the Northeast, where states tend to offer higher pay, support smaller class sizes, and make greater investments in education. Shortages also persist in specific areas: mathematics, science, special education, English language development, and foreign languages. Turnover, which refers to teachers moving from school to school, is 50 percent higher in Title I schools, which serve more low-income students. Turnover rates are also 70 percent higher for teachers in schools serving the largest concentrations of students of color (Carver-Thomas & Darling-Hammond, 2017). According to Ingersoll, Merrill, and Stuckey (2018), “about 45 percent of all public school teacher turnover takes place in just one-fourth of public schools” (p. 48). These high teacher turnover and attrition rates negatively impact student achievement (Ronfeldt, Lankford, Loeb & Wyckoff, 2013).

As we look across two particular issues, attrition and turnover, we assert that for children and schools, it is not important to distinguish between attrition and turnover; the problem is that teachers are leaving. According to an analysis by Pak-Harvey (2017), the national rate of new teachers who left the profession after one year in 2015 was 15 percent. This number does not include teachers who move from one school to another, which is estimated to be significantly higher. Across the state of Nevada, three-year turnover rates for teachers have ranged from 14 percent in Pershing County to 30 percent in Clark County and 75 percent in Mineral County from 2012 to 2015; the data reveal that teacher retention is a significant issue in rural and urban areas of Nevada.

Costs of Teacher Loss for Nevada, the School Districts and Nevadans
There is a high cost when teachers leave school districts. A study of state-by-state attrition rates concluded that there is a revolving door of teacher turnover that costs school districts upwards of $2.2 billion a year (Amos, 2014). The cost of teacher turnover and attrition varies among urban, suburban, and rural schools districts. Research in urban settings suggests that replacing a new teacher in a district can range from $12,000 to more than $26,000 per teacher (Watlington, Shockley, Guglielmino, & Felsher, 2010). This cost includes the money districts must spend for recruitment, orientation, and induction. In addition, there are other hidden costs that are difficult to monetize in terms of student learning, and their impact on school culture should not be underestimated.

Causes of Teacher Loss
Given the impact that teacher loss has on students, schools, and districts, it is imperative to better understand causes of attrition and turnover in an effort to ameliorate the issue. Redding and Henry (2018) contend that “students who lose their teacher during the school year have significantly lower test score gains...than those students when their teachers stay” (p. 1). In this section, we provide an overview of several causes for teachers leaving schools. The list is not exhaustive but rather covers salient topics that have been well-documented by research. Based on our review of literature, we lim-
it our discussion to school leadership, job dissatisfaction, new teacher reality shock, a lack of meaningful professional development, and low pay.

Studies show that teachers leave schools not students. Ashkanasy and Humphrey (2011) found that teachers placed in schools with positive climates (e.g., strong professional and collegial environments and supportive leadership) were more likely to decide to stay in teaching, and administrative support is the factor most consistent with teachers’ decision to stay or to leave (Sutcher, Carver-Thomas, Darling-Hammond, 2016). Specifically, principals are crucial to a positive school climate, teacher professional development, and structures that support teachers. According to Totaro and Wise (2018), when the induction of teachers into a district or school focuses on culture and vision as well as procedural information, teachers are more likely to feel part of the school culture.

Research on teacher job dissatisfaction correlates satisfaction and attrition; the less satisfied a teacher is with his/her job, the more likely he/she is to leave (Perrachione, Rosser, & Petersen, 2008). Contributing factors to dissatisfaction include stress, a lack of confidence in one’s ability to perform requisite duties (Chestnut & Burley, 2015), and challenges of placement when the newest teachers are placed in the hardest-to-staff schools. For new teachers, stress can result from demands such as paperwork or classroom management, or conditions such as isolation and feeling undervalued (Prilleltensky, Neff, & Bessell, 2016). One well-established stressor for teachers is a low level of belief in their ability to execute the tasks of teaching in a way that will garner expected student outcomes. When teachers question their ability to effectively engage students, manage the classroom, or implement instructional strategies, they are likely to experience higher levels of stress than those with more confidence in those areas—Thus beginning teachers are more likely to be impacted by this (Klassen & Chiu, 2010). Furthermore, when teachers find themselves in schools impacted by high poverty and low academic achievement, stress factors can be compounded. Unfortunately, more often than not, the teachers facing such conditions are typically the newest to the profession. Amrein-Beardsley (2007) estimates that “only about 15 percent of America’s expert teachers teach in high-poverty, underachieving schools” (p. 65).

Entering the teaching profession into the most challenging contexts can force new teachers into a “reality shock” (Dicke, Elling, Schmeck, & Leutner, 2015) and contribute to those teachers leaving within five years. “Reality shock” refers to the process of having to apply what was largely theoretical knowledge and ideals to full-time teaching. This is most likely to occur when a teacher enters the profession and quickly transitions from being a student-teacher to the teacher-in-charge. In an influential study on new teachers which popularized the concept of teacher reality shock, Veenman (1984) outlined eight challenges new teachers face: assessing student learning, classroom discipline, communicating with parents, motivating students, organizing class work, having inadequate materials and supplies, addressing students’ individual differences, and responding to individual student issues. While teacher candidates may become aware of these potential obstacles during preparation, they most often have limited opportunities to confront them until their first years teaching.

The lack of high quality professional development (PD) is another cause of teacher loss. When professional development is not aligned with educators’ present teaching contexts or with the needs of schools, districts and schools miss an opportunity to leverage quality PD as a vehicle toward improving school culture, and educators are likely to miss ongoing, high-quality professional growth opportunities. It is generally accepted that PD costs range from 2 percent to 4 percent of a district’s total budget, with some estimates going as high as 7 percent (Gulamhussein, 2013; The New Teacher Project, 2015), so PD is an area in which policymakers should expect evidence of effectiveness. In addition, a school environment in which leadership encourages teachers to further their careers through meaningful PD has been linked to increased teacher retention (Kraft, Marinell & Shen-Wei Yee, 2016).

According to Podolsky and colleagues (2016), the beginning salary for teachers can be 20 percent less than beginning salaries in other fields for individuals with college degrees. In addition, great inequities in teacher salaries among districts within the same labor market leave some high-need, under-resourced districts at a strong disadvantage in hiring. For example, an analysis of nationally representative data found that the best-paid teachers in low-poverty schools were earning 35 percent more than their counterparts in high-poverty schools.
Retaining Nevada’s Teachers (Adamson and Darling-Hammond, 2011). The nationwide issue of teacher pay is also related to teachers feeling undervalued. Currently, four states (Arizona, Kentucky, Oklahoma, West Virginia) have had or are now facing teacher strikes due to low wages (Pearce, 2018), and while striking is illegal for teachers in Nevada, protests to fight pay freezes are underway in the Clark County School District (Pak-Harvey, 2018). Without attending to these and other concerns facing Nevada’s teachers, retaining them will remain difficult.

Potential Solutions

School Leadership. An important solution for improving teacher retention is providing effective professional learning experiences for principals in order to develop a culture conducive to a positive working environment along with school structures that support teacher retention. Once in the profession, substantial evidence indicates that new and experienced teachers will both stay at their schools and in the profession if they receive a variety of supports, the most important of which is a quality principal (Sutcher, Carver-Thomas, Darling-Hammond, 2016). Principals that can develop positive working conditions that include a school culture of collaborative responsibility, teacher empowerment and involvement in decisions, positive student behaviors, a safe working environment, and time for PD are more likely to retain teachers at their schools and in the profession (Allensworth et al., 2009; Boyd et al., 2011; Burkhauser, 2017; Kraft, Marinell, & Yee, 2016).

According to a report by the Education Commission of the States (ECS), “states have played a relatively small role in principal professional development” (Aragon & Education Commission of the State, p. 1), and virtually no attention has been focused on principal PD specific to teacher retention. The ECS report and others (Council of Chief State School Officers, 2016; Manna, 2015), however, suggest states can positively impact principal learning through statewide policies and resource allocation targeted to support and improve principals’ practice. The ECS report specifically highlights Nevada’s efforts to provide high quality PD through Senate Bill 474 and The Great Teaching and Leading Fund. Other states, such as Colorado and Oregon, have developed specific programs to provide coaching, mentoring, and networking opportunities to principals through state initiatives and funding. Through relicensure requirements that direct principals to participate in high-quality professional learning experiences, as exemplified by Pennsylvania’s Inspired Leadership Program (Manna, 2015; Pennsylvania Department of Education, 2018), states can be more systematic in dictating what and how principals learn. Such systematic, state-guided principal professional learning can be focused on skills and practices that specifically help retain teachers.

Mentoring and Coaching. Along with principals, veteran teachers who serve as mentors are vital to retaining their colleagues. High quality mentoring for early career teachers has been shown to impact teacher enthusiasm (Kent, Green, & Feldman, 2012), stress (Adams & Woods, 2015), and classroom teaching behaviors (Spooner-Lane, 2017). To further the impact of mentoring in their state, Texas voters passed legislation to fund a Beginning Teacher Mentoring and Induction grant program which was designed to provide “qualified mentor teachers [for] classroom teachers with less than two years of experience” (Eissler & Watts, 2009, p. 23). The state allocated $15 million across 50 districts in the first grant cycle (2007-2009) and $15 million to 35 districts during the second (2008-2010). Similarly, New York state funds a competitive grant, the “Mentor Teacher-Internship Program,” for beginning teachers in their first or second years to be supported by a mentor who is appointed by a “mentor selection committee composed of a majority of highly qualified teachers selected by peers” (New York State Department of Education, 2018). While public evaluations of these state programs were not readily accessible, the decision to fund such programs is aligned with research that has demonstrated that formal induction that includes mentoring does positively impact teacher retention rates (Duke, Karson, & Wheeler, 2006).

For more established teachers who may be new to a school or district, coaching is a proven method for continued professional improvement. While mentoring and coaching have much in common, the act of coaching takes on a more specific purpose toward improving instructional practice. Coaches often team teach or demonstrate teaching strategies, assist with aligning teaching and student assessments, and focus on reaching “personalized goals that are directly generated from... the needs of teachers and students” (Desimone &
Pak, 2017, p.8). In an effort to specifically increase student achievement in math, Delaware’s governor proposed expanding the state’s number of middle school math coaches (Whinnery & Pompelia, 2018). Data on the effects of large-scale coaching programs acknowledges challenges when widely implemented in a state, yet promising practices include web-based virtual coaching using video-based technology (Kraft, Blazar, & Hogan, 2017) and providing continued support and development for instructional coaches (Eisenberg, Eisenberg, Medrich, & Charner, 2017).

**Induction for New Teachers.** Mentoring is a component of induction, and induction is a component of PD. As with any worthwhile program, all pieces must be in play for a successful outcome to occur. Research outlines the importance of implementing structured induction programs at the district and school level to improve retention of new teachers (Ingersoll & Kralik, 2004; Ronfeldt & McQueen, 2017; Smith & Ingersoll, 2004). These induction programs include new teacher orientations, mentoring and coaching, professional development specific to new teachers, reduced teaching loads, positive personal support and interactions with administrators, and collaborative experiences with colleagues. The New Teacher Center provides a detailed look at induction practices. They claim that “the ultimate beneficiary of a comprehensive induction program is the student. A growing body of research shows that students taught by teachers who receive comprehensive induction support for at least two years demonstrate significantly higher learning gains” (thenewteachercenter.org, 2016).

Induction and mentoring new members in any profession is not a new idea. In the 1978 issue of The Harvard Review Collins and Scott stated that “Everyone who makes it has a mentor.” During the 1980s, support programs for teachers began to appear across the country. These induction programs established systematic and sustained assistance for beginning teachers as well as teachers new to a state or district through the establishment of mentors and allowed for experienced teachers to offer professional and personal support. Zimpher (1987), stated that mentoring of novices by expert teachers can ameliorate initial concerns about self and teaching and encourage an early view toward professionalism. More broadly, the greater the number of supports through an induction program, the less likely new teachers are to leave their schools or the profession (Ronfeldt & McQueen, 2017; Smith & Ingersoll, 2004), with estimates as high as 58 percent of new teachers being more likely to remain in teaching and at their schools with such support (Ronfeldt & McQueen, 2017). If implemented well, mentoring and coaching for new teachers at the state, district, and school levels indicate new teachers may be 30 percent less likely to leave the profession (Smith & Ingersoll, 2004).

While the purpose and processes of induction and mentoring have been thoroughly researched, implementation of such programs is tricky and fraught with challenges. How is the Nevada Department of Education to create and sustain a systematic approach of support for teachers? It appears that implementing a comprehensive and coherent induction program holds great promise in retaining teachers. Given that teachers greatly influence student academic growth (Nye, Konstantopoulos, & Hedges, 2004), and a teacher’s influence may outweigh any number of external factors to a school’s direct control (Hattie, 2009, 2012), support through timely and meaningful induction programs and PD for teachers is basic to the retention of new teachers and experienced teachers. “Focused comprehensive induction helps teachers get better faster, sometime surpassing veteran colleagues. Successful teachers are more likely to stay in the profession; numerous programs point to dramatic increases in teacher retention even in hard-to-staff schools.” (thenewteachercenter.org, 2016)

**Internships and Residency.** Residency and intern programs have become a popular way to lessen the gap between teacher education programs and teaching so that new teachers have more time to gain practical experience before becoming teachers of record by experiencing “clinically rich” practice (Darling Hammond, 2014). Such residencies or internships are based on a medical school model of clinical practice. At the Harvard Graduate School of Education, teams of teachers observe and learn within classrooms in Boston-area schools, and a New York City model of teacher residency has demonstrated effectiveness in building experience in specific school contexts (Goodwin, Roegman & Reagan, 2018) where pre-service teachers work alongside an experienced teacher or teachers over an entire school year.
High Quality Professional Development. Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) conducted an extensive review of research in PD, with the explicit goal of providing a research base for policymakers, concluding “the kind of high-intensity job-embedded collaborative learning that is most effective is not a common feature of professional development across most states, districts, and schools in the United States” (p. 4). The authors found that more than 90 percent of teachers reported that PD experiences were comprised of one-day workshops or conferences. While American teachers spend roughly as much total time on PD activities as do teachers in other developed countries, American teachers are lacking the extended learning experiences that are commonplace elsewhere. The types of professional learning that were identified as holding the most potential included professional learning communities, which were regularly found in the other countries that were analyzed:

In place of professional development dictated by national boards of education, the content of professional learning is determined according to local needs and is often embedded in the work of ‘teacher teams’ or ‘teacher units’ at particular schools, which are empowered to make decisions around curriculum and evaluation. (Ibid., p. 17)

Features of quality and effective PD have been identified by numerous authors and organizations (Corcoran, 2007; Darling-Hammond, et al., 2009; Darling-Hammond, Hyler, & Gardner, 2017; Gulamhussein, 2013; Jensen, et al., 2016) as collaborative, content-focused, focused on active learning, intensive, ongoing and connected to practice, and connected to other school/district initiatives.

Darling-Hammond et al. (2009) suggested that policymakers frame discussions around educator PD by asking, “How can states, districts, and schools build their capacity to provide high-quality professional development that is effective in building teacher knowledge, improving their instruction, and supporting student learning? And how can they assess the impact of their efforts over time?” (p. 27). As the Nevada Department of Education (NDE) does not currently collect information regarding the quality or effectiveness of professional development, the state is lacking the basic information that would be needed to craft meaningful, long-term policy solutions.

The current requirements for PD focus on verifying that a minimum amount of seat time has been completed, rather than making an explicit connection between PD activities and the ongoing professional growth of educators. In other words, the current policy framework for professional development exists in isolation, with no connection to other facets of the career continuum of educators. A few initial steps would modernize Nevada’s approach to educator PD:

- Require NDE (or another qualified entity) to collect, analyze, and report on district- and school-level PD activities across the state including (minimally) expenditures and effectiveness;
- Adopt standards of high-quality professional development and update the regulatory framework to reflect promising practices in the field;
- Require alignment to professional development standards as a mandatory pre-condition for any state or federal funding requests associated with educator development (i.e., Nevada’s Great Teaching and Leading Fund or district requests for Title IIa funds); and
- Should any new initiatives launch in the area of educator effectiveness, the state should include a corresponding PD strategy that capitalizes on the existing infrastructure provided through districts’ regional professional development providers.

Professional development of teachers is viewed as an ongoing process that continuously improves practice. Teachers who have the freedom to complete a range of professional development activities that are timely, relevant to their teaching situations, and connected to district and/or school initiatives can experience effective professional growth (Desimone, 2009).

Teacher Pay. States and districts can increase teacher salaries in schools and communities where salaries are not competitive or able to support a middle-class lifestyle. To do this, some states have funded statewide salary minimums that raise and equalize pay, as well as salary incentives for accomplishments such as National Board Certification or taking on additional responsibilities. Districts can negotiate salary structures that incentivize retention and make compensation packages more competitive in the local labor market.
Jackson et al. (Podolsky et al., 2016, p 3). Teachers can also be compensated through incentives related to housing, flexible work assignments, additional pay for expert/master teachers, and tuition reimbursement for career advancement.

**What is Nevada Doing?**

Senate Bill 474 and the Great Teaching and Leading Fund have provided funding for educator PD that may support teacher retention. In addition, professional development provided via state funding through the Nevada Regional Professional Development Programs may support educator retention. Potentially, the SB 497 Advisory Task Force on School Leader Management may also provide recommendations for improving principal quality that can support teacher retention. However, Nevada does not currently have a state plan directly focused on retaining educators, nor does the state suggest or require districts to address educator retention through formal plans.

**How Can Nevada Do Better?**

The Nevada Department of Education could develop specific programs to provide professional learning opportunities, coaching, mentoring, and networking opportunities to teachers and administrators through state initiatives. Funding that focuses on quality principal practices and best-teaching practices would support teacher retention. Requiring teacher induction and retention plans from districts that may include coaching and mentoring for new teachers, impactful, high quality professional development, and instruction in data collection for experienced teachers could all help improve teacher retention. Increasing teacher pay at all experience levels, as well as considering creative funding for experienced teachers who show competencies in coaching and mentoring, could also support teacher retention.

**Implications of Maintaining Status Quo**

The population of Nevada is projected to increase to 3.5 million by 2020, bringing more diverse learners to the state. This growth will stress the existing educational system which is already struggling to recruit and retain the teaching force necessary to serve a growing and diverse student population. Given that the challenges faced by ELs and other student populations in classrooms contribute to Nevada’s high teacher turnover rate, this issue will persist if not addressed. The educational vitality of Nevada’s rural communities will be inhibited by the absence of teachers and programs that support them. The Education Week Research Center’s report (2016) listed Nevada last in the nation for “Student chance of success,” and 38th for K-12 achievement. This status cannot be improved without increased focus on improving teacher retention and professional development for Nevada’s educators.

**Conclusion**

Support through the various means outlined for educators in this paper is basic to the retention of new teachers and experienced teachers, though according to Ingersoll (2016) none of the reasons previously stated represent the reason new teachers decide to remain in teaching or their perceived success.

States and districts that have prioritized teacher retention have developed ongoing data collection and evaluation systems to determine effective solutions to teacher attrition and turnover (Holme, Jabbar, Germain, & Dinning, 2017; Kraft, Marinell, & Shen-Wei Yee, 2016). Determining solutions to teacher turnover and attrition in Nevada requires robust data collection and analysis to address Nevada-specific issues.

Simply put, though nothing about recruiting and retaining excellent teachers for Nevada students is simple, any shortage of teachers can begin to be addressed by retaining those already certified and in place. Retaining teachers can certainly lighten the cost of recruitment and professional development, and such savings could release funds for establishing support programs. Putting programs in place to retain experienced and new teachers is likely the most powerful tool within our purview at present. The suggestions explained in this paper have the potential to help Nevada schools and districts retain teachers, save money, improve practice and increase student achievement. We have the necessary information, the expertise, and the desire to make significant changes to schooling in Nevada. Working together, across policy and institutional barriers, solutions to the problems of teacher retention can be accomplished.
Retaining Nevada’s Teachers


Amos, J. (2014). *On the path to equity: Teacher attrition costs United States Up to $2.2 billion annually.* (14)14, Alliance for Excellent Education.


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Jackson et al.


## Supporting Teacher Leadership in Nevada

Matthew Borek, Ph.D.

Teacher leadership strategies are increasingly being deployed in multiple jurisdictions across the country, with mixed results. While informal teacher leader roles have existed for decades and are a not new idea, the expectations and responsibilities of these roles vary significantly from district to district or even from school to school. Ultimately, such an inconsistent approach to teacher leadership fails to capitalize on the potential of a comprehensive approach to human capital reform, including a modernized career ladder with advanced teacher leader roles. This would allow excellent teachers to stay in the classroom while also extending their reach by tapping into their expertise to increase the overall systemic capacity for instructional leadership. When designed and implemented purposefully, a teacher leadership approach that identifies the best teachers and provides them with responsibilities that extend beyond typical classroom responsibilities can show positive effects on student learning and may encourage excellent teachers to remain in the profession. A strategic approach to teacher leadership can also be used to strengthen numerous aspects of the career continuum, by improving the quality and effectiveness of induction programs, providing peer review of instruction, or delivering on-site professional development to those who need it most.

Approaches to teacher leadership being used elsewhere have tended to adopt one of two possible definitions of a teacher leader: the first recognizes that all teachers have leadership potential and devises a system of supports to allow individual, classroom-focused leadership; and the second seeks to identify highly effective teachers and provide specialized support to a smaller number of elite teachers, placing them into a modern career ladder and building roles with responsibilities that focus on systemic improvement. If Nevada considers developing a formal teacher leadership framework, given the state’s recent history of teacher shortages, high level of teacher attrition, and the inequitable distribution of effective teachers, the latter definition would provide the state with a framework that allows for a scalable solution to some of the state’s most persistent human capital challenges.

### Nevada Context
- The majority of teachers in Nevada were prepared out-of-state.
- Nevada System of Higher Education (NSHE) reported that for the 2016-17 academic year, 58.6 percent of statewide demand for teachers was met by program completers from NSHE institutions.
- NSHE estimates that roughly 60 to 73 percent of graduates from education programs at NSHE institutions remain in the profession after five years.

### U.S. Context
- Persistent teacher shortages have become more acute in recent years, particular in high-need areas such as special education and secondary STEM fields.
- Teacher attrition continues to be a concern, with the Learning Policy Institute estimating that six of 10 teachers who are hired are replacing teachers who left their district pre-retirement, and the National Center for Education Statistics reporting more than a 60 percent increase in the teacher attrition rate from 1991 and 2005.
- The average cost of teacher attrition per teacher is estimated at $9,000 for rural districts and $21,000 for urban districts.
- In a 2018 national survey, the group Educators for Excellence found: 95 percent of teachers believe teachers should be compensated for taking leadership roles in addition to their classroom responsibilities; 43 percent of teachers express pressure to become an administrator in order to advance their career; and 64 percent to 87 percent of teachers expressed an interest in specific teacher leader roles (i.e., professional development facilitator, instructional coach or mentor teacher).

### Recent Actions in Nevada
- Recent legislative action has focused on recruitment of new teachers, such as the Teach Nevada Scholarship or recruitment programs receiving funding through the Great Teaching and Leading Fund.
• State-level teacher leader initiatives include hiring a “Teacher Leader in Residence” beginning in the 2018-2019 academic year and convening an advisory group to discuss definitions of teacher leadership.
• Following a targeted effort to increase the number of National Board Certified Teachers, over 150 Nevada teachers became newly board certified in 2018, including over 120 newly board certified teachers in Clark County School District.

Considerations for Future Actions
• Accelerate the state’s timeline and strategic planning for the development of a more robust career ladder that articulates explicit teacher leadership roles. Begin by adopting the Teacher Leader Model Standards as an organizational framework.
• Incentivize districts and local organizations to articulate the expectations of specific teacher leader roles and pilot the use of teacher leaders. Existing resources such as the Great Teaching and Leading Fund or state-level Title II-A funds could specifically focus on this work.
• Build new teacher leader roles into the state’s licensure framework and identify appropriate supports for those who are identified for teacher leader positions.
• Include teacher leadership in the state’s strategy to address the inequitable distribution of effective educators.

Implications of Maintaining Status Quo
• Initiatives seeking to strengthen the educator pipeline and/or address the inequitable distribution of teachers will continue to be done in piecemeal fashion, meaning they are unlikely to lead to systemic change.
• Without a modernized career ladder including teacher leader roles, teacher attrition is likely to remain high, as will the number of shortages.
• The inequitable distribution of effective teachers, with the least experienced teachers currently working in the highest need schools at a disproportionate rate, is likely to continue without a targeted strategy.

Introduction
Teacher leadership is a concept that enjoys near-universal support from a wide range of stakeholders; it is also a concept that is widely misunderstood. Teacher leadership strategies exist along a spectrum of possible approaches, and each contains its own implementation challenges. If a state views teacher leadership as a static, uniform concept and does not strategically connect teacher leadership with other educator effectiveness initiatives then it is very likely, based on the experiences of other states, that teacher leadership in Nevada will not result in meaningful change. However, if teacher leadership is piloted purposefully and scaled effectively, it may represent a solution that can bind multiple reform initiatives together and increase the total capacity of the education system.

Teacher leaders serve in numerous formal or informal roles in schools. They work as instructional coaches, data analysts, assessment specialists, parent advocates, state liaisons, action researchers, mentor teachers for novices, supervising teachers for student teachers, critical friends, group professional development facilitators, curriculum experts, department heads, school improvement team leaders, technology coaches, and policy influencers, to name only a small sample of possibilities. Adding to the ambiguity around current approaches to teacher leadership, you could easily find two teachers working as teacher leaders in different states with exactly the same title, but with very different requirements and responsibilities. Moreover, in states that do not have a coherent approach to, and strategy for, teacher leadership at the state level, it is likely that this could apply to two teachers working in the same state, or even the same school district.

As Nevada embarks on the next phase of education reform, it is useful to review the various and numerous teacher leadership models used across the country, the implications of these approaches, and the barriers inherent in each. By understanding these initial efforts by other states to install a formal teacher leadership system, Nevada will be better positioned to craft an approach that will have broad support and buy-in, while also producing a system that is scalable in the future. On the other hand, if Nevada proceeds down a path that does not account for the lessons of early adopters in other states, it is likely that a concept with tremendous potential could be implemented in a manner that
is neither scalable nor sustainable. As the central piece of a comprehensive human capital strategy, teacher leadership has the potential to address the inequitable distribution of effective educators, increase the professionalization of teaching, and create a meaningful career ladder that will attract and retain more talent into the pipeline.

This policy paper begins with a brief overview of teacher leadership, including the numerous influential organizations who have supported it (i.e., Council of Chief State School Officers, New Leaders, Learning Forward, National Network of State Teachers of the Year, National Board for Professional Teaching Standards, etc.) and the framing of the concept. Next will follow a review of relevant research; although teacher leadership has a relatively small but growing research base, early studies indicate positive effects of teacher leadership on student achievement, teacher retention, and improved school culture. Next is a review of state and national efforts with large-scale teacher leadership initiatives. The paper concludes with a set of recommendations for building a sound policy framework for teacher leadership.

There are many existing resources that may be deployed to capitalize on any efforts in teacher leadership, such as Title II-A funds (at the state and district levels), the Great Teaching and Leading Fund, and the network of Regional Professional Development Programs (RPDPs). Teacher leadership has the potential to leverage multiple funding streams into a coherent approach, thus leading to more meaningful systemic change and greater efficiency. This paper supports the development of a comprehensive strategy, with teacher leadership as a central component. The primary frame of this paper is how to proceed in a manner that capitalizes on the lessons from other states, while also creating policy flexible enough to encourage innovation yet precise enough to lead to a sustainable and scalable system of supports. The state can learn from its recent experiences with the launch of the Nevada Educator Performance Framework (NEPF) and apply a different implementation model, capitalizing on and strengthening existing infrastructure without needing to start from scratch. Nevada’s past (and current) efforts in teacher leadership have been piecemeal approaches, lacking long-term objectives and connections to other initiatives, which has led to efforts that are neither scalable nor sustainable. By encouraging a more comprehensive human capital strategy with teacher leadership as a significant connective component, the state can support local efforts and provide a mechanism for disseminating promising practices at the state level, leading to systemic and enduring change.

### Overview of the Issue and Review of Relevant Literature

Curtis (2013) contextualized teacher leadership initiatives across the country by stating:

> When districts compensate teachers based on years of experience and credits earned, which have little to no connection to effectiveness, instead of improved student learning, they send a confusing message about what matters most and provide little opportunity for career growth or recognition of excellence, two things important to high performers (p. 1).

This central thought permeates much of the research literature in teacher leadership: treating all teachers the same is a failure of the system to capitalize on the strengths of high-performing individuals and leverage their talents toward systemic improvement. The policy advocacy group Public Impact has argued that if schools establish what they call an “opportunity culture,” schools and districts can change their practices, apply multi-classroom leadership models, and improve student learning while concurrently strengthening the teaching profession.

Teacher leadership as a concept is not new and stems from theories of distributed leadership. Angelle and DeHart (2011) argued, “schoolwide leadership capacity is built by principals continuously scanning the school environment for prospective teacher leaders” (p. 156). Multiple initiatives that could be considered “teacher leadership” have been launched over the past decades in a number of states, but the purposes of the work and the problems each attempts to address vary considerably. As might be expected, this has led to mixed results from one jurisdiction to another. Before launching any work in teacher leadership, it is important to consider the numerous possibilities and align a

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2 See https://opportunityculture.org for more details.
Teacher leadership is the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with the aim of increased student learning and achievement (p. 287–288).

Muijs and Harris (2006) offered a similar definition: “formal leadership roles that teachers undertake that have both management and pedagogical leadership responsibilities” (p. 112). Finally, Wener and Campbell (2017) suggested a working definition of a teacher leader as a “teacher who maintains K-12 classroom-based teaching responsibilities, while also taking on leadership responsibilities outside the classroom” (p. 140). The focus of these definitions is larger than the individual classroom, extending to the school, district, or even the education system at-large. Given the local context of Nevada, with our persistent shortages and lagging education outcomes, this definition for teacher leadership holds the most potential for systemic improvement.

When purposefully designed and implemented, a teacher leadership strategy can yield many possible benefits. Harris and Muijs (2002) reviewed the field of research in teacher leadership and listed increased collaboration amongst teachers, faster dissemination of effective instructional practices, increased teacher confidence and motivation, higher expectations from teachers, and a greater ability to innovate as positive contributions. Leithwood and Jantzi (2000) found teacher leadership had greater impact on student learning than individual leadership. In addition, researchers have analyzed the perceptions of teacher leaders, as well as the perceptions of those who worked in schools with teacher leaders, finding teacher leaders felt empowered in their schools and were able to motivate younger teachers and disseminate promising practices to colleagues (Center for Teaching Quality, 2010). Jacques, et al. (2016) concluded from their analysis of State Teachers of the Year’s perceptions of teacher leadership, “Through exposure to teacher leadership, more beginning teachers may have opportunities to observe effective teaching and improve their practice. Likewise, teacher leader roles may allow more experienced teachers to continually improve by modeling effective practices for less experienced colleagues” (p. 14). It is worth noting that these benefits were largely found
under an approach to teacher leadership that identifies a smaller number of individuals for teacher leadership opportunities. Here, the focus is on systemic improvement and teacher leaders serve an essential role, increasing capacity for instructional leadership at the local level; they connect research to practice, promote innovation, feel comfortable taking risks, and model a mindset of continuous improvement and growth (Ibid.).

While teacher leadership has been found to be beneficial when part of larger strategy with instructional leadership at the core, the research literature also contains a number of implementation challenges that must be considered when developing a plan. For example, Wenner and Campbell’s (2017) comprehensive review of modern research literature in teacher leadership described a number of themes across successful initiatives:

- Teacher leadership roles must be purposefully designed to extend beyond the individual classroom;
- Teacher leaders need some degree of decision-making authority; and
- Support is needed for teacher leaders, in the form of ongoing training, administrative support, a healthy school climate, and recognition for meeting responsibilities.

In addition, the group Chiefs for Change (2017) recommends developing a network for teacher leaders, ensuring they have ongoing support and that successful efforts do not exist in a vacuum.

If Nevada advances an approach to teacher leadership that focuses on systemic improvement, the state may consider beginning with Learning Forward’s (Killion, et al., 2017) four core components of a teacher leadership framework: 1) a commonly-accepted definition; 2) local conditions that are conducive to teacher leadership; 3) clearly-articulated dispositions for different teacher leadership roles; and 4) assessment of the impact of teacher leaders. These central features can be developed and monitored by the state, while still maintaining control at the local level to adapt teacher leader roles as the context dictates.

**Barriers to Successful Teacher Leadership**

Research in teacher leadership has identified a number of obstacles to successful implementation. According to York-Barr & Duke (2004), strategies and activities that lacked a central framework and vision tended to be unsuccessful. In addition, teacher leadership efforts do not succeed when:

- Teacher leaders’ roles are poorly defined (Johnson & Donaldson, 2007; Natale et al., 2013) or teacher leaders are marginalized and assigned insignificant tasks that do not align with their instructional expertise (Harris and Muijs, 2002);
- Clear criteria for selecting teacher leaders is missing (Johnson & Donaldson, 2007; York-Barr & Duke, 2004);
- Effective teachers are removed entirely from classroom instruction to focus on leadership activities (Public Impact, 2014);
- Insufficient time (Johnson & Donaldson, 2007; Natale et al., 2013; Thornton, 2010; York-Barr & Duke, 2004), training (Natale et al., 2013), and/or compensation (York-Barr & Duke, 2004) is provided for teacher leaders; or
- There is tension between teacher leaders and other teachers (Johnson & Donaldson, 2007; Thornton, 2010; York-Barr & Duke, 2004) or a refusal by other management to relinquish control (Harris and Muijs, 2002).

These barriers can be anticipated with sound policy. Ultimately, a teacher leadership framework in Nevada can succeed and lead to meaningful change if it begins by identifying those who are most capable of contributing, builds roles with additional responsibilities that capitalize on the identified talents of selected individuals, and ultimately rewards teacher leaders in a manner that supports an enhanced career ladder. To do this, the state will need to purposefully design an implementation plan with a strong monitoring component and a strategy for scaling successful efforts.

**Examples of Teacher Leadership Initiatives**

States have been crafting different approaches to formal teacher leadership systems over the past decade or so. For example, Louisiana recruited a group of more than one hundred Teacher Leader Advisors who serve as an extension of the State Education Agency (SEA), developing resources and providing support for a larger group of local teacher leaders across the state. With this approach, there were two levels of teacher leaders deployed; one selected by local schools and districts and another selected by the state. New Mexico also uses multiple types of teacher leaders; one person is selected to serves as a liaison to the state for one year and helps to support the larger statewide teacher
leader network, members of which are also purposefully selected by the SEA. North Dakota created a Teacher Leadership Academy to provide candidates with training, piloting the program through university/district partnerships. Maine and Oregon are implementing a more comprehensive approach, building out a formal career ladder in the licensing system with teacher leader pathways. This embeds teacher leaders within a larger human capital strategy that aligns all facets of the education profession, from recruitment and preparation through professional growth and advanced career options.

Some school districts have also attempted to develop and implement teacher leadership systems. In Denver, the most effective teachers are identified and assume teacher leadership roles focused on leading their colleagues through school improvement strategies. Washington, D.C. established the Leadership Initiative for Teachers, which attempts to recognize and retain highly effective teachers by providing additional career and leadership opportunities. Baltimore City Public Schools has built multiple career pathways, with the “Model Pathway” available to cohorts of potential teacher leaders who go “beyond his or her normal job description to accelerate student achievement, take risks, influence the practice of colleagues, support stakeholders and display excellence and high standards in building professional capacity.” Baltimore’s system includes a peer review process for selecting teacher leaders and offers up to $20,000 in additional compensation. Finally, the Boston Public Schools’ Turnaround Teacher Teams are comprised of teacher leaders who receive additional professional development and are placed in schools with the greatest needs, leading localized inquiry-based discussions to improve schoolwide reform efforts.

There are also examples of cross-state efforts to develop teacher leadership systems. The National Institute for Excellence in Teaching promotes the TAP system, which is designed around four core elements: multiple career paths; ongoing applied professional growth; instructionally focused accountability; and performance-based compensation. Master and mentor teachers in TAP are part of a school leadership, undergo a rigorous selection process, and assume additional leadership responsibilities while also remaining in the classroom. A similar approach was designed by Public Impact, whose career ladder includes 15 levels, from teacher resident to superintendent. “Multi-classroom leaders” and “team reach leaders” are a few of the new roles envisioned by Public Impact, and their focus is on effective collaboration. As with TAP, Public Impact’s career ladder allows teacher leaders to assume additional roles while also maintaining classroom teaching responsibilities. The systems-based approaches of TAP’s and Public Impact’s systems align all human capital strategies, addressing multiple components of the local education system under one common approach.

While the approaches used in other states vary, what they have in common is they all began with the question: What is the vision of, and purpose for developing, teacher leadership? For jurisdictions that are experiencing high amounts of teacher turnover, teacher leadership may be one strategy to build a career ladder and improve teacher retention. Jurisdictions who are seeking support for school- or district-based turnaround efforts may use teacher leadership to recruit cohorts of teachers who are familiar with reform efforts and incentivize them to work in high-need schools. Or, in systems where morale is low amongst teachers, teacher leadership may take the form of public recognition for the most effective teachers. Even under these three different visions, teacher leadership may still take numerous forms, depending on the local capacity, buy-in, inputs, etc.

Recommendations

Reviewing the different strategies to teacher leadership that have been attempted elsewhere, the range of approaches appear to exist along two spectra; the level of state involvement and the number of teachers who are eligible for teacher leader roles, represented by Figure 1 on the following page.

Given Nevada’s persistent need for systemic improvement to the teaching pipeline, and its strong tradition of local control, the recommendations that follow will not assume a one-size-fits-all approach to teacher leadership. Instead, we propose the state’s role center on incentivizing innovation, monitoring implementation, and disseminating promising practices.

Teacher leadership can be used in Nevada as one step toward solving some of the state’s more persistent teacher pipeline issues, such as low retention rates / high teacher turnover and large numbers of unfilled positions from year to year. Ideally, teacher leadership will be embedded as a central part of a larger, comprehensive human capital strategy.
1. **Adopt the Teacher Leader Model Standards.**
A first step toward the development of a meaningful approach to Teacher Leadership in Nevada is to adopt the Teacher Leader Model Standards³. Developed in 2008 and updated in 2011 by a diverse group that included eleven state education agencies, ten national organizations, ten practitioners and eight higher education institutions, the Model Standards may rightly be considered the best representation of current thinking in teacher leadership, vetted by major stakeholders in the field.

The Model Standards do not specify the exact responsibilities of every possible teacher leadership role but instead outline seven domains of leadership that jurisdictions can use to anchor their work to build out a full teacher leadership framework. The seven domains are:

- Fostering a Collaborative Culture to Support Educator Development and Student Learning
- Accessing and Using Research to Improve Practice and Student Learning
- Promoting Professional Learning for Continuous Improvement
- Facilitating Improvements in Instruction and Student Learning
- Promoting the Use of Assessments and Data for School and District Improvement
- Improving Outreach and Collaboration with Families and Community
- Advocating for Student Learning and the Profession

2. **Request the Nevada Department of Education (NDE) develop a timeline for incorporating teacher leadership into the state’s licensure framework.**
Nevada’s current efforts in the area of teacher leadership have been minimal. Despite significant momentum elsewhere, the state has acted on two relatively low-touch efforts: convening a group to discuss a definition of teacher leadership, and hiring a teacher-leader in residence (TLIR). While convening a group may be a sound strategy, little has come out of that group to date, and—as was demonstrated in the overview section—the field has found relative consensus around definitions for

³See http://www.teacherleaderstandards.org/standards_overview for more details
teacher leadership, which would make the group’s main charge moot. The TLIR is likewise an idea that has a solid foundation, but little to no actionable objectives accompanied the creation of the position, so the potential reach of the TLIR has not yet been realized.

While the state has not fully tapped into the potential that teacher leadership holds, there is nonetheless infrastructure in place that would help with implementation. Clark County School District has devoted resources in recent years to helping teachers achieve National Board certification, meaning there is an initial pool of potential teacher leaders to draw from. The statewide evaluation system, if supported by additional training to increase its trustworthiness and reliability of scores, is an essential element to a successful teacher leadership strategy. The need to align multiple educator initiatives into a comprehensive approach to talent management has never been stronger.

The Model Teacher Leader Standards would provide a general framework for leadership in the state. The next step would be to build out new roles in a career ladder that is framed around advanced teacher leadership opportunities. From the review of relevant literature, there are five fields in which we might expect all teacher leaders to have advanced knowledge and skills:

• Working with adult learners
• Communication skills
• An understanding of successful collaboration activities
• Knowledge of content and pedagogy
• Systems thinking

All teacher leader roles that may be imagined will require expertise in these five areas. Specific teacher leader roles will either suggest additional skills (i.e., a teacher leader serving as a Data Analyst in schools will need proficiency in assessment and evaluation) or a more specific detailing on the above domains (i.e., a Professional Development teacher leader working with teachers from a cluster of schools will need precise communication skills, specifically in the areas of presenting complex information and coaching).

3. Authorize the Nevada Department of Education (NDE), or another entity with adequate capacity, to begin defining roles of teacher leaders.

Once standards are in place, and as a state plan is being developed, there are organizations in the state who could begin to define various teacher leader roles and consider how they might be used in local schools. While NDE could also oversee these portion of the work, they may lack the capacity to do so immediately. The state has a number of entities who could partner with NDE to build out teacher leader roles, define possible qualifications for those roles, and consider issues such as the identification, selection and training of teacher leaders.

There are many possible strategies that could move this phase of the work forward. A specialized grant program, similar to the Great Teaching and Leading Fund, could be established with a focus on teacher leadership initiatives. Alternatively, specific programs and/or organizations could be identified, with each working to build out specific roles; for example, a large educator preparation program might use its expertise to define what constitutes an effective “Supervisor Teacher”, or a district with a strong induction program might describe how they select “Mentor Teachers” and build a formal role around it.

One entity that is ideally-positioned to begin identifying and refining teacher leader roles is the Nevada Institute on Teaching and Educator Preparation (NITEP). NITEP’s partnership with Paradise Elementary School provides a local site in which some initial roles, perhaps those of Mentor Teacher and Supervising Teacher, could be articulated and tested. As NITEP enters its next phase of implementation, the development of teacher leader roles aligns well with the Institute’s focus on conducting innovative research and disseminating promising practices.

4. Incentivize implementation of teacher leader roles at the local level.

Ideally, this step will happen concurrently with #3 above. As the selected entity or entities begin(s) to develop teacher leader roles, local sites should be recruited to serve as implementation sites. At this stage of implementation, the emphasis should be on collaboration between larger organizations and local schools/districts. Based on the review of research, the following guidelines are recommended.
for implementation sites:
• Alignment of teacher leadership strategies with other human capital efforts;
• Demonstration of local buy-in from teachers and leadership;
• Clear plans for identifying and deploying teacher leaders in specific roles;
• A system of support for teacher leaders; and
• An assessment plan to determine the effectiveness of efforts.

With these guidelines, the state should be able to support multiple local initiatives in teacher leadership, analyze their effectiveness, and begin considering how scalable the local strategies may be.

It is possible that multiple partners will be needed to develop a comprehensive approach to teacher leadership. For example, one organization may work on designing professional development opportunities, while another may be better-equipped to identify pilot sites. The state can build a policy framework that allows multiple streams of this work to happen simultaneously; the state can also deploy RPDPs to support this work in a manner that encourages local experimentation and ensures consistent monitoring and reporting. In this way, the state can support multiple models of teacher leadership without overreaching and requiring a simplified one-size-fits-all approach.

5. Analyze pilot information and determine how to proceed.

Teacher leadership, which holds the potential to improve multiple components of the larger education system in Nevada, is too urgent to leave unattended until the 2019 Legislative Session. If the overall strategy is not proceeding as planned, then a midcourse correction may be useful; if the strategy is finding early successes, then it may be useful to scale to additional schools and/or districts. If NDE assumes a monitoring role in teacher leadership efforts, the organization could provide updates to the legislature between sessions and recommendations based on initial efforts. At all points of implementation, a review of teacher leadership initiatives should return to the central objective of these efforts, and consider how well the objectives are being met.

The state’s teacher leadership policy framework should install the expectation of constantly analyzing and refining the deployment of teacher leaders throughout the state. The recommendations above assume a new role for NDE, one focused on monitoring, providing support, and disseminating results rather than driving and/or mandating the work itself. While the state has control of certain policy levers that can influence change—for example by building new teacher leader roles into the state’s licensure system—it would be most effective if it pulls those levers at a time when there is local support based on successful pilot efforts. The state’s overall plan around teacher leadership must be flexible and adapt as new information is received from pilot programs, granting the authority needed at the local level to utilize teacher leadership in ways that are most responsive to local needs.

Conclusion

The time has arrived for Nevada to develop a formal career ladder that supports advanced teacher leadership opportunities for highly successful teachers. Nevada is witnessing the results of maintaining the status quo: persistent teaching shortages, inequitable distribution of effective educators, and low capacity for meaningful instructional leadership at the school level. If a statewide framework for teacher leadership is properly developed, implemented and scaled, teacher leadership has the potential to increase the retention of effective teachers, improve school cultures, and improve student learning. An enhanced career ladder that explicitly focuses on increasing instructional leadership and capacity in Nevada schools will support and strengthen the teacher pipeline. Furthermore, teacher leadership – by providing incentives to exceptional teachers to stay in the classroom while assuming additional roles and responsibilities that capitalize on their strengths – can raise the status of teaching, thereby enhancing other state efforts to attract excellent teachers to the state and keeping them in the classrooms that need those teachers most.

The teacher leadership framework proposed above assumes that all may aspire to teacher leadership positions and that training must be provided to those who show the greatest potential, but it also assumes that teacher leadership opportunities as part of a new career ladder will be pursued and filled by a select group of exceptional teachers. The state can accelerate the potential of this work by learning from other jurisdictions who have embarked on similar projects, adopting the best practices in the
Supporting Teacher Leadership in Nevada

field such as the Model Teacher Leader Standards, incentivizing local implementation models, and scaling effective approaches in a deliberate manner. If existing resources, from the Great Teaching and Leading Fund to Title II-A funds to the network of RPDPs - are leveraged to develop teacher leadership opportunities for exceptional teachers, the state can play a leadership role at the national level while also addressing some of Nevada’s most challenging problems around attracting and retaining the best and brightest into education.

References


School Safety in Nevada: 
Toward Thoughtful Responses to a Pernicious Problem 
Samuel Song, Ph.D., Heather Thompson, B.S., and Patrice Leverett, Ph.D.

Violence in schools and the question of how to keep schools safe has preoccupied the country, especially since the Columbine tragedy over twenty years ago and after recent events over the last few years. Research has progressed considerably over the twenty year span, leading us to understand notably that “quick fixes” in the form of simple solutions are not effective. This paper explains why simple solutions do not work and presents strategies that are supported by research in the hopes that legislators may create policies to support them.

Key Nevada Facts and Statistics
- There were two shootings on school grounds in 2018 with one non-fatal injury and one death, but only one was in K-12 schools (Education Week, 2018).
- Nevada accounts for 2.2 percent of the total school shootings in the US for 2018.
- There were 11,187 incidents of student violence, 876 incidents of violence towards staff, and 1,040 possessions of weapons reported to date (Nevada Report Card, 2018).
- The rates of carrying a weapon on school property significantly increased from 2015 to 2017 (Lensch et al., 2017).
- The two largest school safety concerns for Nevada during the 2017-2018 school year were bullying incidents that occurred at a rate of 2.6 percent and violence to other students at a rate of 2.3 percent.

Key U.S. Facts and Statistics
- The vast majority of school shootings (97.8 percent) occurred in other states outside of Nevada.
- Data show that severe violence in schools, such as school shootings, are actually not as common as milder forms of violence in schools; however, milder forms of violence are also very harmful to student learning.
- The national Youth Risk Behavior Survey showed that 19 percent of students were bullied on school property (CDC, 2017)
- Nationwide, 2.9 percent of students experienced victimization in 2017 (National Center for Education Statistics, 2018)

Recent Actions in Nevada
- Nevada has coordinated school safety teams in both the northern and southern regions, specifically Washoe County and Clark County.
- Clark County also has in place a 24/7 Tip Line that can be used to report information or potential threats.
- Clark County School District also requires that all staff watch a safety training video annually, while schools are required to report on monthly training drills and have an Emergency Response Plan in place.
- Washoe County has implemented an initiative to improve school safety in the future.
- The My Brother’s Keeper Alliance of Las Vegas has been working on equity issues in schools related to school safety, discipline, and collaboration with law enforcement.
- The Clark County School-Justice Partnership (SJP) initiative has an MOU adopted in August 2018 by the Board of Trustees “to minimize interrupted educational opportunities.” The MOU requires schools to use Multi-tiered Systems of Support (MTSS), which is a much-needed support for schools in the fight for safer schools including addressing racial disparities in discipline.
- The state of Nevada has also been working on school safety by the creation of the Nevada Statewide School Safety Task Force that has outlined helpful recommendations.
- In January 2019, Superintendent Jara introduced CCSD Strategic Plan 2024, with the goal of reducing disproportionality of discipline.
- UNLV’s Implicit Bias Training (IBT) team, comprised of researchers and practitioners in the field of school discipline disproportionality and implicit bias, is conducting trainings (over 300 schools) to increase awareness of the gaps in school discipline practices and to increase awareness of the role implicit bias may play in those decisions.
School Safety in Nevada

• Nevada Governor Steve Sisolak, has declared during his State of the State Address that “a portion of the 10 percent marijuana tax will go towards preventing violence in our schools” (Sisolak, 2019). According to data made available by the Nevada Department of Taxation (2019), approximately $69.8 million was taken in as marijuana tax revenue from the 2018 fiscal year.

Considerations for Future Actions
• Use security measures thoughtfully. Policy should be developed to require the thoughtful use of security measures and that armed guards are well trained.
• Support adequate staffing of SBMH professionals. Policy should be developed to increase the ratios of SBMH professionals in schools.
• Support individual school safety teams. Policy should be developed to support individual school safety teams.
• Stop using zero tolerance policies or “get tough” approaches in schools. Policy should be developed to implement a phased, cessation on zero tolerance policies (and automatic suspension and expulsion) beginning with elementary schools. Data on exclusionary discipline (suspensions and expulsions) by race and disability status should be made available to the public.
• Implement culturally responsive, comprehensive prevention programming in schools. Policy should be developed to require that schools implement Multi-Tiered System of Support (MTSS) that is culturally responsive to their particular school community. The innovative work done in Clark County with the School Justice Partnership is an excellent example that should be emulated at the state level.
• Support increased professional development for teachers and administrators. Policy should be developed that provides the needed financial resources necessary for preservice training in these areas of school safety for administrators and teachers, so that they are equipped to address school safety when entering the workforce. Additionally, funding should support professional development for existing teachers and administrators in these areas. Increasing SBMH professionals and community collaboration is essential in this regard as they can support much of this professional development in schools.
• Fund high-quality research to develop models and strategies that work specifically for Nevada.
• Support Nevada Community Partnerships who are doing innovative and critical work.

Implications of Maintaining Status Quo
While Nevada is in the process of making schools safe with innovative community partnerships, the rate of change will be slow, and they could potentially fail, without supportive policies that ensure evidence-based practices are implemented in schools well. Schools need more support to create learning environments in which students feel safe, supported and engaged. It is the role of the school district and educational policy makers to make sure that happens.

Introduction
Leaders across the country are faced with the urgency to “solve” the problem of school safety once and for all—and quickly—because of recent horrific events in the media. Indeed, it may seem like there is a tragic event nearly every month (if not weekly!). As a result of this media coverage, there is often an outpouring of solutions to school violence and safety that are, in actuality, embellishments and “quick fixes” that are not supported by research or experts in the field. This type of response to such a devastating problem is understandable and predictable, as the plague of tragic school events has been longstanding in this country. The Columbine tragedy of 1999, in particular, was the impetus for more specific changes in policy, law, and research. Importantly, Columbine brought attention to the insidious effects of milder forms of school violence such as bullying and hostile school climate, and their linkages to extreme violence in schools (Leary, Kowalski, Smith & Phillips, 2003). The purpose of this paper is to clarify strategies that are supported by research in hopes that leaders may use it to inform their own work in the area of school safety.

School Safety in Nevada
There were two shootings on school grounds in 2018 with one non-fatal injury and one death, but
only one was in K-12 schools (i.e., high school), while the other was in college (Education Week, 2018). Compared nationally, Nevada accounts for 2.2 percent of the total school shootings in the US for 2018.

Data show that severe violence in schools such as school shootings are actually not as common as milder forms of violence in schools. According to the most recent Nevada Report Card, in 2018, there were 11,187 incidents of student violence, 876 incidents of violence towards staff, and 1,040 possessions of weapons reported to date (see Figure 1, Table 1). Rates of carrying a weapon on school property significantly increased from 2015 to 2017 (Lensch et al., 2017). The largest school safety concerns for Nevada during the 2017-18 school year were bullying incidents that occurred at a rate of 2.6 percent and violence to other students at a rate of 2.3 percent. Compared nationally, the national Youth Risk Behavior Survey showed that, in 2017, 19 percent of students were bullied on school property (CDC, 2017) and the Indicators of School Crime and Safety Report: 2017 reported 2.9 percent of students experienced victimization (National Center for Education Statistics, 2018). These incidents create unsafe schools that result in school environments that are unhealthy for students’ development and linked with increased bullying, increased delinquent behavior, and a host of academic challenges.

**Figure 1.** School Safety-Related Incidents in Nevada by County (Nevada Report Card, 2018)
School Safety in Nevada

Nevada Policies for School Safety

Nevada has several policies in place at the state level that promote school safety and are in line with best practices:

- **NRS 388.132, NRS 388.1322**
  Safe and respectful learning environment is essential for students (in both public and private schools).

- **NRS 388.13121**
  Administrators, teachers, and members of governing body have a duty to create and provide a safe and respectful learning environment for all pupils.

- **NRS 388.1323**
  Creation of an Office for a Safe and Respectful Learning Environment.

- **NRS 388.1325**
  Bullying Prevention Account.

- **NRS 388.133**
  Implement a policy for all school districts and schools to provide a safe and respectful learning environment that is free of bullying and cyber-bullying.

- **NRS 388.134, NRS 388.1342**
  Provide appropriate training of members of the governing body and all administrators, teachers, and all other personnel employed by the governing body.

- **NRS 388.1343**
  School Safety Team (established by the administrator of each school).

- **NRS 388.135**
  Bullying and cyber-bullying prohibited.

- **NRS 388.1351, NRS 388.1352**
  Reporting requirements regarding bullying and cyber-bullying.

- **NRS 388.139, NRS 388.1395**
  Week of Respect.

- **NRS 388.1454, NRS 388.1455**
  Safe-to-Tell Program.

- **NRS 388.241, NRS 388.243**
  Response to crisis, emergency, or suicide plan.

- **NRS 388.264**
  Consultation with certain person regarding safety in schools before taking certain actions relating to buildings for schools or related facilities or acquiring sites for such buildings or facilities.

- **NRS 388.265**
  Annual conference regarding safety in public schools.

- **Executive Order 2018-5**
  Statewide School Safety Task Force.

### Table 1. Nevada 2017-2018 Safety Data (Nevada Report Card, 2018)

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<thead>
<tr>
<th>Type of Disciplinary Incident</th>
<th>Number of Incidents</th>
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<tr>
<td>Violence to Other Students</td>
<td>11,187</td>
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<tr>
<td>Violence to Other Staff</td>
<td>876</td>
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<tr>
<td>Possession of Weapons</td>
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<tr>
<td>Distribution of Controlled Substances</td>
<td>187</td>
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<tr>
<td>Possession or Use of Controlled Substances</td>
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<tr>
<td>Possession or Use of Alcoholic Beverages</td>
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<td>Habitual Disciplinary Problems (Expulsion Only)</td>
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<tr>
<td>Habitual Truants (No suspension or expulsion)</td>
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<td>Bullying Incidents Determined to be so after an Investigation</td>
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<tr>
<td>Bullying Incidents Suspension/Expulsion</td>
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</table>
Nevada approaches school safety on multiple levels. Policies are implemented at a state level through legislation. At the district level, decisions are made on how to best implement these policies. Individually, schools are responsible for following through on district-wide initiatives that support the state. Significant examples of this are as follows: Nevada has coordinated school safety teams in both the northern and southern regions, specifically Washoe County and Clark County. Clark County also has in place a 24/7 Tip Line that can be used to report information or potential threats (Clark County School district, 2018a). Clark County School District also requires that all staff must watch a safety training video annually, while schools are required to report on monthly training drills and have an Emergency Response Plan in place (Clark County School District, 2018b). Washoe County has implemented an initiative to improve school safety in the future (Washoe County School District, n.d.).

**Recent Nevada initiatives.** Nevada has recently begun several exciting community initiatives to address school safety further. The My Brother’s Keeper Alliance of Las Vegas has been working on equity issues in schools related to school safety, discipline, and collaboration with law enforcement. In particular, the Clark County School Justice Partnership (SJP) initiative focuses on creating diversions away from the criminal court system by a commitment to school safety, enhancing educational opportunities, and providing alternatives to punitive disciplinary practices. The SJP has an MOU adopted in August 2018 by the Board of Trustees “to minimize interrupted educational opportunities.” The MOU requires schools to use Multi-tiered Systems of Support (MTSS), which is a much-needed support for schools in the fight for safer schools including addressing racial disparities in discipline (Clark County, 2018c).

The state of Nevada has also been working on school safety by the creation of the Nevada Statewide School Safety Task Force (see Reference list for policy recommendations). Additionally, CCSD determined as a part of the Superintendent’s Equality of Opportunity Advisory Committee (SEOAC) that training about bias and discipline gaps was essential to reducing the differential impact of discipline and increasing school safety for all. In Jan 2019, Superintendent Jara introduced CCSD Strategic Plan 2024, with the goal of reducing disproportionality of discipline. To that end, UNLV’s Implicit Bias Training (IBT) team of researchers and practitioners in the field of school discipline disproportionality and implicit bias is conducting trainings to increase awareness of the gaps in school discipline practices and to increase awareness of the role implicit bias may play in those decisions. Currently, the UNLV-IBT team is training administrative teams from over 300 schools, with the goal of reducing the impact of implicit bias in day-to-day discipline practices. This training is a product of the Board of Trustees’ policy per SEOAC, SJP, and CCSD Strategic Plan 2024.

To help support these initiatives, Nevada’s Governor, Steve Sisolak, has declared during his State of the State Address that “a portion of the 10 percent marijuana tax will go towards preventing violence in our schools” (Sisolak, 2019). According to data made available by the Nevada Department of Taxation (2019), approximately $69.8 million was taken in as marijuana tax revenue from the 2018 fiscal year.

**Key Issues in School Safety**

The issue of school safety has been brought to the forefront of school leaders’ minds because of the media creating urgency. While urgency is reasonable given the tragedies, grasping onto simple quick fixes that claim to be the solution to school safety is unreasonable and unfounded. School safety is complex and simple solutions do not work. While certain safety measures may be helpful, relying exclusively on them without a comprehensive plan that focuses on prevention is not helpful at best, and harmful at worst. Policy recommendations to enhance school safety—thoughtfully—follow next. There are two key issues that Nevada leaders need to consider for a thoughtful response to school safety.

**Key Issue 1: School Safety is Complex, not Simple.** Because of the urgency to stop violence in schools, simple solutions that focus on only one aspect of the problem such as metal detectors are often suggested in the media. However, school safety is not as simple as it might seem at first glance because it is comprised of multiple factors that, together, create a school climate (see Figure 2). School climate refers to the overall “atmosphere” of a school and one of its key components is physical and emotional safety. School violence includes aggressive acts in all of its forms (physical, verbal,
social, relational, and cyber) and the subtypes of bullying and harassment. Violent acts and the fear of them at school affects student’s safety. Another important part of school climate is engagement and the environment (U.S. Department of Education, n.d.). Engagement is relationships between and among all groups within school (students, teachers, school personnel) and closely related to school families and community). Environment includes the physical, academic, and disciplinary environment as well as school-based health supports. There has been a substantial amount of research on school climate and its importance for student learning, school engagement, mental health, and school safety (Gottfredson, Gottfredson, Payne, & Gottfredson, 2005; Espelage, Polanin, & Low, 2014).

Figure 2. Components of School Climate

Creating a safe school is complex also; Because it requires multiple factors to be coordinated toward a single goal of creating a positive school climate for the entire community. These factors are layered within and outside the school and, consequently, influence one another to create a safe school: laws and policies, community, school leadership, culture of school adults, informal practices, family influence, and students (see Figure 3).

Laws and policies provide guidelines and consequences for schools that influences school climate. Community consists of the neighborhood and the local school board. School leadership influences the climate in a school. Leadership influences teachers and staff by setting the agenda for a school that may prioritize certain values over others. Teachers and staff have powerful and authoritative roles over students, as the school adults. Next, informal practices refer to the natural behavioral patterns that develop among school adults as a group. For example, teachers may develop the informal routine of having morning circles with their class, thereby, contributing to a collaborative and trusting climate. Families are an important influence on the school climate, especially in how they engage the school. At the same time, how well the school promotes family involvement is critical. Finally, students also contribute to the school environment through their interactions with others and the school adults.

Figure 3. Factors that Promote Positive School Climate

Key Issue 2: Simple Solutions Don’t Work. Because school safety is complex with multiple factors to consider, it should be obvious that simple solutions focused on addressing one factor are not effective. Although it might be argued that “something is better than nothing...” Sometimes that is not the case, which may in fact ultimately decrease school safety. For example, a popular school strategy focuses on the external structure of the school termed “safety measures.” Safety measures are often referred to as the “hardening of schools” or “get tough” approach and includes increasing police presence, cameras, and using metal detectors, to name a few.

However, very little research exists to support the efficacy of physical security measures in preventing school shootings or in increasing school
safety (Tanner-Smith, Fisher, Addington, & Gardella, 2018). In fact, research has shown that, paradoxically, safety measures actually decrease school safety. Research has also suggested that many schools affected by mass shootings, including Sandy Hook Elementary School in 2012 and Marjory Stoneman Douglas High School in 2017, had these types of security measures in place and felt there was nothing more they could have done to improve physical safety in their school. Indeed, the number one thing these schools recommended was to improve the relationships between students and adults to better identify students in need and to make it more likely that students feel comfortable reporting when they have noticed a student in need.

*Increasing armed security guards.* Increasing security guards in schools such as police, armed school safety assistants, or school resource officers (SROs) deserves particular attention due to its popularity. Concerns have been raised with SROs around their skills in working appropriately with discipline decisions, working with students with mental health concerns and other disabilities in general, and safely handling firearms around children. Generally, students associate the presence of school resource offers with discipline, but not necessarily with feelings of safety. Additionally, race modifies the feeling of safety, with white students feeling more safe than other racial groups with the presence of SROs (Pentek & Eisenberg, 2018). Work needs to be done to ensure that SRO’s are comfortable working with and improving feelings of safety for all students.

*Zero Tolerance Policies.* Policies that aim to remove students who are making the school less safe by violating school rules are another example of a “get tough” approach. It has been shown that these policies are ineffective in enhancing school safety and result in pushing students out of school. Exiting students from school decreases students’ opportunities to learn and probability to graduate from high school. More importantly, zero tolerance policies are inequitable, disproportionately impacting students who have been minoritized based on race/ethnicity, disability, and those identified as LBTQ+. A report conducted by the American Psychological Association (2008) found that despite the use of zero tolerance policies in schools for over 20 years, there is little evidence to show that these policies positively impact safety or the reduction in discipline infractions over time.

**Policy Recommendations for Nevada**

While Nevada is commended for having implemented some innovative practices to address school safety, the state could enact legislation to support comprehensive best practices to address the key issues discussed previously. The following recommendations are supported by the research literature and supported by multiple professional associations who are experts on this topic (see Resources and References). School leaders should support these practices to occur in schools through their respective roles.

1. **Use security measures thoughtfully.** Enhancing the physical structure of schools may be used effectively such as ensuring that there is a single point of entry into the school. However, other security measures, such as armed guards and metal detectors, should be implemented with the consultation and collaboration of school personnel at each school to address unique issues in a particular school. The use of SROs should include proper training and role definition, especially in discipline and working with diverse students and students with disabilities. The National Association of School Resource Officers (NASRO) (2018) recommends that SROs serve as teachers, informal counselors, and law enforcement officers and that they should be prohibited from participating in student discipline leaving that to school administrators. Policy should be developed to require the thoughtful use of security measures and that armed guards are well trained.

   Overall, there is no clear research that supports the effectiveness of security measures (or hardening of schools) in enhancing school safety (Tanner-Smith, Fisher, Addington, & Gardella, 2018). On the contrary, these measures have been shown to reduce safety, increase fear, and discourage healthy learning environments. There is concern among experts that enhanced security measures criminalize students by pushing them out of school and into the juvenile justice system. Our nation’s children appear to be going to school with more armed guards than caring school professionals who are trained to meet their mental health needs (ACLU, 2017).

2. **Support adequate staffing of School-Based Mental Health (SBMH) Professionals.** Professionals in school based mental health (SBMH) positions include school psychologists,
School counselors, school social workers, and school nurses due to their specialized training in mental health, student behavior, interventions, and diversity and multiculturalism. These SBMH professionals are critical to school safety because they are able to support school personnel, students, and families in the implementation of the best practice recommendations outlined in this paper and prevention issues of school safety directly and indirectly. However, Nevada schools drastically under employ SBMH professionals and are out of compliance with recommended ratios by experts. Policy should be developed to increase the ratios of SBMH professionals in schools.

The recommended ratios are 1-to-700 for school psychologists, 1-to-250 for school counselors, 1-to-250 for school social workers, and 1-to-750 for school nurses. However, according to the Nevada Association of School Psychologists, the state’s ratios do meet these guidelines. School psychologist ratios in Nevada are estimated to be 1-to-2,200 in Clark County, 1:1800 in Washoe County, 1-to-1,750 in Humboldt County, and 1-to-1,500 in Nye County (Roberts & Dockweiler, n.d.). The school counselor ratio is 1-to-508 (Wood, Lau, & Chen, 2017), school social workers are at a current ratio of 1-to-627 students (NCSSLE, 2017), and school nurses is 1-to-1,814 (NEA, 2019). These deficits inhibit school-based mental health professionals from providing comprehensive services that can promote school safety.

3. Support individual school safety teams.

Each school should establish school safety teams that develop crisis plans tailored to their unique school. School safety teams should be multi-disciplinary, that include a school based mental health (SBMH) professional (school psychologist, school counselor, or school social worker) including a school nurse and other relevant stakeholders in the school community (e.g., school personnel, students, and parents/guardians). In addition to crisis plans, threat assessments should be implemented. Policy should be developed to support individual school safety teams.

There is much research supporting the effectiveness of school safety teams (Brock, 2011). The recommendations of the Nevada Statewide School Safety Task Force are excellent in this regard (2018).

4. Stop using zero tolerance policies, or “get tough” approaches, in schools.

As discussed previously, these policies are ineffective in enhancing school safety and result in pushing students out of school. Exiting students from school decreases students’ opportunities to learn and probability to graduate from high school. More importantly, zero tolerance policies are inequitable, disproportionately impacting students who have been minoritized based on race/ethnicity and disability. In Nevada, this problem disproportionally affects children and youth of color. Policy should be developed to implement a phased, cessation on zero tolerance policies (and automatic suspension and expulsion) beginning with elementary schools. Data on exclusionary discipline (suspensions and expulsions) by race and disability status should be made available to the public.

5. Implement culturally responsive, comprehensive prevention programming in schools.

Alternatives to exclusionary discipline practices need to be implemented in schools. The discipline alternatives should be comprehensive, focusing on prevention. These are best delivered as part of a multi-tiered system of supports (MTSS) that includes three tiers of support for students. Beginning with proactive and preventative strategies to support all students, MTSS builds more support for students as they need it. While there are various types of MTSS discussed next, it is essential that it is responsive to the diverse cultural experiences of the student population. Policy should be developed to require that schools implement MTSS that is culturally responsive to their particular school community. The innovative work done in Clark County with the School Justice Partnership is an excellent example that should be emulated at the state level.

The most well-researched MTSS model is Positive Behavior Intervention Supports (PBIS), which focuses on the behavioral support only (Sugai and Horner, 2009). Additional models that should be considered include Social Emotional Learning (SEL) focusing on skills in thinking, managing emotions, and friendships; Restorative Justice (RJ) and Restorative Practices (RP) that focus on creating a school culture of community, addressing harms, and restoring relationships.
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(Zehr, 2015); and trauma-sensitive (or -informed) schools that focus on supporting students who may be experiencing symptoms related to chronic or acute trauma. It is important to note that these models may be integrated in schools to access the various advantages of each model such as integrating PBIS and RJ/RP.

Implicit bias is automatic, unconscious associations and stereotypes about groups of people that affect our understanding, actions, and decisions. This topic has been studied extensively and it is now commonly understood that teachers and staff view students’ behaviors differently based on race and sex. School strategies must incorporate implicit bias training and strategies to overcome it. Currently, CCSD is working in partnership with UNLV’s College of Education and Law School to provide training on implicit bias and its impact on school discipline, called UNLV-IBT. However, the program will need continued funding to expand from training administration, to training all staff on best practice to reduce bias and to increase equity in discipline outcomes. The larger issue of cultural responsiveness and competence of school personnel should also be developed and integrated into any MTSS model.

6. Support increased professional development for teachers and administrators.

Many of these research-based strategies require additional skills that are not part of current school personnel training programs. Professional development should focus on early identification and appropriate referral processes for student concern, fostering a positive school (and classroom) climate, positive discipline strategies (e.g., reinforcing student self-management skills, restorative justice), district and building emergency drill policy and procedure (including regular practice of drills), fostering family engagement, trauma-informed practices, and recognizing and responding to bullying and harassing behavior. Policy should be developed that provides the needed financial resources necessary for preservice training in these areas of school safety for administrators and teachers, so that they are equipped to address school safety when entering the workforce. Additionally, funding should support professional development for existing teachers and administrators in these areas. Increasing SBMH professionals and community collaboration is essential in this regard as they can support much of this professional development in schools.

There is much research on the effectiveness of professional development on relevant student outcomes and established procedures for accomplishing this effectively (Garbacz et al., 2015 & 2016 and Sheridan et al., 2004)

7. Fund high-quality research to develop models and strategies that work specifically for Nevada.

Strategies must be based in research, tailored to meet the unique needs of a particular community, and evaluated and modified to determine their effectiveness and usefulness. Nevada has a diverse population with unique needs requiring innovative programs. The only way to develop effective programs is to research them inclusive of rigorous evaluation.


The current community partnerships in Nevada are excellent models of interdisciplinary collaboration and its role in supporting systems change in schools and communities and should be supported financially. This approach has been shown to produce effective and sustainable change for school safety (Shaprio et al. 2010), but more importantly is working in Nevada! The collaborations include the work of The My Brother’s Keeper Alliance of Las Vegas, Clark County School Justice Partnership (SJP) initiative, Nevada Statewide School Safety Task Force, and UNLV – IBT.

Conclusion

Success in schools is contingent upon students feeling safe, supported and engaged. It is the role of the school district and educational policy makers to make sure that happens. By identifying evidence-based practices, and supporting those practices through time and funding, we expect a drastic change in violent infractions and an overall improvement in students reports of feeling safe in their school environment.
Helpful Resources

http://pediatrics.aappublications.org/content/pediatrics/131/3/e1000.full.pdf

CCSD School Justice Partnership
http://ccsd.net/district/school-justice-partnership/

National Education Association - Policy Statement on Discipline and the School-to-Prison Pipeline
https://ra.nea.org/delegate-resources/policy-statement-on-discipline/

National Association of School Psychologists – Joint Statement on Framework for Safe and Successful Schools

National Association of School Resource Officers - To Protect and Educate: The School Resource Officer and the Prevention of Violence in Schools

National Child Traumatic Stress Network - Creating, Supporting, & Sustaining Trauma Informed Schools: A System Framework

National Parent Teacher Association - Position Statement: Positive School Discipline
https://www.pta.org/home/advocacy/ptas-positions/Individual-Position-Statements/Position-Statement-Positive-School-Discipline

My Brother’s Keeper Las Vegas
https://www.lasvegasnevada.gov/Residents/Education/My-Brothers-Keeper

Ohio State University Kirwin Institute: State of the science: Implicit Bias Review

Supporting Research and Resources


