Policy Issues in Nevada Education (Full issue 2021)

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Policy Issues
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Introduction

Since 2004, the Center for Research, Evaluation, and Assessment (CREA) at the University of Nevada, Las Vegas has served as a major academic center that provides expert, nonpartisan program and education policy evaluation and assessment services for decision-makers in national, state, and local organizations. CREA also provides expert consultation on research design (quantitative and qualitative) for UNLV and non-UNLV researchers.

In collaboration with the leadership of UNLV's College of Education, CREA is pleased to sponsor and introduce Volume IV of *Policy Issues in Nevada Education*. Since 2015, College of Education faculty members at UNLV have authored a series of policy papers with the intent of informing thoughtful policy discussions around the most pressing educational issues in Nevada. Volumes I, II, and III are available on the UNLV Library website, each having received hundreds of downloads.

As Nevada's 81st (2021) legislative session approaches, Volume IV aims to tackle the current and future challenges and opportunities facing Nevada's education system with the best available research evidence. Many of the papers that appear in this edition were drafted as reflections on the issues that history will regard as the cornerstones of the new decade—The many impacts the COVID-19 pandemic and the citizenry's collective introspection of systemic inequality in the United States.

We hope that this volume is not the end of the conversation on these topics but that readers engage with the authors and that these discussion spur action within Nevada's education policy landscape. CREA and the UNLV College of Education take seriously a commitment to serve as a leading source of knowledge to inform and affect policy, practice, and research in Nevada and beyond. This volume is in partial fulfillment of that commitment.

Sincerely,
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In this Issue...

We formulated this issue amidst an unprecedented worldwide pandemic that has disrupted all facets of life, including our education institutions. In this volume, Relles and Spinrad consider the implications of the COVID-19 pandemic for the future of Nevada's workforce, particularly in light of the strain school closures and virtual schooling placed on the transition from high school to college. Huerta, Dahl, and Vo consider the stress the pandemic has placed on Nevada's growing English Language Learner (ELL) community. They articulate recommendations for how to improve ELL access to STEM careers. Quinn and Paretti delve into the challenges and opportunities presented by virtual learning during the COVID-19 pandemic and provide recommendations for how to maintain and strengthen the best of pandemic virtual learning even after COVID-19 subsides. Marianno, Kho, Garza, and Hilpert consider the impending economic strain from COVID-19 and how it might shape the educator workforce. They assess the validity of and provide recommendations for the use of the Nevada Educator Performance Framework (NEPF) for making human capital decisions like layoffs during times of economic uncertainty.

We also formulated this issue during a time in which our country and state continued to grapple with racial inequities and racial violence. The killing of George Floyd in Minneapolis in May 2020 and the subsequent Black Lives Matter protests that followed spurred a summer of reckoning regarding historic and institutionalized racism, policing tactics, and economic opportunity. In this volume, we explore how Nevada policymakers can address inequities within the schooling system. Leverett, Jackson, Dambo, and Lau articulate six evidence-based recommendations to address equity and systemic racism for Black students in Nevada schools. Jackson and Watson overview recruitment, preparation, and retention practices to diversify Nevada's educator workforce to better serve Nevada's Black and Latinx student populations. Yarczower, Weglarz-Ward, and Tredwell consider equity within the context of disciplinary practices in Nevada's early childhood education programs and outline recommendations for eliminating exclusionary discipline from the early childhood setting. The volume concludes with a discussion from Bengochea and Greer on how to expand supports for Nevada's emerging bilingual student population.

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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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The COVID-19 Pandemic and its Implications for Nevada's Future Workforce

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Abstract

Problem. Nevada's capacity for economic recovery in the pandemic's wake has been jeopardized by COVID-related educational impacts. The diversity of Nevada's student population and inequitable rates of college participation and degree attainment infer imminent skilled labor shortages. *Purpose.* Based on the assumptions of prior research, the authors suggest a multi-tiered strategy of policy triage to address workforce pipeline erosion at its weakest juncture, when students transition from high school to college. *Recommendations.* The paper outlines short-term and long-term policy options that target students and institutions. During school closures, nudge interventions are a low-cost option that sends text messages to remind students about college-related deadlines. Once campuses reopen, students will need increased access to in-person advising. To ensure advising is consistent across institutions, partnerships between K-12 and higher education can be an initial step. Yet, to safeguard the state's long-term workforce stability, state-sanctioned changes to educational structures are warranted.

Introduction

This paper responds to immediate questions about the potential impact of the coronavirus pandemic on Nevada's future workforce. Approximately 62% of Nevada's job openings require education beyond a high school diploma (Heise, 2018). Yet, the state has the lowest rate of postsecondary education attainment in the nation at 41% (Lumina Foundation, 2020). Consider, too, that the diversity of Nevada's student population raises attrition concerns in the wake of the pandemic (Clemens & Veuger, 2020). The following facts and statistics about Nevada's educational outcomes suggest the urgency of impending skilled labor shortages:

- While 43% of traditional-aged students nationwide enroll in some type of postsecondary institution, only 31% of Nevada residents are enrolled—the 2nd lowest rate in the nation.
- Less than a quarter of Nevada's adult population has attained a bachelor's degree or higher compared to 32% of U.S. adults nationwide.
- Including certificates and certifications, Nevada has the lowest postsecondary educational attainment rate in the nation at 41%.
- Nevada has a minority-majority public higher education system with approximately 100,000 students. Two of four community colleges are Hispanic Serving Institutions, and the University of Nevada, Las Vegas is ranked as the nation's most diverse university.

- Adopted in 2016, the Learn and Earn Advanced-Career Pathways (LEAP) framework was established to strengthen the state's workforce pipeline, but COVID-related budget cuts and online learning setbacks will preclude progress.
- Implemented in 2017, Nevada Promise was enacted to ensure college affordability, but mixed results suggest the policy inadequately addresses college socialization inequalities that stratify by parent educational attainment and race/ethnicity.

The paper identifies opportunities to triage pipeline erosion at its weakest juncture, when students transition from high school to college. In what follows, we first discuss national and state demographic trends in the workforce from an equity perspective. We then identify three key assumptions that center on how the COVID-19 pandemic may serve to worsen future workforce trends, particularly for Nevada's diverse population. We conclude with policy recommendations.

National and State Demographic Trends in the Workforce

At the same time skilled labor demands are increasing, the nation's population is experiencing sociodemographic shifts (Kezar et al., 2014).

United States. More than 65% of the nation's jobs require education beyond a high school diploma

(Carnevale et al., 2013). However, because college participation rates stratify along sociodemographic lines, economists warn that an increasingly diverse population is a threat to keeping pace with educated workforce demands (Bound et al., 2010). Prior to the pandemic, approximately 66% of the nation's high school graduates transitioned to postsecondary education, but that rate is not stable (U.S. Bureau of Labor Statistics, 2020). Consider, for example, that one of the fastest growing segments of future students are those who aspire to be the first in their families to go to college (Cataldi et al., 2018). Yet only 21% of students who grow up in households without college educated parents earn a bachelor's degree in 6 years (Holland, 2020). Because these students—often referred to as first-generation—are disproportionately of color and low-income, their low rates of college participation mirror larger racial, ethnic, and income inequalities (Flores & Oseguera, 2013). Whereas postsecondary degree attainment is 43% nationally, for African Americans and Hispanics, the attainment rates are 32% and 25%, respectively (Cahalan et al., 2020). Further, only 22% of low-SES students earn an associate degree or higher within 8 years of high school completion, compared to 39% and 67% for middle- and high-SES students (Hussar et al., 2020).

Nevada. Nevada's traditional-aged student population is even more diverse than the rest of the country. Sixty-nine percent of Nevada's K-12 students are of color, indicating the vulnerability of the state's skilled workforce pipeline (Nevada Board of Education, 2020). Given that parent educational attainment is the leading predictor of postsecondary success, most telling of Nevada's workforce challenges is that its percentage of adults with a bachelor's degree is 23%, the fifth lowest in the nation. Meanwhile, more than 60% of the Silver State's jobs already require education beyond a high school diploma (Carnevale et al., 2018). Including certificates and certifications, the state has the lowest postsecondary educational attainment rate in the nation at 41% (Lumina Foundation, 2020). College outcomes reflect public high school graduation rates, which are also amid the lowest nationwide (Cahalan et al., 2020). Correspondingly, high-school-to-college enrollment rates are also among the lowest in the nation, well below the national average of 63% (Brune et al., 2017; Cahalan

et al., 2020). Contributing to the state's low rate of college participation is student transience, which exceeds 40% in Clark County. In Nevada, as in the country, skilled labor shortages are inevitable unless education's root inequalities are addressed.

Increasing Equity Nationwide. Despite a 6% increase in the national rate of college enrollment since 2000, postsecondary participation in the U.S. still stratifies by race, ethnicity, income, and parent attainment (Melguizo et al., 2020). These statistics raise questions about the effectiveness of college readiness and remediation reforms that have been the dominant trend across K-12 and postsecondary systems for more than a decade. High profile examples of K-12 college readiness initiatives include the Common Core Standards (Hess & McShane, 2013) and Advanced Placement coursework (Kolluri, 2018). Higher education, in turn, has sought to increase college affordability and to improve remediation for the third of incoming freshmen who are academically underprepared for college-level coursework (Relles & Tierney, 2013). Dual-credit programs (Taylor et al., 2015) and early college high schools (Duncheon, 2020) are examples of partnerships between K-12 and higher education. Although these reforms may have cumulatively increased college access, findings demonstrate their failure to overcome educated workforce barriers related to equity. In brief, while the economy requires that more workers than ever before have postsecondary experience, our educational systems are failing to serve students of color and low socioeconomic status.

Key Assumptions to Strengthen the Workforce Pipeline

Although recent studies infer that modern college access and remediation reforms have been unsuccessful, there are several areas of consensus that offer a starting place from which to consider Nevada's next steps.

Assumption #1: College guidance in high school increases postsecondary participation. With limited exposure to college socialization at home, at-risk students are shown to rely on their high schools for guidance with college-related decisions (Tichavakunda & Galan, 2020). The immediate transition from high school to college greatly increases the odds of postsecondary success (Bozick & DeLuca, 2005; Goldrick-Rab & Han, 2011). However, the skills needed to navigate this tran-

sition are not just academic. Necessary skills also include social behaviors and dispositions (Conley & French, 2014). Unlike their privileged peers whose college-educated parents are on hand to provide support, first-generation students often are left to complete tasks such as obtaining fee waivers or writing personal statements on their own (Cox, 2016). Without mentorship to help translate web-based information, self-guided internet searches about colleges have been shown to be liabilities (Brown et al., 2016). This finding is consistent with college access studies that suggest first-generation students can become overwhelmed by too much information (Duncheon & Relles, 2019).

To increase postsecondary participation, intensive advising in high school demonstrates large effects on college enrollment and persistence (Barr & Castleman, 2017). Individualized forms of college guidance—especially in-person mentorship—help students complete many pre-college tasks that are hidden prerequisites for college matriculation (French & Oreopoulos, 2017). Whether help focuses on meeting application deadlines or filing for financial aid, no other form of support rivals personalized "guidance via human interaction throughout the lengthy college application process" (Gurantz et al., 2020, p. 1). Even informal access to teachers and administrators can make a difference, especially for college-aspirant students at Title I high schools (Pallais, 2015).

Assumption #2: COVID-19 conditions stand to reduce postsecondary participation. COVID-related conditions exacerbate workforce pipeline concerns, as economic, health, and digital inequalities intersect. Nevada's high school students are facing heightened exposure to crisis-related consequences at the same time they are attempting to keep up with virtual coursework and apply to college (Enarson et al., 2018). According to a Massachusetts Institute of Technology report, the "pivot to online learning could most negatively affect students living in households that are also most vulnerable to negative effects of recession, food and housing insecurity, and limited access to healthcare" (Reich et al., 2020, p. 2). Indeed, majority-minority students are more likely to face socioeconomic repercussions such as housing and food insecurity (Peek & Domingue, 2020). Relatedly, a disproportion of youth exposed to community crises experience grief, depression, and anxiety, which further compromise their academic outcomes (Bolin & Kurtz, 2018; Bonanno et al., 2010; Enarson et al., 2018).

Digital divide issues linked to COVID-related distance-learning have compounded educational risk. Yet, access to the internet and reliable computer hardware are not the only sources of digital inequity (Van Deursen & Van Dijk, 2013). As a temporary fix, online learning was fortuitous. However, the protracted nature of this solution raises concerns about academic regression, as achievement gaps widen when students are not in school (Gershenson & Hayes, 2018). Of specific concern to Nevada's student population, distance-learning undermines the quality of college guidance that would otherwise occur in-person. Research shows that online college guidance outcomes are not on par with in-person formats (Olszewski-Kubilius & Clarenbach, 2012). A recent study, for example, reported null effects from digitally-mediated college advising (Gurantz et al., 2020). One explanation for the difference is that virtual meeting spaces change social interactions and the quality of communication within them. We know that "skilled face-to-face teachers do not necessarily make quality online teachers" (Borup & Evmenova, 2019, p. 1). We also know that digital spaces engender "feelings of isolation among distance learners" (Woods & Baker, 2004, p. 1). Online feelings have offline consequences, as alienation is shown to deter first-generation students from seeking out individualized support on college-related tasks (Conley & French, 2014).

Assumption #3: K-12 and higher education partnerships can address the weakest segment of the workforce pipeline. The separation of K-12 and higher education policymaking is a barrier to providing comprehensive student support during the high-school-to-college transition, when pipeline attrition is highest (Searby & Armstrong, 2016). To explain persistent inequalities in the high-school-to-college pipeline, recent studies suggest that separate systems of educational governance favor patchwork policy solutions (Hallett et al., 2020). Arguably, separatist policies may do more harm than good, as duplicate advising systems increase taxpayer costs. Moreover, advising inconsistencies within and across institutions can be costly to students, delaying time to degree (Bahr, 2008).

The term "middle space" calls attention to the consequences of separatist education policies

on postsecondary equity (Dynarski & Scott-Clayton, 2013). To support college opportunity for all, middle space partnerships aim to bridge this jurisdictional gap with "collaborative efforts between school districts and higher education institutions" (Collins et al., 2009, p. 294). In addressing policy misalignments between K-12 districts and postsecondary institutions, state-sanctioned partnerships have shown promise. Studies suggest that states inviting system leaders to "the [policy] table generates a huge amount of buy-in and increases overall commitment to the collaboration" (Davis et al., 2019, p. 10).

Recommendations for Nevada

In the wake of the pandemic, efforts to stabilize postsecondary participation for the state's majority-minority student body will require innovation. Our recommendations for Nevada rely on the assumptions of prior research to improve the efficiency and effectiveness of high-school-to-college transitions. In what follows, we identify specific program interventions to support students, as well as specific policy development strategies to reform institutions.

Student Supports. To triage pipeline erosion at its weakest juncture, we suggest providing high school students with the guidance they need to transition to college. To this end, studies unilaterally confirm the effectiveness of college-related advising (Bahr, 2008; Gurantz et al., 2020; Venegas & Hallett, 2008). In consideration of cost and effectiveness differences between online and offline delivery, we recommend sequential short-term and long-term actions. Nudge interventions are a low-cost option for immediate deployment during school closures, whereas in-person college guidance is appropriate once campuses reopen.

Nudge interventions. Nudge interventions use text messaging to motivate students to take action towards a desired outcome. At a time when students' physical ties to school are severed, nudge interventions can provide personalized college guidance to offset the isolation of remote learning. A nudge intervention might, for example, issue periodic text messages reminding eleventh and twelfth graders to complete college-related activities before deadlines. This relatively low-cost category of support has shown promise in reducing attrition over the summer for high school students who have been accepted into college, file paperwork expressing

desire to enroll, but do not actually attend college in the fall (Castleman & Page, 2015). This attrition, referred to as summer melt, suggests the adverse consequences that can occur when students are socially distanced from everyday school interactions (Kraft & Monti-Nussbaum, 2017). Nudge interventions are a way to mitigate the distance.

In-person college guidance. When schools reopen, more aggressive reforms will be necessary. While nudge interventions are an apt interim solution during COVID, personalized text messages are not a replacement for in-person college guidance (Barr & Castleman, 2017). If Nevada is to repair long-term economic growth, more aggressive reforms will be necessary. To meet skilled labor needs, counseling services are indispensable (Barr & Castleman, 2017; Brown et al., 2016; Martinez et al., 2020; Mimura et al., 2015; Walley & Knight, 2018). Over the past 10 years, Nevada's student-to-counselor ratio has dropped by 8% (American School Counselor Association, 2015). While the recommended proportion is 250:1, Nevada's numbers are nearly double that at 485:1 (Clinedinst & Patel, 2018). Although improving college advising in high schools is vital, no single policy fix will solve Nevada's long-term workforce pipeline problem. Systemic changes are needed.

Institutional Reform. The diversity of Nevada's students suggests that skilled labor shortages are guaranteed without structural changes. In a state where the majority of students are of color, innovation must therefore be aggressive and immediate.

Middle space innovation. College under-preparation and postsecondary attrition, are not isolated problems, but symptoms of the same inequalities, albeit manifested at different levels of schooling (Duncheon & Relles, 2020). Whereas policy analysts recommend K-12 and postsecondary institutions collaborate to improve pipeline equity, Nevada's separate governance systems have led to a patchwork of well-intended, but stand-alone policy solutions. Recent studies suggest that the patchwork approach is insufficient to improve equity (Goldhaber et al., 2020). In Nevada, where skilled labor shortages are imminent, efforts to suspend the deepening of student inequalities across the middle space will require building both policy partnerships and cross-system infrastructure.

Restructuring is practical not only to improve pipeline productivity, but also to consolidate the

state's limited fiscal resources. The duplication of efforts under siloed education systems is a budgetary excess that the state can no longer afford (Levin & Calcagno, 2008). Consider the upsides of information-sharing and joint accountability for student outcomes. Together, the Department of Education and Nevada System of Higher Education (NSHE) could streamline advising services. The same personnel would counsel students not just across the middle space to college, but to gainful employment. Consistent academic and social guidance as students transition from one institution to another can reduce inefficiencies, such as the start-up time it takes for a new advisor to service a new student case (Holland, 2015). While reforms such as increasing student-to-counselor ratios are often cost-prohibitive (Robinson & Roksa, 2016), individualized college guidance may be economically viable under a unified system that promotes cost-sharing.

Future Directions

As Nevada's economic structures struggle under the weight of COVID, policies that span—as opposed to work around—the middle space are warranted. Specific reforms that made sense even a year ago arguably are not aggressive enough to curb the inequitable impacts of COVID on Nevada's diverse student body. The scope of the crisis warrants coordinated efforts not just to support students, but to restructure institutions. To this end, we have outlined a multi-tiered strategy of policy triage. Adaptable to health-related socialization mandates, student support in the form of individualized college guidance can begin with text messages and transmute to in-person advising. Concurrently, institutional reform can begin with legislative encouragement for middle space partnerships, but structural innovation is needed to safeguard the state's long-term economic interests. To repair the pandemic's damage to Nevada's workforce pipeline, state-level leaders will need to plan ahead. Mobilizing K-12 and postsecondary cooperation now is essential to ensure economic recovery and stability later.

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Success in STEM: Diversifying our STEM Workforce by Supporting our English Learner Students' Mental Health and Academic Achievement

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Abstract

Problem. Nevada faces a shortage in STEM-qualified employees. Given that our English Learner (EL) community is one of the fastest growing communities in Nevada, policymakers have a vested interest in supporting these students in STEM careers. Unfortunately, EL science scores in Nevada are particularly low, implying they are not on a trajectory towards STEM careers. ***Purpose.*** This paper provides an overview of recent trends in Nevada policies addressing ELs, STEM, and counseling. It also provides an overview of evidence-based strategies for improving EL success in STEM. ***Recommendations.*** We recommend that Nevada educators and policymakers work to 1) Improve quality instruction for ELs by integrating language learning into STEM curriculum; 2) Involve school counselors to promote EL social-emotional needs and mental health; 3) Invest in professional development for STEM educators on how to specifically integrate language into content; and 4) Lower the student-to-counselor ratio in Nevada to the recommended best practice (i.e., 250:1).

Introduction

One important element of sustaining economic growth in Nevada is to build a stronger science, technology, engineering, and mathematics (STEM) sector. Following the 2008 recession, the Nevada Legislature created the Advisory Council on STEM, which has developed and overseen a strategic plan for expanding the state's educational resources in STEM (SAC, 2017). The Advisory Council on STEM notes that Nevada has made progress in diversifying its economy away from tourism and hospitality towards STEM careers, adding 35,132 STEM jobs between 2011 and 2016 (SAC, 2017). However, the council also notes that Nevada still faces a shortage in STEM-qualified employees.

Given that our English Learner (EL) community is one of the fastest growing communities in Nevada, policymakers have a vested interest in supporting these students in STEM careers. English Learners (ELs) are students who are in the process of learning English as a second or other language. In Nevada, 17.1% of students are classified English Learners (ELs), and approximately 48% of ELs are likely living in socio-economically disadvantaged families (Sugarman & Geary, 2018). Notably, 67.6% of ELs in Nevada (52,898) speak Spanish (National Center for Education Statistics, 2020). ELs have historically scored significantly below native English speakers in math, English language arts (ELA), and science on standardized assessments (National Assessment for Educational Progress, 2020). For example, on the National Assessment of Educational Progress (NAEP), a national standardized assessment used to track and compare student performance across states and over time, Nevada EL students consistently score below the proficiency cutoffs in ELA and math. On Nevada's state standardized assessment (the SBAC), EL students score low in all subjects, but EL science scores are particularly low (see Table 1). This information suggests Nevada students, but especially ELs, are not on a trajectory towards STEM careers.

There are likely several reasons for Nevada's lagging test scores among its EL student population. In fact, for vulnerable populations, including ELs, the COVID-19 global pandemic revealed previously documented inequalities in education and health disparities (Ku & Brantly, 2020). For example, ELs are less likely to have technology access to participate in remote learning making it difficult for them to achieve in core subject areas such as science and math (Meyer, 2020). In addition, since the rise of COVID-19, researchers have observed

Table 1. *Averaged Percentages of ELs and Non-ELs Across Reported Grades Who Met or Exceeded State Standardized Assessments in 2016-17 by School Subject Areas in Nevada*

Subject Area (Grade levels reported and averaged)	EL Averaged % Meeting or Exceeding Standard	Non-EL Averaged % Meeting or Exceeding Standard
English Language Arts (Grades 3-8)	16.6	58.4
Math (Grades 3-8)	16.4	43.35
Science (Grades 5-10)	4.3	34.75

increased anxiety, depressed mood, and stress in individuals, often seeing a need for immediate increase in mental health support (Drouin, 2020; Durankus & Aksu, 2020). Children and adolescents have been particularly impacted, having to attend to the impacts on their own mental health and added systemic factors (e.g., parent well-being, home insecurity) that may be occurring simultaneously. COVID-19 has brought to light how disadvantaged families and racial minorities, including ELs, are more likely to be impacted by the pandemic (Center for Disease Control and Prevention, 2020). They therefore need access to counseling resources to help them navigate their mental health, including anxiety, resulting from both home-based and school-based stressors.

In short, COVID-19 has magnified pre-existing issues surrounding EL learning and academic success in STEM, which includes attention to both STEM instruction and mental health for successful learning. Figure 1 illustrates how COVID-19 has magnified the needs of ELs which are supported by STEM educators (for instruction) and counselors (for mental health). This type of critical integrated support (shown by the arrow) represents a nexus worthy of attention. Considering how to promote success for Nevada's ELs along the intersections of STEM and mental health as magnified by COVID-19 is critical now and in the future. This paper will first overview recent trends in Nevada policies addressing ELs, STEM, and counseling. Then we discuss evidence-based strategies for improving EL success in STEM. We conclude by offering recommendations for how new Nevada policy can integrate best practices to improve EL STEM outcomes.

Figure 1. *Supporting ELs as COVID-19 magnifies challenges to academic success and mental health*
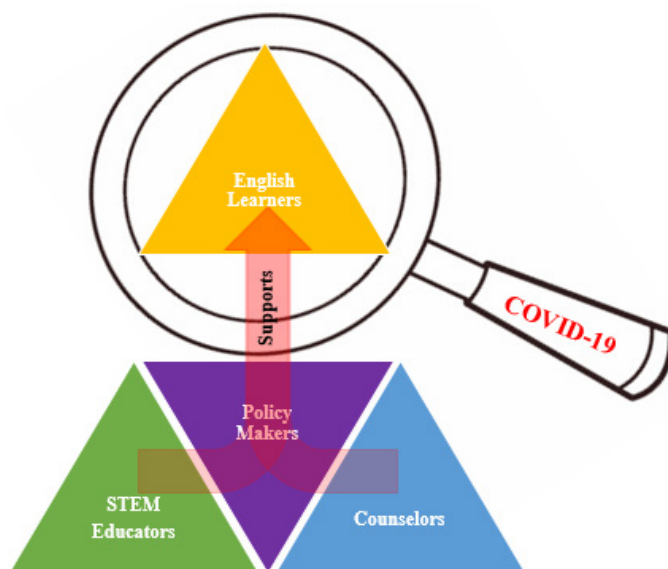
Trends in Nevada Policies Addressing ELs, STEM, and Counseling

Policies have considered STEM learning initiatives or EL learning initiatives separately and have largely failed to consider the critical role of mental health in both of these areas. Current Nevada policies do not integrate EL supports, including mental health supports, within STEM initiatives or STEM supports within EL initiatives, and by treating these concepts disparately, these policies fall short of addressing the inequities that impact EL student success. In what follows, we briefly overview these policies.

EL Policies. In terms of EL learning initiatives, the Nevada legislature has been active in taking actions to address issues concerning ELs' math and reading underachievement in our state. For example, the Nevada legislature approved funding starting in 2013 (SB 504) to establish Zoom funding schools with high percentages of ELs. In 2015, the funding was increased to include secondary schools (SB405) and funding was extended in 2017 (SB 390). The services have increased academic achievement and improvements in English language proficiency for ELs (SB 390 Annual Report, 2017; Buckendahl, 2019). While helpful, Zoom funding did not target STEM education or address how teachers can effectively instruct ELs in STEM.

In terms of teacher preparation, the Nevada State Board of Education approved legislative language in July 2016 regarding the English Language Acquisition and Development (ELAD) endorsement for teachers. The language states all newly licensed teachers should take four foundational EL courses starting in 2020 (State of Nevada Department of Education, 2016). The results of this legislative language have yet to be observed and evaluated and they do not attend to how to teach ELs effectively in STEM. More recently, the development of the English Language Development Standards Framework (ELD Standards Framework) was presented to the Nevada State Board of Education in January 2020 (Office of Student and School Supports, 2020). Notably, the ELD Standards Framework highlights the important connection between language and content learning (e.g., in science, math, language arts). This connection between language and content language is encouraging, but again, how teachers will be given this

information and use it in terms of STEM education for ELs is yet to be determined. Notably, none of the aforementioned policies consider the importance of educators and school systems understanding the role of affective realms of learning such as anxiety which can impact ELs' language and content learning (Ariza & Coady, 2018).

STEM Policies. Nevada faces many challenges around supporting students within STEM (e.g., training, time, and materials for teachers; OSIT, 2018). In order to meet these challenges, a number of policies have been enacted to encourage K-12 students' STEM involvement. SB 241 (2017) rewards students who participate in additional STEM classes with a STEM Seal. Regional STEM networks have been created to connect and fund resources across NV. Governor Designated STEM schools have been established to further this agenda and SB 345 (2013) includes collecting and disseminating STEM resources. STEM educators, for both formal and informal contexts (e.g., in classrooms vs. in a museum) come in many forms within Nevada and are often supported by the Office of Science, Innovation, and Technology (OSIT), established by NRS 223.600 (2001).

Most of these policies include additional considerations for vulnerable populations of Nevada students. However, these programs and policies are solely focused on STEM content not on language learning and attending to affective learning factors (e.g., reducing anxiety) which are critical for ELs' achievement. For example, OSIT has a series of grants focused on providing students greater access to STEM resources but most do not attend to ELs' learning which include attending to language and mental health. While prioritizing growing content knowledge is important, students need additional language support (i.e., including culturally responsive teaching and learning) and increased resilience around learning (i.e., mental health support) in order to build capacity within STEM.

Counseling Policies. Current policies in the Nevada school system require that each public school employ at least one full-time school counselor and that each school has a professionally developed comprehensive school counseling program (Amendment 1088, 2019). This policy has been in response to the needs reflected at a national level, where 70-80% of students received mental health support from their school counselor (Atkins et al,
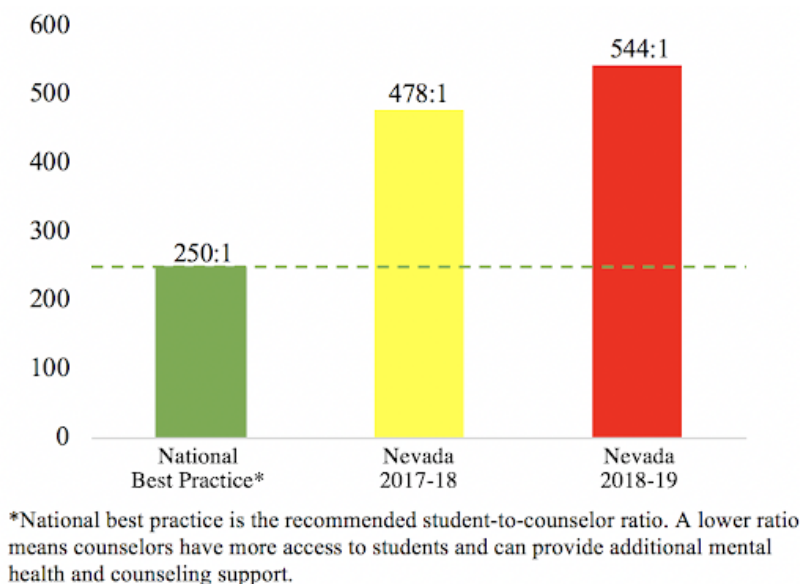
2010). Aligned with national best practices, Nevada school counselors are tasked with addressing the academic and social-emotional learning needs of the students as well as advocating for equitable access to rigorous education (Amendment 1088, 2019).

Unfortunately, student-to-counselor ratios for Nevada continue to widen (i.e., 478:1 in 2017-18; to 544:1 in 2018-19), over double the recommended best practice (i.e., 250:1; ASCA, 2020a). These widening gaps in student coverage make it more difficult for a school counselor to meet the increasing needs of EL students given the complex context, only exacerbated by the COVID-19 global pandemic. Figure 2 illustrates these points, comparing trends in Nevada to national best practice. This figure notes that a lower student-to-counselor ratio would allow counselors more access to students, increasing the ability to provide additional mental health and counselor support to populations of need, such as ELs.

School counselors are uniquely positioned to recognize and respond to the mental health needs of EL students (ASCA, 2020b), making them critical for supporting EL student mental health and resilience during a global pandemic and beyond.

Figure 2. Student-to-Counselor Ratio

*National best practice is the recommended student-to-counselor ratio. A lower ratio means counselors have more access to students and can provide additional mental health and counseling support.

Evidence-Based Strategies for Supporting ELs STEM Success

In STEM classrooms, ELs learning outcomes are enhanced when language and academic concepts are taught simultaneously. In addition, ELs learning improves when students are in supportive classrooms that attenuate anxiety and increase motivation to learn. The following section addresses cognitive (i.e., Language in STEM), and affective (i.e., mental health in STEM) factors that impact ELs' STEM learning, prevalent in Nevada based on existing research. Finally, at the culmination of these topics, we present proposed best practices to support Els' STEM learning.

Language in STEM (Cognitive). There is much science educators can do in terms of simultaneous language and concept instruction. For example, science educators need to teach vocabulary explicitly, teach reading skills for non-fiction texts, value the students' home language and use it to support learning, and allow opportunities for ELs to speak and write in class. Research has shown this type of instruction increases ELs' and non-ELs' content and language learning (e.g., Huerta et al., 2016; Jackson et al., 2019; Lara-Alecio et al., 2016; Lee et al., 2005; Lee et al., 2008; Llosa et al., 2016; Maerten-Rivera et al., 2016). It is also important for science educators to consider students' background knowledge (e.g., what students know or don't know about a topic; Bravo et al., 2014; Llosa et al., 2016) and provide instructional scaffolds such as overall classroom structures that

promote exploration (Lara-Alecio et al., 2016), visual supports, and collaboration among students so that they are communicating through speaking and writing, while also receiving feedback (Stoddard et al., 2013; Shaw et al., 2014).

STEM educators need extensive external classroom support to implement research-based effective EL STEM practices (Lee et al., 2008; Santau et al., 2010). For example, teachers in the aforementioned studies received intense professional development training ranging from two to five full-day workshops during the year and/or summer (e.g., Lee et al., 2016) to bi-weekly meetings throughout the school year (e.g., Lara-Alecio et al., 2012). Still, teachers were reported to not reach the level of practice the researchers were wanting (Lee et al., 2008; Santau et al., 2010). Science educators need intense and ongoing support to integrate language into STEM curriculum effectively.

Mental Health in STEM (Affective). STEM educators can also create environments that promote positive mental health. This includes strategies to lower anxiety and increase motivation in the classroom. For example, they can value the students' home language, provide instructional scaffolds (e.g., opportunities for group and partner work; materials with visual supports to aid comprehension; learner-centered instruction; Ariza & Coady, 2018).

When it comes to external impacts on mental health (e.g., COVID-19 and related anxieties), however, science educators need the support of school counselors to promote positive mental health for ELs. School counselors could work with ELs at the individual, group, and classroom level (Cook, 2015, Cook et al., 2012). At the individual level, identifying the specific needs of each EL student includes counselor engagement with caregivers as well as individual sessions with the student. At the group level, counselor developed interventions could specifically address areas of need for ELs (e.g., culturally responsive, anxiety, content-oriented). At the classroom level, the counselor could provide lessons that include anxiety reducing techniques for students when working with STEM concepts, thus promoting positive mental health. In terms of resources, the role of the school counselor becomes critical for student assistance in accessing community resources which are much needed for EL students and families (Ariza & Coady, 2018).

In addition to working directly with students, school counselors are in a position to assist ELs and STEM educators, recognizing the individual education and mental health needs of each student (Cook, 2015). Specifically, school counselors can assist STEM educators in gathering and analyzing relevant data, monitoring student progress, and integrating literacy concepts into the comprehensive school counseling program (Cook, 2015).

Best-Practices in STEM for ELs. Table 2 provides a quick reference guide to practices for working with ELs in STEM in terms of instruction that promotes learning. The guide is based on the EL research cited above and state-suggested recommendations around STEM learning (Advisory Council on Science, Technology, Engineering, Math, 2017).

Table 2. *Research-based Ideas for Promoting EL Learning in STEM*

Language	Culture	Classroom Environment
Teach vocabulary explicitly after lessons to reinforce concepts.	Understand and build students' background knowledge.	Create classroom structures that promote exploration and opportunities to speak and interact (e.g., group and pair work; inquiry).
Teach non-fiction text reading explicitly.	Value the students' home language and culture and allow it to be used for learning.	Create classroom structures which include scaffolds (e.g., visual supports; feedback).
Allow low stress opportunities for ELs to speak and write in class.	Allow students to tie personal funds of knowledge to academic language.	Create classroom environments which support students to communicate (e.g., supportive technology, additional time).

Table 2 highlights that attending to language, culture, and environment is important for promoting EL success in the classroom, including STEM classrooms. In terms of language, ELs benefit from attention to explicit vocabulary instruction, instruction on how to read non-fiction texts, and opportunities to speak and write in the classroom. In terms of culture, ELs benefit from teachers' eliciting (i.e., finding out what ELs know) and building (i.e., not assuming ELs know but providing context) students' background knowledge on different instructional topics. ELs will also learn STEM more successfully if they feel their home language and culture are valued and are used as tools for learning, including connecting what they know to what they are learning. In terms of classroom environment, ELs benefit from experiential learning in which they have many opportunities to speak and write with supports for that communication (e.g., group and pair work, visuals, feedback, technology).

Recommendations for Policy and Practice

In addressing instruction and mental health issues surrounding EL learning and academic success in STEM, we rely on the research findings outlined in this paper. First, we recommend supporting policy that provides quality instruction for ELs, such as (a) integrating language learning into STEM curriculum to promote EL academic achievement within EL initiatives, similar to Zoom programs and the ELL Master Plan call for content and language integration (Clark County School District, 2019). We also suggest involving school counselors to promote EL social-emotional needs and mental health within initiatives, including using resources such as CASEL guide to school-wide social and emotional learning (CASEL, n.d.). Finally, we recommend policies and practice that advocate support for STEM educators and counselors working with ELs, such as (a) investing in professional development for STEM educators on how to specifically integrate language into content within initiatives and (b) lowering the student-to-counselor ratio in Nevada to the recommended best practice (i.e., 250:1) by hiring additional school counselors.

Conclusion

ELs' STEM success depends on successful language integration into content with teacher and counselor support. ELs' STEM success also depends on attending to students' mental health ranging from ongoing simultaneous content and language learning to currently managing feelings regarding the pandemic. The COVID-19 global pandemic should and is pushing STEM educators and counselors to conceptualize a new learning landscape that is beneficial to all learners, including ELs. This work must be started in the midst of a pandemic and continue to move forward long after. This work conducted across stakeholders (e.g., students, STEM educators, counselors) is a nexus which can be leveraged to create new opportunities and support capacity building within Nevada through policy and practice.

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Challenges and Opportunities for Virtual Teaching in Nevada

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Abstract

Problem. School closures in Nevada due to the COVID-19 pandemic created an unprecedented challenge to schools, districts, teachers, parents and students. The rapid switch to virtual teaching left many students unaccounted for and teachers unprepared for teaching virtually. Therefore, there exists a need for advanced planning to assure education in Nevada continues at a high level, whether through on-premise learning in schools or through remote teaching. ***Purpose.*** This policy paper discusses ways virtual teaching requires adaptations to teacher professional development, access to technology, and teacher preparation. Ways to improve the viability of virtual teaching to enhance student achievement, teacher performance, and transform schooling in Nevada are also discussed. ***Recommendations.*** A legislative commission could be established to capture lessons learned from this year's virtual teaching and offer guidelines to ensure schools in Nevada always have the capability of switching between on-premise and remote learning.

Introduction

School closures resulting from the COVID-19 pandemic of 2020, affected all constituents of education in Nevada. In-person instruction halted on March 22, 2020, and district administrators, principals, and teachers were placed in the difficult position of trying to find immediate solutions to the unexpected problem of delivering instruction virtually over the approximately 60 days remaining on the calendar. One immediate problem of the school closures was that nearly 30 percent of students could not be contacted during spring 2020. Through the summer months, administrators diligently reached out to families to contact all students. Moving into the fall semester, of the 17 school districts in Nevada, less than half remained closed for the beginning of the 2020-21 school year, 12 opened full-time, resumed on-premise instruction, or followed a part-time hybrid model. Nevada's largest school district, Clark County School District (CCSD), remained in virtual instruction and a number of families moved out of the district or withdrew their enrollment for other schooling options. For example, 75 schools in the district enrolled fewer than 90 percent of the students they were expecting (Appleton, 10/5 LVRJ).

The challenge of student attendance was not just confined to Nevada. In a survey of at least 100 teachers in each state regarding student attendance during Spring 2020, Michigan had the largest issue with class attendance; 61.95% of Michigan teachers reported that 1 out of 4 students or fewer attended remote classes. Other states with critical attendance issues included North Carolina, Ohio, and California with more than 40% of teachers in these states stating 1 out of 4 students or fewer attended remote classes (Fishbowl, April 13, 2020).

While the COVID-19 pandemic and the rapid move to virtual learning has created a strain on Nevada's teachers, schools, districts, parents and students, virtual learning is not new to education or to Nevada, nor is it likely to disappear after the pandemic subsides. According to the National Education Policy Center, there were 500+ full-time virtual schools in 2017. In 1991, CCSD began offering distance education opportunities for students and in 2013, the Nevada Learning Academy (NVLA) was established. Currently there are 293 full-time students and 9,420 part-time registered students at NVLA, with a new elementary school for grades 3-5. Other institutions offering free accredited online education include the Nevada Virtual Academy and the Odyssey Charter School Nevada (OdysseyK12.org). Some institutions across the U.S. offer virtual education for tuition or small monthly fees (liberty.edu/ms/online-academy). Such online learning programs offer individualized and customized learning paths.

The lessons learned from the challenges presented by the COVID-19 pandemic creates an opportunity for policymakers to provide a more robust infrastructure for virtual learning in the future.

In short, lawmakers can help Nevada schools embrace the best of what virtual learning has to offer. In this paper, we discuss evidence-based actions for Nevada lawmakers to improve the state's virtual learning infrastructure. We provide four recommendations of how this might be accomplished.

Enhancing Virtual Learning in Nevada

It is possible, even probable, that virtual instruction will become a common occurrence in education moving forward. Beitlers (2020) attests that, "We [are] learning there are circumstances where some amount of online instruction can benefit student learning." Virtual learning, for example, can be used to provide personalized and additional support for at-risk students or to students who need additional support to meet grade-level expectations. Through technology, teachers can offer additional second language learning by providing immediate translations of students' first languages along with the English version of the lesson. Additionally, technology can be used to provide continuity of learning during shutdowns for weather-related events. When power outages occur, teaching remotely may also include documents that can be delivered to support student learning when technology is not available.

Given the unique skills required to facilitate virtual learning and its potential use in the future of schooling, Nevada can engage in policy reforms now to help teachers gain the requisite skills and confidence in facilitating learning in an online environment. In what follows, we discuss the following four actions to make this a reality: 1) all teachers must be prepared to deliver excellent instruction whether remotely or in traditional settings; 2) funding must be made available for new technology and technology upgrades for all teachers, students, and parents; 3) support for teacher education candidates in traditional and alternative route to licensure (ARL) programs to expand their knowledge of teaching remotely; 4) development of a plan for virtual teaching in Nevada. The dramatic effect the closure of schools had on teaching and learning highlights the importance of preparing K-12 educators with the skills to effectively teach online should teaching virtually become part of the new normal (Trust & Whalen, 2020).

Preparing Teachers For Virtual Teaching

Funding must be provided for institutions of higher education, school districts and regional professional development programs to include teaching virtually as a necessary component of professional development (Kennedy & Ferdig, 2018). A mentoring system to support teachers in remote instruction can be created to provide the opportunity for teachers to specialize in online instruction through continuing education units or licensure endorsements. Teachers new to the profession can also receive support from experienced colleagues through induction and mentoring. The Nevada Distance Learning Collaborative and the Nevada Department of Education Digital Engineers cohort are in place to help teachers learn the best-practices for virtual teaching. These overarching organizations support virtual teaching. However, teachers learn best from one another in timely and relevant situations that are school-based and are concerned with specific groups of learners (Juliani, 2015). Small learning communities of teachers are common and often serve to create healthy school cultures and effective problem-based instruction leading to increased student achievement. A cadre of teachers with virtual teaching experience and expertise in technology and visual tools can support teachers in exploring the benefits of virtual teaching and creating online courses (Gordon et al., 2019).

Teaching skills in the traditional, face-to-face school setting do not necessarily translate well to the virtual setting. Teachers are used to being in close proximity to their students, of seeing an entire room in a glance and being able to re-engage students in learning with a nod or gentle suggestion. In remote education, the teacher is as distant from the learners as they are from one another. Educative interactions among learners and teachers in the virtual environment require more flexibility and adaptability than in a traditional classroom. The manner in which students interact with their teachers and with other students in a virtual classroom can occur at a different, even more rapid pace than in traditional classrooms and it is essential to keep students engaged. "Keeping the lesson flowing at a good pace helps keep students engaged—and remember, what we're after is maximizing not just time on task, but 'engaged time'" (Simmons, 2020). "A lot of what [instructors] know about really great in-person facilitation applies online," said Cindy Huggett, a virtual training consultant. But some skills need to be tweaked or expanded. "It's like, you already know how to drive a car; now you're learning to drive a truck. It's the same

set of skills, but you add on to it."

Huggett (2020) identifies three key differences:

- The role of technology—while a face-to-face instructor might use technology, in the virtual classroom, technology becomes the main platform
- Engaging learners—different strategies are needed to engage and build a rapport with learners the instructor cannot see
- Multitasking—instructors need to simultaneously present, engage learners, and use the technology platform.

Creative methods of teaching have emerged from the rapid switch to virtual teaching. Teachers are working in teams to determine which programs and online platforms work best for specific groups of students. Administrators and teachers are learning ways that technology supports increasing the permeability of education. Distance learning "can be as effective as traditional instruction and to do so, online courses need cooperative/collaborative learning" (Dixson, 2010). As teachers gain experience teaching virtually, they develop new skills in online education and expand their abilities to reach all students individually (Affinito, 2018).According to Connections Academy (September 2020),

> "The best teachers know that a successful online school year takes creativity, specialized training, knowledge of the curriculum, and lots of preparation. In today's virtual classrooms, online teachers play an essential role in supporting student success, and it requires a slightly different skill set than in-person learning." (page 1).

New approaches to teaching (in addition to being proficient in the use of various online learning applications) include online presentation skills, and the ability to view teaching virtually as both synchronous and asynchronous. In remote education the teacher becomes more of a facilitator of learning to help students with their interactions, both with the content and with others. As in all schooling, it is the teacher who organizes the instruction and guides discussions but it is the student who must learn. During the recent school closures, teachers have gathered numerous resources to support student learning and to encourage student-to-student discussions.

Technology for Access

New technology and technology upgrades for all teachers, students and parents across Nevada are needed. At the start of the pandemic many students in Nevada did not have access to the Internet or did not have the digital tools necessary to log into virtual classrooms. In an April, 2020 report, the Nevada Department of Education stated that approximately 136,507 devices were needed by students for remote learning, and 7,146 were needed by educators. A Pew Trust survey indicates that students in remote areas are less likely to use the Internet which can contribute to the digital-divide among students (Modan, 2020). This disparity in student access can create an additional inequity among learners during a rapid switch to remote instruction. (DeLa Rosa, 2020). The challenge of attendance in virtual classrooms may be further complicated by the necessity for multiple connections in a single home. Plans have been initiated to "boost Internet access for students in underserved communities allowing student access to heightened Internet via cellular phone, tablet, and mobile notebooks" (Johnson, 2020, p28). This support for access will assure all students can attend school whether in person or virtually.

Students without the tools for online learning were provided Chromebooks by districts. Organizations stepped up to help Nevada families obtain access to the Internet. T-Mobile began a program titled Project 10 Million, to provide free Internet access to school districts and families in need for five years. Cox Communications offered programs for schools and districts to expand their Internet capacities. Students from single-parent families were provided space and technology to attend virtual schools in city recreation facilities while their parent went to work.

This support from community members serves to make virtual schooling an integral part of education in Nevada. Building a strong network of Internet access for all schools, teachers and students will support all types of learning in the future. As districts begin to recognize the potential technology provides for reaching learners and their families as well as sustaining teacher collaboration, new approaches to schooling in Nevada will emerge.

Preparing Teacher Candidates for Virtual Teaching

Funding is necessary to support teacher candidates in traditional and alternative route to licensure (ARL) programs to expand their knowledge

of teaching and practice. Time and space outside of coursework and teaching assignments should be provided for the formation of small learning communities of teacher candidates, novice teachers and experienced teachers. These peer support groups would establish time for collaboration and would include knowledge and skills related to virtual instruction. Teacher collaboration on effective practices can often be the best form of professional development (Quinn & Paretti, 2019). Teacher education programs could also include opportunities for teachers to specialize in online instruction through a licensure endorsement.

It is essential that teacher preparation programs also include methods to help teacher candidates participate in virtual teaching. In the past and the present, experience in classrooms has been viewed as the cornerstone of learning to teach. Practicum has long been espoused to provide PST's (preservice teachers) with an opportunity to practice and reflect on teaching and translate theoretical ideas into practice (Zeichner, 2010). Sasaki et al. (2020) studied the efficacy of using virtual reality simulations to prepare preservice teachers for a practicum experience. They found increased levels of confidence and competence as a result of the simulation and debrief sessions, suggesting that "the simulated practicum experience, whilst generally seen as a way to prepare [teacher education candidates] for their practicum experience, could now be a viable tool for supplementing or replacing the practicum experience [in classrooms] both during and after the current pandemic" (p. 334-5).

If classrooms are virtual, candidates must acquire skills in navigating virtual environments. Teacher candidates must understand digital-age competencies and skills, such as digital agility, a coaching mindset, adaptability and collaboration as part of their growth toward becoming expert teachers. A reconceptualization of teacher preparation should be considered. Instead of offering separate courses on distance learning, teacher preparation programs should strengthen existing coursework and field experiences to prepare teachers to use technology effectively in virtual or blended learning environments. This way, teachers will adopt strategies to enhance student learning in any context (Holdheide, 2020).

Developing a Plan for Virtual Teaching

As states begin to lift emergency orders and districts prepare to reopen schools, this is an opportunity for state leaders to reimagine education and build a system that will emerge from the coronavirus crisis stronger than ever. It is important to keep a record of all that is being done now and how it is being done so that movement to online schooling can be tracked whenever it occurs. Virtual teaching can bridge emergency closures, provide an opportunity for innovative instructional practices, and increase parent and school staff communication (Arundel, 2020).

A plan for districts to document and track student achievement and teaching practices during virtual teaching can be established as well as new methods to evaluate teaching practices with video self-recording and reflection replacing in-person observation. Reimagining the roles and responsibilities of teachers, students, parents, and the community should be viewed as a blueprint for moving forward, recognizing that if a strategy is working in a virtual environment, it could also be adapted for a traditional classroom. A legislative commission to capture lessons learned during this time of virtual teaching could be created to provide guidelines so districts always have the capability to switch between on-premise and remote learning.

Development of a resource available to all teachers in Nevada regarding components of best practices in teaching virtually could be distributed by districts. Such a resource would include information regarding the use of technology (learning platforms), strategies for maximizing student engagement and accountability, development of communication skills, ways to be available and provide feedback to students, and ways to strengthen the home school connection.

While accountability is still a vital part of teaching and learning, administrators and teachers have begun to expand their thoughts about how evaluations represent success and growth in student learning. Standardized tests are not the only way to document growth (Voices from the Classroom, November 2020). A new way to look at student learning is to allow teachers to define what works for a specific group of students and how to document their growth. Accountability in a virtual environment is not just about metrics, it is more focused on what individual students are learning and how they are responding to 21st century access to learning.

Conclusion

The recommendations here are intended to provide guidance to state leaders as they develop solutions for the short-term and long-term effects of COVID-19, or any other reason why schools cannot be open, with an eye toward maintaining high expectations for quality teaching. While the Nevada Department of Education (NDE) [Re-Opening] Schools Committee focuses on a safe return to schools, what can be learned from the virtual teaching experience should not be overlooked. "Change is inevitable. Growth is optional" (Maxwell, 2019). Positive growth in schooling in Nevada requires support and creativity.

As one teacher, Micaela Chewjalearn, fourth grade at Myrtle Tate Elementary School put it:

> "Although we lost out on some benefits of in-person learning, we learned plenty of new strategies to take back to our classrooms when we do return. This experience has definitely been the most interesting experience of my career so far, but I am glad we were able to learn in so many different ways. The students will now have life skills, such as learning how to adapt to unforeseen circumstances, and new technology skills that they will be able to put to use throughout the rest of their lives. This is a perfect example of the curriculum philosophies I believe in. Teaching is a career that requires all educators to be adaptable, ready for the unexpected, and quick to transition to whatever new curriculum, learning environment, or set of students we may have."

The goals and objectives of teaching and learning remained the same, but the necessity of working in a virtual environment prompted teachers to develop improved ways to support student learning and achievement. Through virtual schooling, students and teachers are developing new skills in technology that will become part of their knowledge and will remain with them into the future. Policymakers who had initially focused on the practical issues of online schooling should now turn their attention to the working levels of teachers and students. It is time to consider the learning effectiveness of virtual schooling. Since something could happen in the future that would require a shift to remote instruction, it is best to be prepared.

Research will continue to address resources and timely and relevant practices that use technology and digital tools. Effective practitioners need skills that are applicable for teaching and learning in both actual and virtual classrooms. While the elements of high-quality teaching and learning are essentially the same, the delivery system has changed (Marzano, 2017). Some teachers may have previously used technology as an engaging add-on but the advent of virtual teaching requires them to become proficient in the use of digital tools for teaching and learning.

The long-term effects of virtual schooling and the ways that teacher-preparation programs can be enhanced through a combination of face-to-face and distance learning strategies need to be addressed. Evidence thus far suggests that virtual education depends on old school principles: creative, attentive teaching and patient support from parents (Carey, 2020) and the relationships formed between the teacher and students.

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Prepping for Another Recession: Re-Assessing the Validity of Teacher Evaluation Systems for Human Capital Decision-Making

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Abstract

Problem. The school budget cuts concomitant with the COVID-19 pandemic mean educator jobs may again be threatened by layoffs. During prior recessions, school district administration primarily determined teacher layoffs by virtue of seniority. However, as new evidence emerges that seniority policies may not be the most equitable way to determine teacher layoffs, some have turned towards performance-based measures from evaluation systems. ***Purpose.*** The purpose of this paper is to examine the validity and reliability of the Nevada Educator Performance Framework (NEPF) for making human capital decisions like layoffs. ***Recommendations.*** We recommend that Nevada and other states improve the differentiation in scores across the varying evaluation domains by engaging in more rigorous training of evaluators. Additionally, we recommend that Nevada and other states improve the distribution of final teacher evaluation scores so that the performance measure really distinguishes among teacher performance. Strategies could include lessening the administrative burden of filling out the final evaluation, increasing the number of performance levels, or rotating the specific standards focused on each year.

Introduction

The coronavirus pandemic (COVID-19) has had major consequences for the public education sector. Schools have experienced significant budget cuts resulting in teacher layoffs throughout the nation (Burnette & Will, 2020; Harris & Morton, 2020; Irons, 2020; Turner, 2020), and still more layoffs are expected given decreases in state budgets, reallocations to address other economic and health concerns, and the lack of greater assistance from a federal bailout. Based on similar patterns following the 2008 recession, the layoffs are expected to harm students—particularly Black, Latinx, and low-income students—the most, further widening opportunity and achievement gaps (Jackson, Wigger, & Xiong, 2020). In the case of unavoidable layoffs, making decisions based on teacher effectiveness has shown to harm students less than traditional approaches based on seniority (Boyd et al., 2011; Dabbs, 2020; Goldhaber & Theobald, 2013; Kraft, 2015). However, this requires measures of teacher effectiveness that produce reliable and valid evidence tied to teacher practice and student success.

As a part of the American Recovery and Reinvestment Act of 2009, President Barack Obama launched the Race to the Top federal grant competition, providing grant-based support to states willing to institute educational policies that, in part, overhauled performance evaluation systems for teachers and administrators. States responded with a flurry of legislation aimed at revamping existing evaluation systems. During the 2011 state legislative sessions alone, 19 states enacted comprehensive changes to the way they evaluated teachers and administrators (Marianno, 2015). Over the past decade, almost all states have adopted new teacher evaluation systems (Steinberg & Donaldson, 2016). These policy changes aimed to increase the number of measures used in making determinations of teacher performance, to improve the differentiation in performance between teachers, and to provide decision-makers better information when making difficult layoff, tenure, and dismissal decisions.

In this brief, we first review the literature on trends in educator evaluation systems and prior re-

search that has assessed reliability and validity evidence from these systems. We then turn to the case of Nevada's teacher evaluation system. To support human capital decision-making processes, the Nevada Teachers and Leaders Council created the Nevada Educator Performance Framework (NEPF), first enacted in 2015-16 (Fitzpatrick & Salazar, 2012; Nevada Teachers and Leaders Council, 2013)[1]. Using longitudinal, statewide administrative data, we examine the validity and reliability of the NEPF for making human capital decisions. Our results show that NEPF scores are moderately predictive of student achievement, but we find little distinction in educator domains and little variability in educator ratings that would provide any data for making layoff decisions or other human capital decisions based on teacher effectiveness. We provide recommendations for improving the usefulness of evaluation systems like the NEPF[2].

Recent Trends in Teacher Evaluation Systems
Following the Great Recession of 2007-08, the United States experienced massive educator layoffs (Dabbs, 2020; Felch, Song, & Smith, 2010; Goldhaber et al., 2016; Knight & Strunk, 2016). Traditionally, these layoffs were decided using seniority – "first in, last out" (Boyd et al., 2011; Goldhaber & Theobald, 2013; Sepe & Roza, 2010). However, research emerging from this period began to note the importance of utilizing teacher quality over teacher seniority to make human capital decisions, noting the two were not always highly correlated. While teacher turnover in general harms student achievement (Ronfeldt, Loeb, & Wyckoff, 2013), layoffs made using seniority resulted in greater decreases in student achievement than those made using teacher effectiveness measures, a difference ranging from one-fifth of a standard deviation up to one-third of a standard deviation (Boyd et al., 2011; Dabbs, 2020; Goldhaber & Theobald, 2013; Kraft, 2015). Layoffs based on seniority were also more likely to harm minority students, students from low-income families, and low-performing students, as schools with greater proportions of these student populations are more

likely to employ less-experienced teachers (Goldhaber & Theobald, 2013; Knight & Strunk, 2016; Lankford, Loeb, & Wyckoff, 2002; Sepe & Roza, 2010). Further, because teacher salary schedules are based on years of experience, more teacher layoffs would be required under a seniority system to meet budget restraints, which also translates to larger class sizes (Boyd et al., 2011; Kraft, 2015).

In line with this research, an increasing number of states have mandated teacher performance be considered in educator employment decisions, relying on teacher evaluations to provide teacher performance data (Thomsen, 2014). While there is a significant amount of work assessing the predictive validity of individual elements of teacher evaluation systems such as student achievement and student growth measures (Bacher-Hicks, Chin, Kane, & Staiger, 2019; Chetty, Friedman, & Rockoff, 2014; Hill, Kapitula, & Umland, 2011; Kane & Staiger, 2008; Kane et al., 2013; Koedel, Mihaly, & Rockoff, 2015; McCaffrey et al., 2003; Papay, 2011) and classroom observations (Bacher-Hicks et al., 2019; Cohen & Goldhaber, 2016; Garrett & Steinberg, 2015; Goldring et al., 2015; Kane & Staiger, 2012; Kane, Taylor, Tyler, & Wooten, 2011; Steinberg & Garrett, 2016; Whitehurst, Chingos, & Lindquist, 2014), little research has focused on assessing the validity and reliability of the evaluation system as a whole and the specific rating and scoring procedures and scales. In fact, a recent study surveying administrators in a large, suburban school district found administrators were skeptical of the reliability and validity of the evaluation system, yet many states lacked any coherent strategy to assess the reliability and validity of their teacher evaluation systems, despite this concern (Herlihy et al., 2014; Paufler & Clark, 2019).

Examining the Validity of Teacher Evaluation Systems. A small number of studies have published their assessment of educator evaluation systems with a focus on human capital decision-making. Most notably, the New Teacher Project highlighted the Widget Effect, or "the tendency of school districts to assume classroom effectiveness is the same

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[1]In addition to providing data to inform human capital decisions, other goals of the NEPF were to foster student learning and growth, improve educators' instructional practices, and engage stakeholders in the process.

[2]Readers can find an extended discussion of our findings and recommendations in our report to the Nevada Legislative Committee on Education at http://crea.sites.unlv.edu/reports/.

from teacher to teacher," treating teachers as interchangeable parts rather than individuals (Weisberg et al., 2009). The study consisted of surveys from 12 districts in four states – Arkansas, Colorado, Illinois, and Ohio. While the districts range greatly in size, location, and management of teachers, each of the 12 districts arrived at the same conclusion. Teacher evaluation systems rarely distinguished effective teachers from ineffective teachers or satisfactory teachers from exceptional teachers. These findings appeared to echo in other states including Florida, Michigan, and Tennessee where 97-98% of teachers were deemed effective (Anderson, 2013). In studies specifically asking principals to assess the performance of teachers, this inability to distinguish effective from ineffective teachers was also pervasive (Jacob & Lefgren, 2008; Lash, Tran, & Huang, 2016).

Related to distinguishing effective from ineffective teachers is the factor structure, or the various aspects of teacher effectiveness assessed by an evaluation system. In most systems, multiple factors are assessed. For instance, the Danielson Framework for Teaching posits four factors in observing teachers and classrooms – Planning and Preparation, Classroom Environment, Delivery of Instruction, and Professional Growth. Each factor is meant to identify a distinct component of teaching effectiveness. However, a study of three large school districts in the southeast and Los Angeles Unified School District found scores only supported a one-factor model, meaning all four proposed factors appeared to measure the same construct (Liu et al., 2019). A similar study evaluating the validity of the National Institute for Excellence in Teaching's (NIET) Teacher Advancement Program (TAP), a widely used observational evaluation framework, also found only one or two factors (depending on method) for a posited three factor structure evaluation system (Sloat, Amrein-Beardsley, & Sabo, 2017).

Lastly, Lash and colleagues (2016) conducted a more comprehensive evaluation of the validity of the Danielson Framework for Teaching classroom observation rubric for Washoe County School District in Nevada. Like prior studies, the evaluation found principals did not identify minimally effective or ineffective teachers, and analysis of the teacher scores indicated a single dimension (or factor) fit the data, though the rubric was designed to measure four different dimensions of teaching.

However, teachers' average ratings did show a moderate relationship with student learning, providing some credence to its use as a measure of teaching effectiveness.

Similar to Lash and colleagues (2016), we conduct a more robust validation study of the statewide NEPF. We extend this analysis to include the entire evaluation rating system, including observations and student learning goal measures.

The Nevada Educator Performance Framework. The NEPF is made up of three domains that fall under two overarching categories: educational practice and student outcomes. Educational practice is made up of Instructional Practice and Professional Responsibilities, each with five standards. For standards for each domain, see Appendix A, *Table A1*.

Teachers are rated on a scale of one to four for each domain, and final evaluation ratings are a weighted average of the individual domains on a four-point scale with cutoffs for Highly Effective (3.6 to 4.0), Effective (2.8-3.59), Developing (1.91-2.79), and Ineffective (1.0-1.9). The initial plan for NEPF weighted Instructional Practice 35%, Professional Responsibilities 15%, and student performance 50% of the overall score, where student performance scores were made up of school growth, school proficiency rates, and achievement gap reduction based on the state standardized assessment. However, these weights continued to change annually (with the exception of 2016-17 to 2017-18) in the following years (see Table 1), and in 2016-17, the student performance measure changed from state standardized assessments to a Student Learning Goal (SLG) that provided flexibility for teachers to work with their supervisors to identify student progress goals using assessments other than the state standardized assessment.

In 2014-15, the NEPF was piloted and 125 schools participated in a validation study (WestEd, 2015). Through trainings and telephone interviews with principals, surveys with educators, and focus groups with district superintendents, the study found teachers and administrators believed the framework was valid and reliable. In this study, we utilize administrative data to revisit the reliability and validity of the NEPF five years after initial implementation when the new evaluation system had rolled out and was implemented with all educators in the state and the NEPF was adjusted with new weights to calculate final evaluation scores. Specif-

Table 1. *NEPF Teacher Domain Weights Over Time*

School Year	Domain		
	Instructional Practice	**Professional Responsibilities**	**Student Outcomes**
2014-15	35%	15%	50%
2015-16	80%	20%	0%
2016-17	60%	20%	20%
2017-18	60%	20%	20%
2018-19	45%	15%	40%

ically, we ask, can reliable and valid score interpretations be made about teacher effectiveness using data collected from the Nevada Educator Performance Framework? The results of this analysis will be particularly important for understanding the utility of NEPF for human capital decisions as originally designed.

Methods

Data Informing This Brief. The Nevada Department of Education (NDE) provided school-aggregate teacher NEPF scores for the 2015-16 to 2018-19 school years. This data included the number of teachers earning a final rating of ineffective, developing, effective, and highly effective, school average scores on a scale of 1 to 4 for each Instructional Practice and Professional Responsibilities standard, student learning goal scores, and final scores. Individual-level data, including school assignment and grade and subject identifiers, were not included for anonymity purposes. We supplemented this with publicly available Nevada Report Card data, which included school-level student proficiency rates on the annual standardized assessments and school characteristics.

Analytic Strategy. To address whether accurate score interpretations can be made from the NEPF ratings, we examine reliability and validity evidence in a multistep process. We begin by calculating evidence for the internal consistency and dimensionality of NEPF teacher ratings. Then, we calculate aggregate NEPF scores to examine the distribution and score ranges. We conclude with an examination of the predictive validity by fitting an ordinary least squares regression model, predicting student achievement from teacher NEPF scores.

More details on our analytic approach can be found in Appendix B and in our full report to the Nevada Legislative Committee on Education (Marianno, Garza, Hilpert, & Kho, 2020).

Results

Internal Consistency and Dimensionality. An internally consistent and valid test is one in which test items that purport to measure the same thing report similar scores across the same respondent. Thinking of the NEPF domains and standards like items on a test, Cronbach's alpha tells us whether a given educator is scoring similarly on the different NEPF standards within a domain. If the standards within a given NEPF domain (say Instructional Practice) are highly correlated with one another (as they should be, if they are truly capturing information on a given teacher's Instructional Practice), then we would expect a high Cronbach's alpha score (above 0.70 on a scale between 0 and 1), and we could conclude that the Instructional Practice domain of the NEPF is internally consistent and reliable. In the case of the Instructional Practice domain, we found a high alpha coefficient of 0.95 with inter-item correlations ranging from 0.65 to 0.80. For the Professional Responsibilities domain, the alpha coefficient was also high at 0.92 with inter-item correlations ranging from 0.62 to 0.83. These results suggest that the NEPF has strong internal consistency.

To establish the tool's validity, it is also useful to explore the dimensionality of the NEPF. Dimensionality has to do with whether the NEPF domains and standards are measuring similar or different things regarding educator performance. By design, the NEPF hypothesizes a two factor structure—it

groups a series of standards under Instructional Practice and a series of standards under Professional Responsibility. We used exploratory factory analysis to examine whether the hypothesized two factor structure consisting of the two NEPF teacher domains of Instructional Practice and Professional Responsibilities best fit the data. Our results suggest that the single factor solution was the best fit to the data. The Instructional Practice and Professional Responsibilities domains load on to the first factor with a correlation of at least 0.76. The results lend support to the idea that the NEPF teacher performance framework is best conceived of as a unidimensional measure of teacher effectiveness – educators scoring highly on the Instructional Practice domain also score highly on the Professional Responsibilities domain.

Distribution of Final Scores. Another indication of validity is whether the NEPF, as a measure of teacher performance, can distinguish between high and low performers. One way to explore this is to look at the amount of variation in the scores. We dis-

play summary statistics for the final average scores in Table 2. Given the changes in weighting over the years following implementation of the evaluation system, we do this for unweighted scores as well as for each of the weights from 2017-18 to 2019-20. In all cases, the mean is approximately 3.28, which sits in the middle of the Effective range. In Figure 1, we show the distribution of school-level NEPF teacher final scores. The black vertical lines show the lower and upper bounds of the cut score for a teacher to receive an Effective rating. Without any weighting applied, no schools maintain an average that could be classified as Ineffective (1.9 or lower), and very few maintain an average of Developing. Schools primarily score in the Effective range, with some in the Highly Effective category. These distributions are confirmed in Table 3, which shows final average scores by effectiveness level. Without any weights applied, 92% of schools have a mean score of Effective and another 8% have a mean score of Highly Effective. Less than 1% of schools have a mean score below Effective.

Figure 1. *Distribution of School-Level NEPF Teacher Final Scores (Unweighted)*
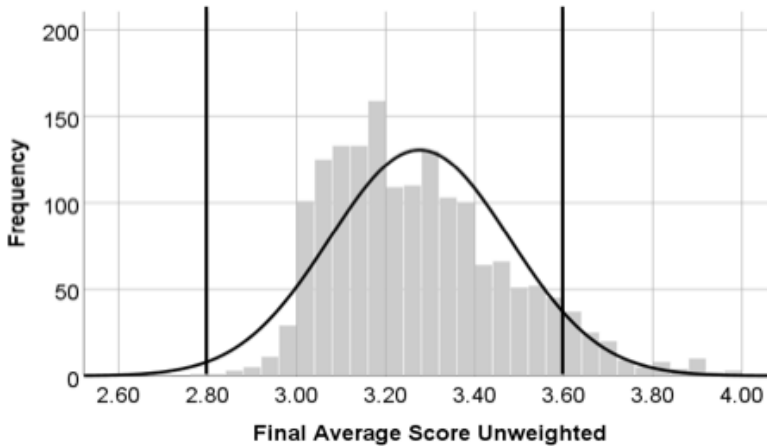
Table 2. *Summary Statistics for School-Level NEPF Teacher Final Scores*

	Mean	SD	Min	Max	Skew	Kurt
Final Avg. Score (Unweighted)	3.28	0.20	2.70	4.00	0.73	0.34
Final Avg. Score (2019-20 weights)	3.27	0.20	2.73	3.99	0.60	0.14
Final Avg. Score (2018-19 weights)	3.28	0.23	2.26	3.99	0.53	-0.03
Final Avg. Score (2017-18 weights)	3.27	0.21	2.68	3.99	0.58	0.09

Note: Data from all years (2015-16 to 2018-19) are included.

Predictive Validity on Student Achievement. Lastly, we examine the predictive validity of teacher NEPF scores on student achievement. We use an ordinary least squares regression controlling for school characteristics and year, the results of which are summarized in Table 4. We see small positive associations between teacher NEPF final scores and student achievement, where a 1-percentage point increase in teachers rated Effective or Highly Effective is associated with an increase of approximately 0.01 standard deviations in both reading and math. When we substitute the percent-age of teachers rated Effective or Highly Effective with the continuous measure of NEPF final scores, we again see positive associations. Specifically, a 1-point increase in the NEPF Final Score is associated with an 0.24 standard deviation increase in reading and an 0.29 standard deviation increase in math. Overall, our results suggest the NEPF scores are moderately predictive of student achievement. However, the teachers' numeric NEPF scores seem to be more predictive than the final effectiveness ratings.

Table 3. *Percentage of School-Level NEPF Teacher Final Scores Classified by Effectiveness Level*

	Ineffective	Developing	Effective	Highly Effective
Final Avg. Score (Unweighted)	0	0.10	92.20	7.70
Final Avg. Score (2019-20 weights)	0	0.40	92.60	7.00
Final Avg. Score (2018-19 weights)	0	0.70	87.30	12.00
Final Avg. Score (2017-18 weights)	0	0.40	91.50	8.10

Note: Data from all years (2015-16 to 2018-19) are included.

Table 4. *Percentage of School-Level NEPF Teacher Final Scores Classified by Effectiveness Level*

	Reading		Math	
	(1)	(2)	(3)	(4)
Percent Teachers Rated Effective or Highly Effective	0.01* (0.00)		0.01* (0.00)	
NEPF Final Score Using 2016-2018 Weighting		0.24* (0.11)		0.29* (0.11)
Year Fixed Effect	X	X	X	X
R-squared	0.456	0.486	0.399	0.433
Observations	1,225	1,194	1,224	1,193

*Notes: Standard errors clustered at the school level in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001; Dependent variable = standardized scores derived from uncoarsening total school performance levels by subject and year. Teacher evaluation scores are using 2016-17 and 2017-18 weights. Results are robust to weights from 2018-19 and 2019-20. Data from all years (2015-16 to 2018-19) are included. Models control for student demographic characteristics.*

Discussion and Recommendations

In the past decade, many states have revamped their educator evaluation systems to link teacher performance to student achievement and to better distinguish effective from ineffective teachers. These evaluations have already been used to inform human capital decisions. However, as we likely approach the first recession since Race to the Top, the grant schools received for overhauling their evaluation systems, we can expect more layoffs as a result of state and district budget cuts. With new measures of effectiveness, schools and districts may feel equipped to make layoff decisions based on their new educator effectiveness measures. However, the results of this study caution schools in using these measures in a high-stakes way until the systems are adequately assessed for reliable and valid score interpretation.

Based on our analysis, we make two recommendations as Nevada and other states consider how to improve their teacher evaluation systems. First, states should engage in strategies to improve differentiation in scores between domains. The domains should be related, but the rating scores should load more strongly on their respective factors to demonstrate they are being used to evaluate distinct skills associated with good teaching. One of the goals of the evaluation process is to generate feedback that allows educators to assess opportunities for growth and make progress in those areas. The lack of differentiation between domains, however, means educators may lack clarity on where or how to make improvements or be unable to identify areas of strength. Prior research suggests a significant effort for investment in ongoing training can help (Casabianca, Lockwood, & McCaffrey, 2015). By having raters practice standardized scenarios, raters could gain clarity on more difficult or unclear elements of the evaluation protocol, helping them maintain calibration of their scores with the intended ideal, and thereby improve score differentiation between domains (Park, Chen, & Holtzman, 2014).

Second, we encourage states to improve the distribution of evaluation scores. Our examination of the underlying distributions of the NEPF standard ratings for teachers indicated the full range of the evaluation instrument was not being utilized by evaluators. The accumulation of scores within a narrow scoring band creates a ceiling effect that

limits the utility of the evaluation system. Without a clear definition of which teachers are indeed Effective and which are not, it is unclear how to truly make human capital decisions based on this instrument. At best, stakeholders are left to interpret what it means to be a lower level of Effective, for example a score of 3, or to be slightly more Effective at a 3.2, making it difficult to assess teacher growth in meaningful ways. Presumably, when raters make greater use of a greater range of ratings, they can provide greater feedback and incentives for teachers to improve their performance and to distinguish them from Ineffective teachers whose performance has not improved. With little variation in scoring, decisions regarding layoffs may default to alternative criteria like seniority, which further harms students and may have equity implications (Boyd et al., 2011; Dabbs, 2020; Goldhaber & Theobald, 2013; Knight & Strunk, 2016; Kraft, 2015).

The lack of variation in educators' evaluation scores is a problem that many states are still tackling (Kraft & Gilmour, 2017), which could be for several reasons. There is a growing body of research suggesting administrators can get bogged down in deciphering standards and logistical aspects of the evaluation process, spending large amounts of time on evaluations that do not affect positive change (Darling-Hammond, 2015; Marsh et al., 2017; Marshall, 2013; Marzano & Toth, 2013). Further, some school districts require greater reporting and evidence requirements for evaluators who score educators at the bottom or top of the distribution as well as intensive amounts of time providing feedback and support for unsatisfactory teachers (Kraft & Gilmour, 2017). The enhanced paperwork burden associated with scoring educators other than Effective leads to strategic behavior and the clustering of educators at the Effective rating.

We recommend rubrics be detailed enough to provide meaningful standards and indicators reflecting quality teaching while at the same time being simple enough to be used effectively by evaluators in the face of competing time demands. One approach might be increasing the number of performance levels to create truly inadequate levels at the bottom of the scoring range that are rarely used. For instance, splitting the Effective category into two different performance levels. Doing so would expand the scale, thereby helping to limit the ceiling effect that presently exists in the system. States

could replace the single summative rating with a focus on the ratings of individual standards. This would emphasize the specific areas where an educator is succeeding and where they might need additional assistance and could potentially eliminate some discomfort with rating teachers Ineffective overall, another reason principals cited for not differentiating effectiveness (Kraft & Gilmour, 2017). While Nevada's current teacher evaluation system may provide little data to inform human capital decisions during the time of COVID-19, the pandemic provides an opportunity for the state to reset

and revisit the validity of the NEPF. While states dropped their accountability assessments and provided flexibility for educator evaluations in the 2019-20 school year, we encourage them to extend that flexibility for the 2020-21 school year as operations are still far from "normal." Instead, states can take this natural pause to examine and reflect on the historical use of their evaluation systems, assess its reliability and validity, and make appropriate changes that will yield a more useful evaluation system when schools return to the new normal.

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Appendix A

Table A1. NEPF Teacher Standards

Domain: Instructional Practice

Standard 1. New Learning is Connected to Prior Learning and Experience
Standard 2. Learning Tasks have High Cognitive Demand for Diverse Learners
Standard 3. Students Engage in Meaning-Making through Discourse and Other Strategies
Standard 4. Students Engage in Metacognitive Activity to Increase Understanding of and Responsibility for Their Own Learning
Standard 5. Assessment is Integrated into Instruction

Domain: Professional Responsibilities

Standard 1. Commitment to the School Community
Standard 2. Reflection on Professional Growth and Practice
Standard 3. Professional Obligations
Standard 4. Family Engagement
Standard 5. Student Perception

Domain: Student Outcomes

Note: The Student Outcomes domain does not have specific standards—Each is made up of three to four more-specific indicators.

Appendix B

Below we provide a technical summary of our four step analytic process.

(1) We calculated Cronbach's alpha for the Instructional Practice and Professional Responsibilities domains, estimating the average inter-item correlation among the domain standards (Peterson & Kim, 2013) to examine the internal consistency of NEPF ratings. Then, we use exploratory factor analysis with a promax rotation (Costello & Osborne, 2005) to assess the dimensionality of the NEPF. We hypothesized a two factor structure composed of the standard ratings for the Instructional Practice and Professional Responsibility dimensions. For the NEPF to have adequate dimensionality, the Instructional Practice standard ratings, and the Professional Responsibility standard ratings, respectively, should share more common variance within standards for their respective factors, and less between. To determine the number of factors to retain, we assessed eigenvalues, the scree plot, and item loadings from the pattern matrix, where item loadings for respective factors greater than 0.4 were considered acceptable (Costello & Osborne; 2005; Osborne, Costello, & Kellow, 2014).

(2) We utilize the school-aggregate teacher NEPF scores to explore the domain score ranges and distribution of educator performance on each NEPF domain and standard across all years. Ideally, each NEPF domain and its respective standards should show substantial variation and scoring then follows an approximate normal distribution. In addition to showing the distributions, we present the minimum and maximum scores, standard deviations, skew statistics, and kurtosis statistics.

(3) We examine the predictive validity of NEPF scores on student achievement. We use an ordinary least squares regression in a model estimated as:

$$y_{st}=\beta_0+ \beta_1 NEPF_{st}+X_{st}\beta_2+\tau_t+e_{st} \qquad (1)$$

where y_{st} is a measure of student achievement for school *s* in year *t*, as measured on the annual Smarter Balanced Assessment Consortium (SBAC). In particular, we utilize a commonly used uncoarsening procedure to translate frequency counts of students scoring in each performance category on the SBAC (Emerging, Approaching, Meets, Exceeds) into standardized scores (Reardon, Kalogrides, & Ho, 2017; Reardon, Shear, Castellano, & Ho, 2016; Shear & Reardon, 2019). $NEPF_{st}$ represents the school percentage of teachers scoring Effective or Highly Effective. β_1 is the parameter of interest and represents the marginal effect of a percentage point increase in the average school NEPF performance on school achievement. In alternate models, we also use the school average NEPF scores on a continuous scale from 1 to 4.

We control for various time-varying school characteristics using X_{st}, a vector that includes the percentage of male students, students of color, students eligible for free or reduced-price meals (a proxy for students' socioeconomic status), English language learner students, and students with an individualized education plan (IEP). τ_t represents a year fixed effect to account for changes in school growth that are common to all schools in Nevada. To account for multiple observations per school (from different school-by-years), we cluster our standard errors at the school level.

Educational Equity Perspectives in Response to
the Black Lives Matter Movement: A Road Map for Nevada

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Abstract

Problem. Communities across Nevada call for more equitable practices, especially to reduce contact between communities of color and law enforcement, particularly in the African American community. By increasing our cultural awareness and highlighting the commitment of the state to support an Antiracist Nevada, we foresee a reduction in unrest and an increase in educational outcomes across all student groups. ***Purpose.*** The purpose of this policy paper is to highlight the importance of addressing racism and racialized bias in education. ***Recommendations.*** To address the rising need for equity practices and policies in Nevada, we propose six recommendations to acknowledge and address equity and systemic racism issues: Building community legislative task force, addressing hiring practices, diversifying curriculum, increasing professional development, addressing discipline policies in education, clarifying legislation related to restorative justice, and increasing clarity regarding socioemotional learning standards and practices. The following document highlights research and support for these practices and more detail on the practicality of these recommendations.

Introduction

On Memorial Day 2020, the American people bore witness to the undercurrent of a racial divide in our country as unarmed George Floyd died at the hands of law enforcement. In response, social justice organizations such as Black Lives Matter, the American Psychological Association, and the National Education Association called for legal and social action to protect Black citizens' lives. In particular, African American males are underrepresented in prosocial outcomes such as high school graduation rates but over-identified in legal incidences. This shifting dynamic from education to incarceration is better known as the school to prison pipeline.

Black students are 3.9 times more likely to be suspended than White students in the United States (U.S. Department of Education, 2018). While Nevada high school graduation rates have risen substantially over the past few years (to 81%), Black students' graduation rate is only 68% compared to 84% for White students (McFarland, Cui, Holmes, & Wang, 2020). Also, White students are 2.1 times more likely than Black students to be enrolled in at least one AP class in Nevada (Propublica, n.d.). Finally, Nevada ranks in the highest 10% of the country for average arrest per school, referrals to law enforcement, and transfers to alternative schools for all students (U.S. Department of Education, 2018), however these arrest rates are even higher for African American youth (Bittleson, 2020).

It is imperative to examine the policies and practices that have differential impacts on students of color from their white peers. Without academic achievement, Black students' access to resources lessens, which influences their potential to achieve high-earning jobs. Also, without access to high earning jobs, the income/wealth gap will continue to widen. The need to create equity across all races in Nevada is apparent for the benefit of our citizens and the economy. This policy paper aims to highlight the importance of addressing racism and racialized bias in the educational environment. Importantly, it offers six evidence-based strategies and solutions to mitigate bias and increase educational and social outcomes for Black students and the community at large, making Nevada a more welcoming place for us all to call home.

Diverse Collaborations: Six Evidence-Based Strategies to Improve Racial Equity in Education

There is a growing call for the adoption of antiracist principles into educational systems to address these gaps. Antiracist attitudes, values, beliefs, and policies actively challenge individuals and systems to confront commonly accepted attitudes, values, beliefs, and behaviors and to question and examine how these principles are complicit in promoting the more extensive systemically racist systemic practices. These practices are often rooted in the masking of social capital tied to Whiteness. Whiteness in America was created as a type of property due to a "legal necessity" to separate White people from the enslaved and native people (Harris, 1993). This delineation permitted White people to be judged under a separate, unequal collection of laws and practices from the 17th century to the present. It was through legal means that these practices are ingrained in the fabric of our society and it can be through legislative action that these practices can be rendered defunct. In the spirit of active engagement, we propose the following six policy recommendations:

1. Joint Legislative-Community Committee on Racial Equity. We recommend developing a legislative committee that focuses on racial equity and collaborates with community and family members to grow and sustain practices and policies that highlight equity. The focus of this committee will be to formulate a racial equity impact statement for all legislation that can be shared to highlight the goals of the current legislative session. By acknowledging the current climate the legislative body holds the value of equity as a priority and has a baseline to develop policy over the next several years. Public acknowledgement of harms is the first step in restoration (Bryant-Davis, 2007; Carter, 2007). This public statement could highlight a commitment to improving race relations in Nevada and set the stage for future committee work in building dialogue and progress around race in this state (Sue, 2013).

Second, the committee can further equity and antiracism work through the strategic support of ongoing programming and community focused development. The population of families and community members who serve as schools' voices are traditionally represented by individuals who main-

tain a certain level of status based on their education, class, socioeconomic status, power, and privilege (Baquedano-López, Alexander, & Hernandez, 2013). It is necessary to mitigate potential barriers that may derail the participation of families in the educational process. A strength-based approach that values the contributions (talents, skills, prior knowledge) individuals bring from their diverse cultures and backgrounds can strengthen educational equity practices and prepare a multicultural accepting atmosphere. In short, diversifying voices in educational systems include going into the community, partnering with organizations (non-profits, churches) known to reach populations that are underrepresented in the education systems decision-making processes, and collaborating with various community agencies and universities (private, public, Historical Black Colleges and Universities, Hispanic Serving Institutions).

The Joint Legislative-Community Committee on Racial Equity may include individuals (i.e., parents from Black communities) and cultural brokers selected by communities who are underrepresented in the educational decision-making process to serve as voting committee members, community-school liaisons, and consultants (Ishimaru et al., 2016). The committee will play a key role in facilitating community educational partnerships. Partnerships can be developed by utilizing marketing announcements (social media, flyers) that highlight the benefits to the community, requesting to speak at common community agencies, attending community events to establish relationships, scheduling community-based meetings with leaders, organizations, and families, and creating structured time for collaboration meetings that include the voices of students. To help build partnerships, educational institutions and government bodies can also provide and fund incentives and the resources (i.e., transportation, childcare, employment opportunities, culturally responsive programming, non-traditional hours to extend educational opportunities and to engage parents) needed for individuals to engage in partnership opportunities. Current systems rely on invisible labor of minority community members to do this work, increasing the burden on these communities without adding additional support (Buckingham, 2018). Educational institutions and government bodies can also leverage trained facilitators (who could also be a part of the joint legislative-community committee) to help them

integrate multicultural competencies, be mindful of the impact of capital (i.e., resources, access, relationships, and experiences influencing one's ability to navigate), and acknowledge areas (micro-aggressions, systemic racism, discrimination, intersectionality, power and privilege, marginalization, stereotypes, cultural discontinuity) that can influence equitable processes (Liu, 2016; Ratts et al., 2016).

Effective community-school-family partnerships have positively influenced students' socio-emotional wellness, academic growth, and career development (Evans, 2013; Sharma, 2018). Additional school-community-family partnerships may include: (a) family psychoeducational groups, (b) student interns in community/government agencies, (c) community financial management speakers and class volunteers, (d) mobile community counseling services combined with school counseling to provide non-traditional group counseling services, (e) community-based school clubs (Griffin & Steen, 2010). Further interventions can include a trade career to college programs that may help students complete certificates (CNA, pharmacy tech, barber, etc.) that can help students have higher pay rates as they maintain college prep courses and transition from high school to their aligned college career goals. Policies regarding students' age may need to be modified to support career opportunities for students' educational and economic development.

2. Representation. We propose intentional hiring practices that ensure greater representation of African American/Black individuals in positions within the K-12 system to include school administrators, teachers, and staff to diversify attitudes, values, beliefs, and policies. While the percentage of non-white students in the U.S. has dramatically increased over the past few decades, the same cannot be said for the percentage of non-white teachers. Only 20% of teachers in the U.S. come from non-white backgrounds, of which 7% identify as Black/African American. Representation is not only crucial for its ability to provide students with role models in the school environment with similar attitudes, values, and beliefs, but it also helps provide advocacy for students of color (Papageorge et al., 2018). Having at least one Black teacher preceding middle school reduces the probability of dropping out of high school by 29% for Black students. Among low-income Black males, having a Black teacher reduces their risk for dropping out by 39% and increases their chance to pursue college by 29% (Gershenson et al., 2018). Furthermore, positive relationships with adults involved in the school system—including counselors, teachers, and administrators—have indicated higher academic engagement levels for students (Bottiani et al., 2016), and higher academic engagement is associated with being less likely to engage in delinquent behaviors (Lucero, 2015).

There must be intentional efforts to recruit, hire, and retain school personnel of color in Nevada schools. Past research has highlighted strategies such as Grow Your Own (GYO) programs that create elective courses for high school students to introduce them to teaching as a career through an equity and justice lens. Other strategies include creating support groups for teachers of color, creating incentives and hiring packages to further recruit and retain school staff of color, and collecting necessary data to better understand current employees' experiences (Goings et al., 2018).

3. Diversity in Curriculum. The state needs diversity and inclusion in all coursework in all subject matters and all grades. A thorough examination of current "required reading" materials can identify elements that contribute to the larger systemically racist system. These reading materials could be replaced by literature that instead promotes and highlights greater diversification. Research shows that a curriculum that overemphasizes Euro-American perspectives can cause students to disengage from learning (Sleeter, 2011; Wiggan, 2007). Moreover, a well-developed and executed ethnic studies curriculum is linked to academic success and prosocial outcomes for all students (Bowman, 2010; Sleeter, 2011). In fact, a curriculum that mirrors the diversity of students in the classroom is linked to higher academic outcomes and overall empowerment (Chavous et al., 2003).

Strategies to improve diversity in curriculum include: (a) teaching students of historical figures from non-White backgrounds; (b) providing a curriculum that highlights learning about and celebrating non-White and non-dominant historical events and holidays, and (c) providing literature written from non-White perspectives on commonly taught subjects such as social studies and history. Greater diversity of curriculum materials can create greater diversity in perspectives and a greater appreciation for diverse classroom and school perspectives.

4. Professional Development. We must prepare teachers to work with a diverse student body through effective professional development in culturally responsive, antiracist, and implicit bias mitigation. Bias, both implicit and explicit, directly can inflict harm to students and families in our communities. Administrators and teachers have a responsibility to all students, but more importantly, they have a responsibility to create equity inside and outside of the classroom (Garrett, 2009). Given how teacher bias can impact a student's course placement, suspensions, and academic identity, targeted professional development that improves cultural sensitivity and awareness for all school staff and their work with diverse student populations is needed (Lehman, 2017; Washington, 2019). This includes training related to hiring practices (Ford et al., 2004) to teach bias reduction techniques in the school environment (Gonzalez et al., 2017).

While models exist to address these issues in some of our districts through in-house training or community providers on implicit bias and restorative justice practices (Leverett et al., 2019; Song, 2016), there is no policy in place to ensure this work is done systematically across school districts. Uniform implementation and assessment of professional development programs must be implemented to demonstrate a commitment to community equity issues. The outcomes must be tied to the distribution of funds and to the certification of professionals to ensure they are abided.

5. Discipline Policy Reform. Reconciling research with discipline practices and reducing the interaction between students and law enforcement in school spaces is the way forward for equity reform. It is imperative that we find efficient ways to handle behavior concerns without taking children out of school. Additionally, Nevada has been ranked in the top 10% of student arrests, referrals for law enforcement, and transfer to an alternative school (U.S. Department of Education, 2018). The arrest rate for African American youth in Nevada is higher than the national average despite arrest rates for youth of other races falling below the national average (Bittleson, 2020).

While a student's absence from their normal school routines impacts their academic identity, the negative experiences for racial minorities are reinforced by student-police interactions. Past research has indicated that police and student interactions are associated with internalizing (e.g., iso-

lating) and externalizing (e.g., disengaging, acting out) problems (Mrug & Windle, 2010). Student's awareness of discipline gaps is associated with feelings that school is unfair and unsupportive (Bottiani et al., 2017). Alternatively, past studies have documented positive experiences when intervening with school counselors and others to create a healthier school climate for students (Hernández & Seem, 2004).

Nevada policymakers can make a few changes to the way discipline is managed in schools. First, policy can reflect a commitment to reallocating some resources for school policing towards mental health specialists. The police are quite often called to handle social issues such as mental health or homelessness, that they are not adequately trained to address. However, mental health professionals are specifically trained to handle such situations and can through the formal integration of these services. Second, using in-house strategies instead of police intervention for minor offenses can lead to student success (Schuck, 2017). Removing students from the classroom does not address the origin of the problem and can lead to more negative school system experiences. Learning more effective strategies for teachers, counselors, and administrators can help increase student presence in the classroom, providing them with better opportunities to excel in school. Third, we can align our school discipline policies with restorative justice reforms. Restorative justice policies seek to repair harm in school environments. This starts with clarifying the definition of restorative justice in Sec. 3. Chapter 392 of NRS to recognize the joint responsibility of adults to recognize and repair the harm they have caused during school-based incidents. Currently, the policy puts the onus on the students to repair harm in the school environment. There is no language that asks the adults to repair harm in the event that they are the initiators of the harm. Students are being acted on by the school environment, which can include students and adults alike, and an acknowledgment of this in policy can be a powerful tool towards building community within schools.

6. Data-Driven Decision making for SEL and Mental Health. Socio-emotional learning (SEL) has a positive influence on students' motivation, achievement outcomes, social behaviors, self-esteem, psychological health, and employment trajectory (Durlak et al., 2011; Jones et al., 2015).

SEL can decrease student engagement in at-risk behaviors and recidivism. However, school systems often do not have sufficient SEL data to provide data-driven support to students, particularly those experiencing trauma from exposure to racism and bias. It is important to maintain a continuous data collection process for gathering information pertaining to students' socio-emotional needs and wellness in K-12 school systems to provide data-driven interventions that support student success. This data can help drive additional research about the impact SEL has on marginalized populations and racial inequities (disciplinary data, misdiagnosis, staff-student relationships) (Beyer, 2017; Garner et al., 2014).

Additionally, while educational institutions have begun to implement SEL programs in schools, more explicit policies are needed that identify the primary SEL curriculum, how these components are implemented, who assists with implementation, the roles of each stakeholder in the collaborative multi-tiered systems of support (MTTS), and the required training of SEL instructors particularly in regards to the integration of multicultural education elements. Some states and districts have designed social-emotional learning standards to support the socioemotional development of students. Government policies (i.e., Every Student Succeeds Act, NRS Chapter 388 System of Public Instruction, NRS Chapter 389 Academics and textbooks) may also implicitly discuss the need to provide SEL as a means of creating culturally responsive safe climates that support students' growth and development. Legislation can also address the specific curriculum and learning outcomes that qualify for SEL. Identifying specific criteria that meet SEL requirements with special attention to culturally competent practice is critical due to the positive impact SEL has shown on students' development and attainment.

Conclusion

Anti-racist education goes beyond naming racism. It requires an active engagement in the removal of barriers and privilege that suppresses some community members in favor of others. We recommend establishing a legislative committee on racial equity in the Nevada Legislature to review and prepare a racial equity impact statement for all legislation that is reported favorably to the senate. Additionally, by creating more financial incentives to increase representation in the workforce, altering curriculum, and developing programs to increase retention of faculty/staff of color we can begin to see a shift in climate that ensures better outcomes for African American students. We encourage the legislature to also adjust policy to ensure equity in discipline through increasing engagement and addressing gaps in discipline and police interaction. Finally, we argue for additional clarity on existing language regarding SEL standards and requirements. These recommendations provide a way forward through existing best practices in education and antiracist ideology to our current policy and practice. These strategies will create better pathways for all learners and a safe space for our most vulnerable populations.

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Retention Starts with Preparation: Preparing
Black and Latinx Teachers through Alternative Routes to Licensure

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Abstract

Problem. Critical to the support and success of students of color is support for Black and Latinx teachers. Yet, teacher preparation programs often neglect the culturally relevant perspectives and experiences of teachers of color. This can contribute to retention issues given challenging school climates that Black and Latinx teachers must navigate. ***Purpose.*** The purpose of this paper is to provide an overview of sound teacher recruitment, preparation, and retention practices nationally and draw alignment to the state of Nevada. We focus on alternative routes to licensure (ARL) because such programs are touted for increasing the number of teachers of color. ***Recommendations.*** Based on national and local evidence, we recommend augmenting Nevada's SB 511 which established the Teach Nevada Scholarship (TNVS) program. Our recommendations include advancing Grow Your Own models of ARL recruitment, collecting and evaluating data on issues specific to Black and Latinx ARL teachers, and providing specialized professional development and induction.

Introduction

Conversations about racial bias and discrimination in schools typically center on student experiences. Research using longitudinal data indicates students of color, particularly Black and Latinx students, are more likely than their White counterparts to receive an office referral, receive harsher punishment, and to be suspended or expelled from school (Aud et al., 2011; Skiba, et al., 2011; Smith & Harper, 2015; Yeager et al., 2017). In addition, students of color are also disproportionately represented in special education (Artiles, 2011); such realities combine to render students of color less likely to be college and career ready if they graduate from high school. The recent American College Test (ACT) Report on College and Career Readiness (2019) indicates only 11% of Black and 23% of Latinx students met three or more of the college readiness benchmarks (e.g., English, math, reading, science). The literature shows that Black and Latinx students who are able to navigate often toxic educational environments and persist to graduation are more likely to have received academic, emotional and social support from educators of color (Knight-Manuel et al., 2016). For example, although white teachers tend to have lower educational expectations for students of color (Tenenbaum & Ruck, 2007), the opposite is true for teachers of color. In addition to higher academic expectations, educators of color are also more likely to possess higher levels of multicultural awareness, are more likely to engage in pedagogical and curricular choices that foster critical thinking that supports social change, as well as are more likely to play a significant role in student of color achievement (Bristol & Martin-Fernandez, 2019; Eddy, Easton-Brooks, 2011). Thus, critical to the support and success of students of color, specifically Black and Latinx, is the support of Black and Latinx teachers.

This paper will present national- and state-level data on teacher recruitment and retention trends. In addition, we will present a synthesis of the literature detailing factors that contribute to teacher attrition, with a particular focus on teachers of color (e.g., Black and Latinx). We will provide an overview of sound teacher recruitment, preparation, and retention practices nationally and draw alignment of practice to the state of Nevada. The paper concludes with recommendations that focus on addressing current issues surrounding Black and Latinx teachers.

National Issues and Trends Impacting Black and Latinx Teachers

Issues concerning critical teacher shortages can be viewed like a coin with two distinct sides: recruitment and attrition. Between 2008 and 2013 enrollment in traditional teacher education programs decreased by 30%, and for the same period, the number of teacher education graduates fell by 17%

nationally (US DOE, Title II Report, nd). White teachers make up approximately 80% of that workforce nationally, while Black and Latinx teachers make up only 7% and 9% respectively (US DOE NCES, 2019). Data from the National Teacher Attrition and Mobility Report (2017) found a 60% increase in teacher attrition between 1991 and 2005, with a current national attrition rate of approximately 14.2%.

Teacher education programs are comprised of majority White teacher candidates (75%) and White faculty (80%), who are more likely to be over the age of 62 and twice as likely to be female than faculty as a whole (AACTE, 2018). Thus, the curriculum most often tends to neglect culturally relevant perspectives and experiences of teachers of color; "within a context that privileges Whiteness, teacher candidates of color have reported feeling invisible, silenced, and isolated" (Amos, 2010; Haddix, 2010 as cited in Kohli, 2019, p. 40). Once in the classroom, teachers of color experiences in the educational environment continue to be racially charged. Kohli (2019) notes that teachers of color are racially marginalized across and throughout the teacher pipeline in ways that serve to impact their attrition and subsequently prevents their success, growth, and retention.

School climates for Black and Latinx teachers include their reports of being asked to serve as the racial expert, experiencing racial microaggressions and bias (Endo 2015; Kohli, 2018; Starck et al., 2020), receiving evaluations that are based on racially biased definitions of teacher quality, (Rogers-Ard et al., 2011) and unfavorable stereotyping from co-workers, administrators, parents, and/or students that can make their work environment uncomfortable if not hostile (Amos, 2016; Philip et al., 2017; Woodson & Pabon, 2016). In addition to external factors that can negatively impact these teachers, researchers acknowledge that Black and Latinx teachers are not immune from replicating damaging teaching practices they experienced as students once certified and placed in classrooms (Jackson & Knight-Manuel, 2018). These realities contribute to Black and Latinx teachers being problematically isolated in schools, feared by colleagues (Bristol, 2018), experiencing racial battle fatigue (Pizarro & Kohli, 2018), and for some, pushed out of the profession (Dixson et al., 2019).

Scope of the Issue in Nevada

Although data available for the state of Nevada via the NSHE Institutional Research Office indicate there has been an overall increase in enrollment in teacher education programs between 2012 (n = 3,160) and 2017 (n = 4,106), Black teachers only comprise 5% of the teacher licensure program completers in Nevada while Latinx teachers account for 19% (Hays et al., 2018). The Nevada Teacher Workforce Report (2018) notes that between 2012 and 2017, approximately 19.8% of the teacher workforce had left the profession. The same report notes that Nevada is only meeting approximately 58% of its current teacher workforce needs; thus, teacher attrition is a critical component to addressing teacher shortages. In Nevada, as of 2017, the state retained 73% to 80% of teachers after 1 year and 60% to 73% after 5 years (Hays et al., 2018).

To address issues of recruitment and retention, policymakers, researchers, and educators have turned attention to increasing the number of teachers of color, specifically by expanding alternative routes to licensure (ARL). In 2015, SB 511 in Nevada established the Teach Nevada Scholarship (TNVS) program which provided grants to teacher educator programs to recruit and support ARL teacher candidates with an academic scholarship. TNVS focused priority on racial/ethnic minorities, low income, and veterans or spouses of veterans, and required all award recipients to teach for five years in the state of Nevada. Data available for the state of Nevada via the NSHE Institutional Research Office shows ARL enrollments have increased by 59% (from approximately 330 in 2015 to 519 in 2017). For the same time period, Latinx ARL enrollment increased by 200% (from 34 to 102), Black ARL enrollment decreased by 22% (from 49 to 38), and White ARL enrollment increased by 56% (from 176 to 275). Of importance to note is representation in ARL programs for Black and Latinx folks is in sharp contrast to their representation in Nevada. While Black teacher candidates comprised 7% of all ARL teacher candidates in 2017, Black residents comprise 10.3% of Nevada's population (U.S. Census Bureau QuickFacts, n.d.). Latinx residents comprise 29.2% of Nevada's population and 19.6% of ARL teacher candidates. In contrast, White residents represent 48.2% of the state population and 53% of ARL teacher candidates. It is also important to note that no existing

legislation in Nevada explicitly provides for preparation or induction (i.e., support and mentoring of novice teachers in the first years of their career) of Black and Latinx teachers. This absence arguably contributes to and sustains cultures of schooling that are inequitable for Black and Latinx people whether teachers of record or K-12 students.

Strategies for Recruiting and Retaining Black and Latinx Teachers

To address the inattention of the recruitment of teachers of color as well as to aid in their retention, Nevada policymakers can build on existing legislation aimed at improving the preparation of teachers as a whole, and teachers of color, in particular. For example, AB 276, effective as of July 1, 2019, created the Nevada State Teacher Recruitment and Retention Advisory Task Force which is charged with evaluating and making recommendations to attract and retain teachers. By disaggregating quantitative and qualitative data to include issues specific to Black and Latinx ARL teachers, the Task Force could provide more informed recommendations for increasing the diversity of Nevada's teacher workforce. We discuss some steps the Task Force can take below.

Recruitment: Scholarships and Grow Your Own Programs. Through a grant titled *Teacher Opportunity Corps I and II (TOC I &II)*, the New York State Department of Education provides funding to teacher licensure programs offered by eligible institutions. The purpose of this grant is:

> To enhance the preparation of teachers and prospective teachers in addressing the learning needs of students at risk of truancy, academic failure, or dropping out of school; and to increase the participation rate of historically underrepresented and economically disadvantaged individuals in teaching careers (New York State Education Department, 2019b).

Similar to Nevada's TNVS, TOC I & II prioritizes recruiting and certifying African American, Hispanic, Indigenous, and Alaskan Native teachers. However, unlike approaches commonly found in Nevada, Teachers College focuses exclusively on preparing graduate students by providing internships, seminars, dedicated workspace, and professional development opportunities developed for TOC I & II pre-service teachers (Teachers College Columbia University, 2020). Currently,

dedicated workspaces, internship experiences and professional development designed for TNVS are not hallmarks of Nevada's approach. Adding such support could strengthen the preparation of TNVS recipients.

Another approach gaining empirical support is the "Grow Your Own" (GYO) model that recruits community members into teacher preparation programs. Several states including California, Hawai'i, and Illinois have established GYO programs with the premise of recruiting teacher candidates who understand how to navigate the racial injustices students of color face in K-12 schools (Rogers-Ard et al., 2019). While often distinguished from ARL, GYO programs typically provide options for career changers or for individuals with bachelor's degrees to obtain a teaching license. Effective models seek to prepare teachers in "environments that foster academic identity development, cultural relevancy, language- and race-conscious pedagogies, and critical perspectives that disrupt institutional hierarchies and dehumanizing discourses, policies, and practices" (Valenzuela, 2017, p. 5). In an evaluation of Washington state's GYO program, Garcia and colleagues (2019) note that strong university-district partnerships were essential to their program's success at preparing bilingual educators. They recommend other states take a multifaceted approach to recruiting and preparing teachers through GYO alternative route programs and "a systems approach that engages a range of stakeholders working at all levels of the system…with the goal of developing a universal understanding of the target candidates and desired outcomes" (p. 76). Missouri's Department of Elementary and Secondary Education lists among positive outcomes of GYO initiatives: a sense of community pride, robust relationships between teachers and students, an improved perception of the teaching profession, and fostering former students' aspirations to give back to their community and teach in the areas in which they live (Missouri Department of Elementary and Secondary Education, 2016).

While undergraduate initiatives exist, there is little to no explicit attention given to GYO programs at the graduate level in Nevada's current legislative approaches. Based on the proven and potential success of these programs, a recommendation is to prioritize the recruitment and preparation of ARL teachers from Nevada through TNVS.

Retention: Professional Development and Induction. As noted above, in addition to the need for innovative recruitment and preparation strategies for Black and Latinx teachers, Jackson and colleagues (2019) also posit the importance of induction as a function of professional development for new teachers and emphasize the potential for induction to support retention. Added to the significance of continued support for all new teachers is the need to provide specialized professional development for teachers of color. Studies of critical professional development and culturally responsive communities of practices for early career teachers of color demonstrate the positive impact of these approaches. Critical professional development positions teachers as socio-politically conscious educators who seek teaching as a means of transforming society, i.e., facilitate creation of learning spaces and opportunities that enhance teachers' abilities to teach for social change (Kohli et al, 2020). Kohli and co-authors provide an example of the impact of a "racial affinity critical professional development space" called the Institute for Teachers of Color Committed to Racial Justice (ITOC) (p. 1). According to the authors, ITOC "is structured to attend to the impact of racism that teachers of color experience through models of self- and community-care, to address their racial and ideological isolation by facilitating a sense of collectivity, and to provide opportunities for culturally sustaining professional growth" (p. 3). An essential characteristic of culturally sustaining pedagogy is building teaching and learning experiences around the cultures, identities, and communities represented in the learning environment (Martell & Stevens, 2019). According to Kohli and colleagues (2020), ITOC participants share their experiences during the professional development and the lasting effects of the time they spent transforming their curriculum and pedagogy, to center the cultural assets of people of color, with the support of like-minded peers; this was not an opportunity afforded to most of them in their schools. Inspired by her attendance at ITOC, Pour-Khorshid (2018) collaborated with a small group of teachers of color to establish healing, empowerment, love, liberation and action (H.E.L.L.A) in the Bay area of California. H.E.L.L.A. educators met to share stories and writing of their experiences in schools which allowed for honest, vulnerable reflection that led to healing and empowerment for participants. Pour-Khorshid echoes Kohli's

call for racial affinity professional development as a means of supporting and sustaining teachers of color. Such spaces can be viewed as culturally responsive communities of practice which "provide spaces for teachers to engage in critical dialogue… [and] affirm in community their sociocultural consciousness of the school, geographic community, and classroom context" (Gist et al., 2014, p. 20).

First-hand Accounts from Nevada Teachers. As authors of this policy paper, we have been engaged in efforts to improve preparation and increase retention for Black and Latinx teachers in the state of Nevada. Through funding from the Branch Alliance for Educator Diversity, we have been able to pilot approaches aligned with the research above and conduct interviews with three in-service teachers of color who are current or graduated students from our secondary ARL program. Our project included five group meetings which functioned like a culturally responsive community of practice for one Black male teacher (Kenneth), one Latinx male teacher (Laurents), and one Afro-Latina teacher (Honey) who were all Teach Nevada Scholarship recipients. Our approach included providing material resources such as classroom supplies, validating teachers' feelings of frustration/commitment/concern for students through shared experiences, and creating space for developing meaningful relationships with like-minded educators. In a statement that summarizes the need for such a space, Honey, a high school science teacher, discussed her experiences as a teacher of record thus far:

> What do I need? I just need acceptance; accept me for who I am, let me do my thing, stay in your place, know your role, and don't worry about me, right? If my administrators are not worried about what I'm doing, then [other teachers] shouldn't be worried about what I'm doing. I just feel like the labels weigh on you year after year after year. They make you question what you're doing. It's hard to be at a job where you don't have any connections with anyone, where everyone is different than you.

Our community, also known as *the Collective*, was constructed to be a place where Honey, Kenneth, and Laurents could be accepted for who they are and develop skills to thrive in schools where they do not always feel accepted. Based on their time in

our community and the induction supports therein, all three teachers shared how they benefited from the experience. For example, Kenneth stated, "This has been so good for my spirit and not just that, but just everything I want to do as an educator. And it's great to see that there are like-minded spirits out there… I get replenishment. I get encouragement." In this way, our work is an example of the transformative potential of critical professional development (Kohli, 2019). Critical professional development focuses on building communities that help teachers develop transformative teaching practices through cooperative dialogue, unity within the PD (professional development) space, and feeling as though all members' holistic needs are being met. This happens in the context of, not at the expense of, confronting inequitable conditions of schooling (p. 41).

Recruitment and Retention: Strategies for Improving ARL for Black and Latinx Students

In addition to providing induction support via critical professional development, we asked our students for their recommendations for improving our ARL program. Below, we summarize key insights from Honey, Kenneth, and Laurents that all underscore the importance of building and sustaining supportive communities during preparation.

Better attend to the needs of ARL students working as full-time substitute teachers. As a long-term substitute, Honey was not working directly with a mentor teacher at her school. She notes:

> I thought there was a disconnect [between the practicum and the university] and it could just be because [the field experience coordinator] is responsible for taking the students who don't have placement and putting them in their placement. And that's fine. But I feel like the teachers who were already in their own classroom, they didn't need to fulfill the [practicum] with someone else, we're kind of like thrown under and forgotten about…it would've made sense that our science department chair would have been my mentor.

Provide a content area support earlier in the program. In addition to the recommendation to ensure mentored support for long-term substitutes, Honey also recommended having a community of practice related to her content area, science, at the beginning of the program and as she entered the field as a teacher of record:

> I would have liked to be a part of the group of students who were part of science already in their classrooms. I think there should have been some sort of a like, okay, 'Congratulations. You're part of UNLV's ARL program. These are the three classes that you're going to take. Here is a list of other teachers who are also teaching science. Here are their schools that they're working in.' I feel like the relationships that I got I had to wait for [until] I took [a science method] class.

Provide a designated advisor to help navigate the requirements and expectations for licensure. Kenneth spoke to this recommendation as he notes:

> It would have been nice to have an advisor from the jump. I went to [one program staff member] for everything. And bless her heart, she had whatever small section of bandwidth set aside for me. And I know I'm not the only one who's done it….She was just so open and so welcoming about it that, you know, she took that on. I'm really grateful to her for it, but it wasn't her job to be my advisor.

While the recommendations here are applicable to all students navigating the ARL program, it is important to note that issues of program support are exacerbated for Black and Latinx teacher candidates who are also seeking affirmation regarding their feelings of isolation that are connected to their racial identities. Specialized professional development during and after coursework could provide such support.

Provide social and emotional support for the teachers. Laurents discussed his experiences attending counseling services at UNLV and related this experience to a specific recommendation for the ARL program:

> [We should have] a place for us to go to just discuss like what's going on in our classrooms if we're teaching or coursework….Somewhere you could go, especially with those students who decide to teach right after the first semester. I think that would be beneficial

just so we know that we're not the only ones…a place where we can just come together and be like, 'Yo, is your classroom on fire too? Cause mine's on fire. And, how are you dealing with it?'

Similarly, Honey notes how she struggled to teach the standards in her first year. Honey is currently teaching in a charter school though she has previous experience in CCSD. She reflected on the different access to curriculum and the need that exists for resources, and thus how additional support during induction would have been of benefit:

> So if UNLV could have a system like [Curriculum Engine] or teachers maybe in conjunction with the bank of [lesson plans]…it's a really wonderful resource that would be helpful. For the teachers who are in CCSD, I think having UNLV teachers understand what Curriculum Engine is would have also been helpful.

Our professional development community sought to provide such a space for Honey, Kenneth, and Laurents.

Growing our own – Recruitment. As one of Clark County School District's New Educator of The Year award recipients during the 2019-20 school year, Kenneth is the kind of teacher any program should be working to recruit; his story of enrollment into our program is one of encouragement from his social network more than university outreach, which highlights a need for innovative approaches to recruitment alongside programs to prepare and retain teachers of color. Kenneth spoke to this recommendation as he notes:

> The three of us…we're active in our communities…we try to actually make sure that we are giving back somehow….If you're looking to actually level up and grab other people that come from different backgrounds and have other things that they can give, then you're going to want to broaden your net and actually cast it out [to] the whole community.

Recruit and retain more professors of color. Although currently there are only two professors of color who teach in the ARL program at UNLV, all three teachers spoke to the power and validation of having a professor of color during their preparation program. All three noted, with great emotion, what it has been like to have professors that look like them, who can substantiate experiences they have had, and who can validate and see them, too, as smart, not just see them Kenneth notes as, "the diversity of their department." Both professors were repeatedly noted as being instrumental to the teachers sense of racial identity and thus, contributed to their ability to navigate the mostly White spaces of their schools. As noted earlier, the ability to close the educational gap rests on supporting retention and recruitment of teachers of color. Likewise, the presence of faculty of color are of equal importance.

Conclusion

Through our work, we hope to emphasize the importance of preparing to retain Black and Latinx teachers certified through alternative routes. We suggest that this is not solely the responsibility of teacher education programs. Additionally, there is a need to legislatively prepare for successful recruitment, education, and support of Black and Latinx teachers. This need implies increased partnerships between legislators and state approved ARL programs. With a few modifications to existing practices, we believe Nevada can become a leader in preparing and retaining Black and Latinx teachers through alternative routes to licensure.

The evidence-based practices reviewed in this paper along with the experiential knowledge from current Nevada teachers certified through an ARL program can inform revisions to and implementation of existing Nevada state legislation. For example, under the auspices of the Nevada State Teacher Recruitment and Retention Advisory Task Force, and using the recommendations and examples noted here, innovative programs that bridge preparation with recruitment and retention are one means of beginning such an endeavor.

In addition, *the Collective* can be developed and piloted at varying stages of the teacher pipeline, (e.g., pre-service through induction), and can provide a counterspace that affords teachers of color a place whereby they can unpack experiences in the classroom, strategize how best to retain and support each other, and identify and actualize home grown recruitment.

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Eliminating Exclusionary Practices in Early Childhood Education in Nevada

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Abstract

Problem. Many young children under 5 years old spend a significant part of their days in early childhood settings which provide them access to environments and activities that foster their learning. Unfortunately, in many of these early childhood settings, young children are expelled and suspended at a rate that is three times the rate of students in a K-12 setting leading to detrimental, long-term outcomes for young children, families, and the community. *Purpose.* This paper gives an overview of exclusionary practices in early childhood, discusses causes and consequences of these practices, and provides recommendations to eliminate exclusionary practices in Nevada. *Recommendations.* To reduce exclusionary practices, it is recommended to embed preventive practices into early childhood state requirements; develop data systems to better understand and track practices; deliver high quality professional development and technical assistance; use developmental screening and referrals for young children in need; and increasing family engagement.

Introduction

Young children in Nevada spend a significant portion of their time in early childhood programs prior to entering kindergarten. According to the U.S. Departments of Health and Human Services and Education (U.S. DHHS/DOE; 2015), early childhood programs "provide early care and education to children birth through age five…[including] 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). Unfortunately, the expulsion and suspension of young children, including infants and toddlers, from early childhood programs is common and leads to devastating, long-term consequences including lower academic outcomes, increased likelihood of repeated disciplinary actions in school and with law enforcement for students, and distrust in the educational system for students and families (U.S. DHHS/DOE, 2016). Early childhood programs suspend young children ages birth to five up to three times the rate of students in K-12 (Gilliam, 2005). In the US, 5,000 preschool children were suspended at least once and 2,500 children were suspended a second time

(U.S. Department of Education for Civil Rights [OCR], 2014).

In 2019, there were 181,207 children under the age of five in Nevada (Children's Cabinet, 2018; Nevada Institute for Children's Research and Policy, 2019). It is estimated that although almost 71,000 children (40%) were enrolled across a variety of early childhood programs, 134,000 children (74%) were in need of some kind of early childhood programming (see Table 1[*]; Child Care Aware of America, 2019; Children's Cabinet, 2018). In these programs, children gain access to environments and activities that foster their learning in all areas of development including their cognitive, social, emotional, physical, and language development. In addition to benefits of early childhood programs for children, families are able to use programs to seek employment, continue their education, and gain respite from the heavy demands of caregiving (Zero to Three, n.d.). Overall, early childhood programs are essential for communities and states to function (Stevens, 2017). Without access to quality programs, children, families, and communities face potential outcomes that can be detrimental to the child and family structure. The purpose of this paper is to give an overview of exclusionary practices

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[*]Refer to paper's Appendix on page 66 for all tables and figures.

in early childhood, discuss potential causes of suspension and expulsion, share examples of efforts in other states to address this issue, and provide recommendations to eliminate exclusionary practices in Nevada. Although exclusionary practices occur in all early childhood settings, this paper focuses primarily on early childhood programs and professionals outside of school districts that are bound by more stringent federal, state, and local regulations.

What are Exclusionary Practices in Early Childhood?

There are two categories of exclusionary practices: suspension and expulsion. Suspension is defined as a "disciplinary action that is administered as a consequence of a student's inappropriate behavior and requires that a student absent him/herself from the classroom or the school for a specified period of time" (Morrison & Skiba, 2001, p. 174). Expulsion is defined as "permanent dismissal of the child from the program in response to problem behavior" (National Center on Pyramid Model Innovations [NCPMI], 2018, p. 3). Expulsion is the most severe action that a school or childcare center can take in response to a student's challenging behavior (NCPMI, 2018).

Exclusionary practices in early childhood may be explicit, such as asking a family to leave a program (i.e., expulsion) or requiring a child to stay home for a day (i.e., suspension). Often, however, 'soft' practices are used such as calling families to pick up a child with challenging behaviors so that families must find a different program to meet their needs (i.e., expulsion) or having a child sit in the hallway during group time (i.e., suspension; Garrity et al., 2017; Zeng et al., 2020). Table 2* describes definitions and examples of exclusionary practices. Figure 1* provides the numbers of expulsions and suspensions of young children per 1,000 children in the United States.

There are many factors that lead to expulsion and suspension of young children. Gilliam and Reyes (2018) state, "Preschool expulsion is not a child behavior; it is an adult decision" (p.106). In what follows, we overview two main factors, lack of training and implicit bias.

Lack of Training on Child Development and Social-Emotional Development. The first factor related to the expulsion and suspension of young children engaging in age and developmentally-appropriate behaviors such as crying, biting or hitting, using fingers to eat, not sitting for long periods of time, sharing materials, and choosing not to engage in structured activities that professionals believe are inappropriate or challenging (Anderson, 2015). Developmental appropriateness considers valuing each child as they develop individually at their own pace across all domains of development and within the contexts of their family and community's culture (National Association for the Education of Young Children, 2020). Furthermore, children may have unidentified developmental delays or disabilities that impact their behavior. However, professionals working in most early childhood settings including licensed childcare are often not required to have any initial or ongoing training on child development, sequences of learning, and developmentally appropriate practices (Center for the Study of Child Care Employment, 2018). Only 20% of early childhood professionals reported receiving training on facilitating social-emotional development and early childhood professionals consistently report that the most pressing need for training is addressing children with challenging behaviors (Fox et al., 2011; U.S. DHHS/DOE, 2016). Therefore, professionals often have unrealistic expectations (e.g., sitting for long periods, verbally expressing needs, hitting, biting) of children and lack the ability to identify children with developmental delays and disabilities and often see children's behaviors as challenging and resulting in exclusionary practices (Zero to Three, n.d.).

Implicit Bias in Early Childhood Practices. Secondly, implicit bias in professionals leads to suspension and expulsion of young children. Implicit bias is defined as what's happening when, despite our best intentions and without our awareness, stereotypes and assumptions creep into our minds and affect our actions (Desmond-Harris, 2016). Implicit bias contributes to how professionals act towards certain populations of students, particularly children of color, children who are multilingual, and children with disabilities (National Center on Early Childhood Health & Wellness, 2020).

Early childhood professionals are often untrained in culturally appropriate practice and implicit bias, which often leads to a disproportional exclusionary practice across race and gender (An-

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*Refer to paper's Appendix on page 66 for all tables and figures.

derson, 2015). Figure 2 shows the racial disparities of young children who are suspended or expelled. Black children (birth – five years old) are 3.6 times more likely to be suspended than their White peers (U.S. OCR, 2014).

- Black children (birth – five years old) are suspended or expelled at a rate of four times greater than their White peers (Neitzel, 2018).
- Black girls make up 20% of the early childhood population (birth – five years old); however, they account for 54% of the girls who are suspended from early childhood programs (U.S DHHS/DOE, 2016; NCPMI, 2018).
- Boys represent 54% of the early childhood population (birth – five years old); however, boys account for 78% of those suspended from early childhood programs (U.S. OCR, 2014).
- The odds of being suspended or expelled are 14.5 times larger for young children diagnosed with any disability or social-emotional challenge (Novoa & Malik, 2018).
- Young children with any disability or social-emotional challenge make up only 13% of the early childhood population; however, they constitute 75% of all early suspensions and expulsions (Novoa & Malik, 2018).
- The odds of being suspended or expelled in early childhood were more than 43 times higher for young children with behavioral problems (e.g., crying, biting, using fingers to eat, not sitting for long periods of time; Anderson, 2015; Novoa & Malik, 2018).

Impact of Exclusionary Practices on Children and Families

The early years of development are crucial to building the foundation for learning, health, and wellness in school (Gilliam & Reyes, 2018; Miller et al., 2017). During this time, children's brains are developing quickly with positive and negative experiences significantly impacting their development across all learning (Steglin, 2018). Exclusionary practices in early childhood are stressful, negative events that have harmful effects on a child's self-esteem, social-emotional development, and relationships with peers and adults. They also disrupt children's routines and sense of security (Mitchell et al., 2016; Zulauf & Zinsser, 2019). Stressful events are negatively associated with future school experiences, increasing the likelihood of dropping out, academic failure, grade retention, and incar-

ceration (Michell et al., 2016; U.S. DHHS/DOE, 2016) particularly for boys of color (Neitzel, 2018) and have not been effective at improving student behavior (Craven, 2016).

Exclusionary practices also hurt families (Steglin, 2018). When a program removes a child, parents experience emotional stress by forcing families to find alternative care immediately, question their own parenting and children's developmental course, and reduce their confidence in educational programming. Consistent requests to pick up a child early or to leave a program entirely disrupts a parent's ability to meaningfully attend to their employment or education. They also need to find childcare, often without support from the previous program (Steglin, 2018; U.S. DHHS/DOE, 2016). These negative experiences can be prevented through strong family partnership and communication and early intervention for children in need for development support.

Scope of the Problem in Nevada

According to the survey of early childhood professionals administered by Nevada TACSEI Pyramid Model Partnership (2018), now named Nevada Pyramid Model Partnership (NPMP), 51% of providers have asked a child to leave their program because of challenging behavior and 44% of providers have asked a child to take a break for several days or to shorten the hours they attend the program. However, the exact number of suspensions and expulsions of young children are difficult to measure because the state does not systematically collect these data from programs and families and the use of 'soft' exclusionary practices are hard to measure and often go undocumented.

During the last Nevada legislative session, AB293 added legislative provisions targeted to reduce the suspension and expulsion of students in grades K-12; however, there is no current legislation to prevent these practices to children birth to five years old in Nevada. The state does have some documents, policy recommendations, and has enacted some practical efforts in early childhood settings to reduce exclusionary practices; however, these recommendations are not part of state legislation nor regulated.

There are several documents that give clear recommendations about using exclusionary practices in early childhood. In 2016, The Nevada Early Childhood Advisory Council instated an expul-

sion and suspension policy statement that mirrors the U.S. DHHS/DOE's Policy Statement (see Table 4; 2016). This statement makes general recommendations for programs that may reduce the use of exclusionary practices; however, these policy statements lack infrastructure and accountability to meaningfully address this persistent issue. Nevada's State Systemic Improvement Plan (2019), further addresses exclusionary practices of young children by focusing on creating healthy and positive learning environments and developing positive relationships for staff and students.

Nevada has begun some efforts to support programs in reducing exclusionary practices. For example, any program receiving federal or state funding, such as the Child Care Development Fund subsidy, are prohibited from using exclusionary practices. But, due to lack of understanding of what practices are and data systems to track incidents, it is difficult to appropriately ensure this. Secondly, Nevada has embedded indicators related to practices that reduce and eliminate exclusionary practices in its Quality Rating and Improvement System (QRIS), Nevada Silver Stars; however, this system is voluntary with only 54% of licensed childcare and 20% of public preschool programs currently enrolled (Children's Cabinet, 2018; Edge & McCann, 2017). Finally, NPMP provides on-site technical assistance to help programs and professionals address exclusionary practices and their related factors (e.g., professional learning about social and emotional development, culturally appropriate practice, addressing challenging behaviors, program assessment, data collection; see Table 4*).

Recommendations to Reducing Exclusionary Practices in Nevada

Within the last two years, 18 states have proposed legislation on suspension and expulsion that specifically restrict states from suspending and expelling young children. There are 12 states and D.C. that proposed legislation to promote alternatives for suspension and expulsion (see Table 3* and Table 4*; Administration for Children & Families, n.d., NCPMI, 2018).

Embed Preventive Practices into Early Childhood State Requirements. Although Nevada has begun to identify indicators and practices to reduce exclusionary practices in their QRIS program, a lim-

ited number of programs have participated in the program and lower levels of the star system do not include the robust indicators that should prevent exclusionary practices. Furthermore, since lower quality programs are more likely to engage in these practices, it is recommended that indicators such as professional development in social-emotional development, implicit bias and equity, child development, and assessment and referral be included for all programs and initial qualifications for professionals; and having comprehensive policies to address challenging behaviors and exclusionary practices (Nevada Department of Education: Office of Early Learning, 2019).

Data Systems to Better Understand Practices. Currently, a significant barrier to reducing exclusionary practices in early childhood is that we do not have accurate data on practices. Without data systems to track incidents, it is impossible to understand, analyze and measure the problem. Recently, Arkansas, Illinois, and Colorado have used data tracking using statewide technical assistance systems (Arkansas Department of Human Services, 2018; Vinh et al., 2016; Zinsser et al., 2019). NCPMI has a publicly available program-wide data system, Behavior Incident Report (BIR) that may be viable to track incidents of challenging behavior, staff or program response, and exclusionary consequences (Zero to Three, n.d.). This system allows for analysis of patterns of an individual child's behaviors and use of practices across race/ethnicity, age, gender, teacher, classroom, and program. Analysis of these data would allow state and program leaders to identify programs and professionals in need of targeted professional development or intensive targeted technical assistance and to understand trends across the state.

Professional Development and Technical Assistance for Programs. Initial and ongoing training for early childhood professionals is essential in reducing exclusionary practices. However, due to the lower income rates of early childhood professionals and extended work hours, attending costly training or seeking out degree programs is challenging. Arkansas and Colorado offered statewide training and technical assistance to program directors and early childhood professionals on social-emotional development of young children with and without disabilities (Arkansas Department of Human Ser-

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*Refer to paper's Appendix on page 66 for all tables and figures.

vices, 2018; Vinh et al., 2016). By providing free and low-cost professional development to early childhood professionals particularly in implicit bias, child development, addressing challenging behaviors, and the inclusion of children with disabilities would build the capacity of Nevada's early childhood workforce (Administration for Children & Families, n.d.). Nevada has adopted some national resources that are available to support programs to facilitate professional development through the Nevada Registry, however many of these are limited, one-time training that provide basic awareness of content without in-depth application of practices to their programs. Nevada should consider investing in ongoing, individualized technical support to early childhood programs (State Capacity Building Center, 2017).

Consistent Developmental Screening and Referral of Young Children in Need. To support the development of young children, programs must engage in regular developmental screenings of all children birth to 5 years old (Weglarz-Ward et al., 2019a). Illinois uses a referral model to address the child's needs which includes observations, communication with the family, and referral to services (e.g., pediatrician, special education services, mental health; Illinois Action for Children,

n.d., Steglin, 2018). These screenings can provide professionals with information on children's developmental needs and identify children with possible disabilities and delays. However, it is regularly reported that early childhood professionals do not have enough training and awareness of screening and available services for children (Weglarz-Ward et al., 2019b). Additional resources such as assessments, intervention procedures, social emotional supports, and mental health consultation should be available to all early childhood programs.

Conclusion

Exclusionary practices in early childhood are detrimental to the child, the family, and the community. Because exclusionary practices often go undocumented, there is a great need in Nevada to reduce the number of expulsions and suspensions of young children by 1) embedding preventive practices into early childhood state requirements, 2) developing data systems to better understand and track practices, 3) delivering high quality professional development and technical assistance on social emotional development of young children, and 4) using developmental screening and referrals for young children in need and increasing family engagement.

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Figures & Tables

*Figure 1.* Number of Suspensions and Expulsions of Young Children in the U.S.
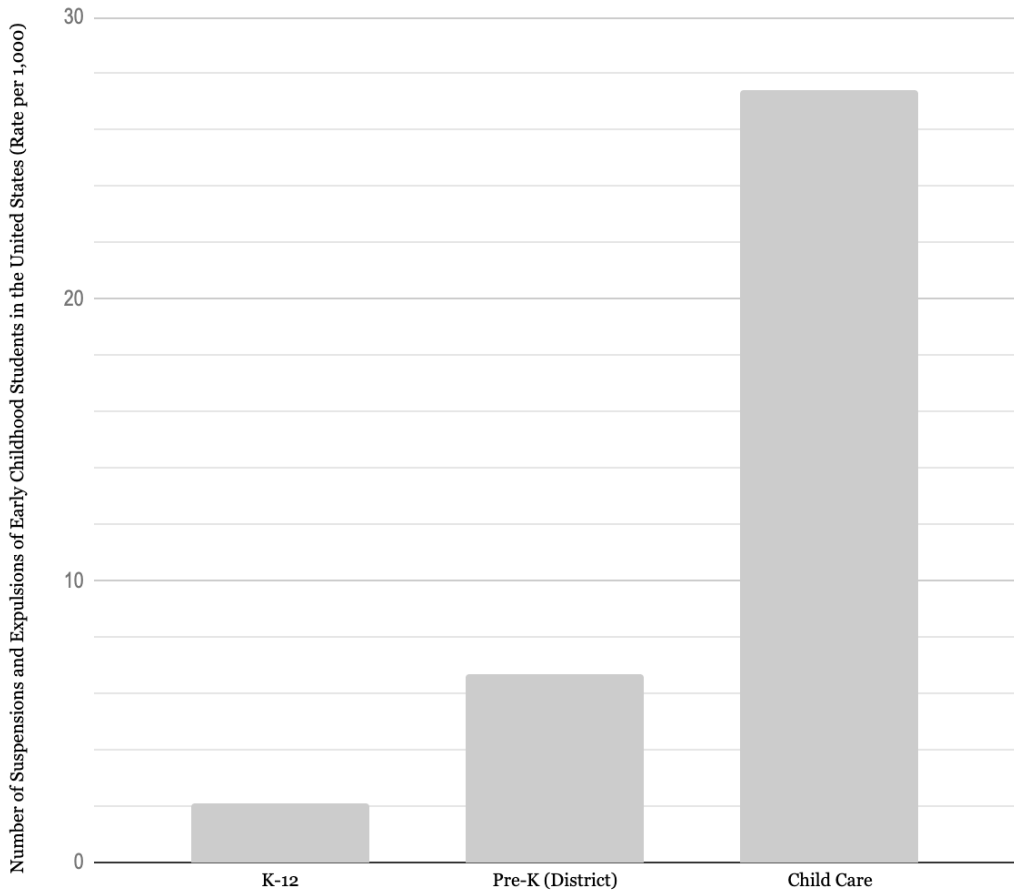
Note: Adapted from Gilliam and Shabar (2006)

Table 1. Child Enrollment Across Early Childhood Programs in Nevada

Type of Program	# Children Enrolled	% Children Enrolled
Childcare programs	41,786	59%
Early Head Start/Head Start	3,364	4.7%
Public school programs	12,046	17%
Children ages 3-5 in IDEA Part B (early childhood special education)	5,187	7.4%
Children ages 0-3 in IDEA Part C Programs (Early Intervention)	3,274	4.6%
Licensed Family Child Care Homes	1,286	1.8%
Licensed Group Child Care Homes	3,874	5.5%

Note: As adapted from Nevada Institute for Children's Research and Policy (2019).

Figure 2. *Percentage of Preschool Students (3 to 5 years old) Receiving Out of School Suspensions by Race/Ethnicity in U.S.*
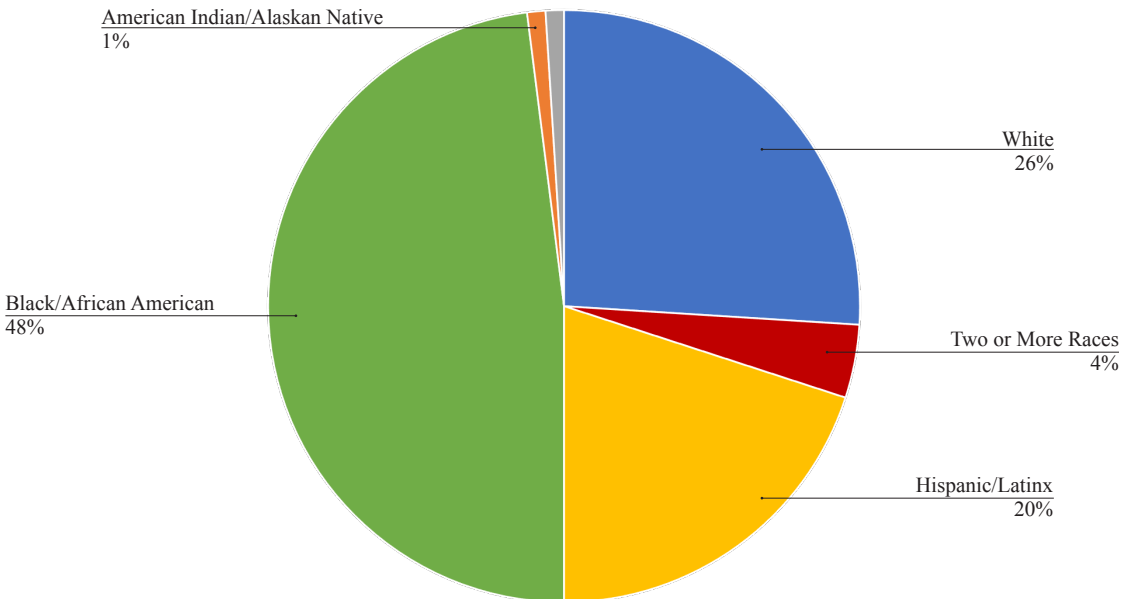
Table 2. *Definitions and Examples of Exclusionary Practices*

Exclusionary Practice	Definition	Examples of Practice in Early Childhood
In-school or soft suspensions	Practices that involve removing or excluding the child from the classroom.	Having a child sit out of activity, room, or program space or sending them to the administrator's office.
Out-of-school suspensions	Practices that involve temporarily removing the child from the program.	Asking families to pick up their child early from a program due to behaviors including challenging behaviors, crying, or disability-related issues.
Expulsions	Permanent removal or dismissal from the program.	Telling a family they must find a different program or care arrangement for their child due to behaviors including challenging behaviors, crying, or disability-related issues.
Soft-expulsions	Practices that make it so that the program is not a viable or welcoming care arrangement for the family and leaves the family with little choice but to withdraw their child	Repeatedly asking families to pick up their child from a program due to behaviors including challenging behaviors, crying, or disability-related issues resulting in families leaving the program.

Table 3. *State Policies on Early Childhood Suspension and Expulsion*

	States' Policies		Guidance to Programs		
	Prohibit or Restrict Expulsion	**Prohibit or Restrict Suspension**	**Prevent or Address Behavior**	**Partner with Families to Address Behavior**	**Training to Staff Support**
Arkansas	X	X	X	X	X
California	X		X	X	
Colorado	X	X			
Connecticut	X	X	X		
DC	X	X	X		
Georgia	X		X	X	X
Illinois	X			X	X
Maryland	X	X	X	X	X
New Jersey	X	X	X	X	X
Oregon	X	X			
Texas	X				
Virginia	X		X	X	X
Washington	X	X			X

Note: *Adapted from Fox et al. (2019).*

Table 4. *Resources on Early Childhood Exclusionary Practices*

Policy Statements

State of Nevada Policy Statement on Expulsion and Suspension in Early Childhood Settings
This 2016 policy statement provides guidance to early childhood programs to addressing issues related to suspension and expulsion including supporting children's social-emotional skills and preventing challenging behavior, creating clear exclusionary policies, increasing family engagement, engaging in professional development, and using regular developmental screening.

Link: http://nvecac.com/wp-content/uploads/2018/12/SuspensionExpulsionPolicy.pdf

U.S. Departments of Human Development and Education Policy Statement on Expulsion and Suspension Policies in Early Childhood Settings
This joint statement provides current research on exclusionary practices, implications of these practices on children and families, and recommendations for individuals, programs, and states.

Link: https://www.acf.hhs.gov/sites/default/files/ecd/expulsion_ps_numbered.pdf

State Efforts

State and Local Action to Prevent Expulsion and Suspension in Early Learning Settings: Spotlighting Progress in Policy and Supports
This report from the Administration for Children and Families of the U.S. Department of Health and Human Services provides an overview of the federal policy statement on suspension and expulsion and descriptions of efforts across multiple states. See reference list for specific resources on individual states including Arkansas, Colorado and Illinois.

Link: https://www.acf.hhs.gov/sites/default/files/ecd/state_and_local_profiles_expulsion.pdf

Pyramid Model and Technical Assistance Centers

Nevada Pyramid Model Partnership (formerly Nevada TACSEI: Pyramid Model Partnership)
This initiative helps to promote the social-emotional development of young children and support families and professionals in reducing challenging behaviors. In Nevada, this project provides technical assistance to programs, regional and state training, collaboration with institutions of higher education, and resources to families, professionals, and policymakers.

Link: http://nvtacsei.com/

National Center for Pyramid Model Innovations
This national technical assistance center, funded by the US Department of Education, supports research and training in issues related to social-emotional development, challenging behaviors, suspension and expulsion, implicit bias, and family-centered practices. This site offers free live and recorded webinars, practitioner and program tools, and teaching and training materials. The Center also offers state-specific technical assistance that of which Nevada has received for their IDEA Part C programs.

Link: https://challengingbehavior.cbcs.usf.edu/.

The Viability of Bilingual Education Programs in Nevada

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Abstract

Problem. Approximately 15% of emergent bilinguals (EBs; commonly referred to as English learners) in Nevada demonstrated proficiency in math and English language arts in contrast with the general student population, which achieved proficiencies of 42% and 55% in these subjects, respectively. Therefore, there is a critical need for programs that are responsive to EBs' linguistic, cultural, and academic strengths. ***Purpose.*** This policy paper discusses the need for alternative educational supports for EBs, the effectiveness of bilingual education models compared with prevailing English instructional models, and the possibility of bilingual programming as a viable option in Nevada. ***Recommendations.*** Nevada could require that strong forms of bilingual education, supported by the new funding formula, be offered to EBs. University-school partnerships could create a pipeline between enrollment in bilingual teacher education programs and staffing of bilingual programs. The state should also allow the assessment of content knowledge in English and other languages for accountability purposes to promote bilingualism/biliteracy for all students.

Introduction

Policy changes since No Child Left Behind (NCLB) in 2001 resulted in the dismantling of the Bilingual Education Act, ceased federal funding allocation for bilingual education, and increased accountability through standardized English testing. Prior to and following NCLB though, there have been two competing arguments regarding the value of using students' home language during instruction. Proponents of home language use during instruction confirm that students' ability to read in their home language strongly predicts English reading performance and that bilingualism does not interfere with academic achievement in either language (Francis, Lesaux, & August, 2006; Yeung, Marsh, & Suliman, 2000). Another view is that home language instruction may interfere with or delay English language learning because students may be less exposed to English (Rossell, 2000). It is thus critical to understand the instructional programming for emergent bilinguals[1] (EBs; commonly referred to as English learners) and the outcomes these models produce for this population.

National educational policies such as NCLB and the Every Student Succeeds Act (ESSA, 2015) have intended to improve the educational outcomes of EBs, but there is still a hyper focus on standardized testing in English, leading to reduced curriculum and poor educational experiences for EB students (Acosta et al., 2020; McCarthey, 2008). On the other hand, It is important to note that recent policy changes resulting from ESSA (2015) now include requirements that states must "identify languages other than English that are present to a significant extent in their participating student populations," indicate the languages for which annual student achievement tests are not available, and "make every effort" to develop such assessments. With these changes, state education agencies currently have the flexibility to look beyond English assessments and more holistically examine EBs' content area knowledge (across students' languages) rather than focusing on English language proficiency alone. The acknowledgment of students' home languages via this federal directive again brings into focus the importance of EBs' bilingualism and the degree to which efforts are taken to fully support and holistically showcase these students' knowledge. It also provides an opportunity to appraise current educational program models available to EBs in Nevada as well as those that have been deemed effective in improving their achievement. The purpose of this

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[1]We use the term *emergent bilingual* in place of the commonly used designation English learner to highlight the multiple languages that these students continuously navigate at home, school, and community levels, even when being educated in English-only settings (García et al., 2008).

policy paper is to discuss the need for alternative educational supports for EBs, to review the effectiveness of bilingual education models compared with prevailing English instructional models, and explore the possibility of bilingual programming as a viable option in Nevada to better serve EB students in preschool (PK) to secondary schooling.

Emergent Bilinguals' Performance and the Language Programs That Serve Them

The number of EBs in PK-12 classrooms has increased by 60% in the last decade with Nevada among the top 10 states with the largest growth. Although EBs represent 10% of the school population at the national level, they represent approximately double that figure in the state of Nevada, which ranks fourth in number of K-12 EB students (National Center for Education Statistics, 2017). Given the high numbers of EBs in Nevada, there is a critical need to address their academic achievement. Approximately 15% of EBs in Nevada demonstrated proficiency in math and English

language arts in contrast with the general student population, which achieved 42% and 55% proficiency in these subjects, respectively (Nevada Department of Education, 2020), thereby showing a greater need for programs that are responsive to EBs' linguistic, cultural, and academic strengths.

All schools are required to provide a language education program for EBs (ESSA, 2015). Currently, most EBs in the U.S. and specifically in Nevada are taught by English-speaking teachers and are expected to receive additional support to access academic content. In these English-immersion programs whose primary goal is English acquisition, students' home languages are not used nor further developed in an academic setting (Crawford, 2004). Alternatively, in some pockets of the country, schools are increasingly employing a bilingual education model, which incorporates the students' home languages in the classroom.

Taken together, language education programs in the U.S. used to support EBs can be classified

Table 1. *Program Models Serving Emergent Bilingual Students in the U.S.*

Program	Common Model Names	Student Population	Language(s) of Instruction	Goal(s) and Length
Bilingual	• Dual Language Bilingual Education • Two-Way Bilingual Education • Dual Immersion	• Emergent bilinguals • Bilinguals showing English proficiency • English Monolinguals	English and the Language other than English (LOTE)	Bilingualism, biliteracy, & cross-cultural understanding; Indefinite
	One-Way Bilingual Education	Emergent bilinguals who speak the same home language	English and LOTE	Bilingualism & biliteracy; Indefinite
	Transitional Bilingual Education	Emergent bilinguals who speak the same home language	English and LOTE at the beginning, with a quick progression to most or all instruction in English	English proficiency; Usually rapid exit (e.g., after 3-5 years)
Monolingual	English as a New Language (ENL): • Pull-out ENL • Push-in ENL • Self-Contained	Emergent bilinguals, usually who speak different home languages	English	English proficiency; Upon exiting English learner status

into two categories: monolingual and bilingual programs, each with multiple instructional models that vary on the use of English and students' home languages (see Table 1). Monolingual English programs for EBs are generally labeled English as a Second Language (ESL; newly referred to English as a New Language, or ENL), may vary in level of support from school to school, use techniques to make content accessible within (i.e., self-contained ESL or push-in ESL) or outside the classroom (i.e., pull-out ESL), and solely lead learners to English acquisition. For most EBs in the U.S. and specifically in Nevada, content and language learning occurs through these types of programs led by English-speaking teachers, and students' home languages play little to no role during instruction. Alternatively, as also shown in Table 1, there are three general types of bilingual programs implemented nationwide, which differ by students in the program, language(s) of instruction, overall goals, and length of participation.

The State of Bilingual Education in Nevada

Nevada has relatively few bilingual programs, and the Nevada Department of Education provides little guidance on how to implement bilingual programming. To our knowledge, there are only three bilingual schools in Nevada, which are located in Washoe County. Due to the large proportion of Latino students in the district, a former superintendent introduced the two-way dual language immersion program model to foster Spanish-English bilingualism and biliteracy for both monolingual English and language minority students approximately one decade ago, and three principals opted to host it in their schools. At Beck and Donner Elementary Schools, a subset of students at the school following the bilingual strand learn in the content areas using Spanish 50% of the time and English, the other 50%, at every grade level. At Mount Rose Elementary, all students regardless of language status spend a larger proportion of learning in Spanish in the earlier grades, starting with 80% in Spanish and 20% in English at kindergarten, and incrementally learn content in English at each grade level before reaching an equal distribution of both languages in the upper grades. In 2018-19, each of

these schools exceeded the district's rate at which EBs met English language proficiency (Nevada Department of Education, 2020), indicating that bilingual programs could outperform English-only programs in fostering EBs' English language development while promoting bilingualism/biliteracy for both monolingual English and language minority students in Nevada.

The Effectiveness of Bilingual Education Programs

There is overwhelming research evidence indicating that both monolingual English and EB students in bilingual programs demonstrate equal and sometimes higher levels of academic achievement on English and math assessments than their counterparts in English-only classrooms (Francis, Lesaux, & August, 2006; Genesse, Lindolm-Leary, Saunders, & Christian, 2005; Han, 2012; Lindholm-Leary, 2014; Lindholm-Leary & Block, 2010; Slavin & Cheung, 2005). In a recent and the most rigorous longitudinal study yet (Steele et al., 2017), both language minority students[2] and monolingual English speakers in bilingual programs outperformed students in English-only classrooms on accountability tests in reading, with their performance representing approximately seven additional months of learning in grade 5 and nine additional months in grade 8. These findings show the powerful effect that bilingual instruction has on language minority speakers and monolingual English speakers. This same study also revealed that while both language minority students and monolingual English speakers developed proficiency in both languages, long-term exit rates from English learner status were improved for non-English proficient students (i.e., EBs no longer needing specialized support due to meeting proficiency English standards), and there was no detriment to performance in content areas such as mathematics and science. As such, one of the most effective bilingual models, two-way immersion, for language minority students is equally valuable for monolingual English speakers. These findings have been corroborated by other studies that revealed the fewest dropouts in two-way bilingual programs and that all students (not solely language minority students) scored higher (i.e.,

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[2]Language minority students encompass emergent bilingual students (not yet met standard levels of English proficiency for their grade level; commonly referred to English learners) as well as more experienced bilinguals who have achieved standard levels of English proficiency but also speak a language other than English at home.

White; African American; EBs; language minority students fluent in English; students with low economic status) than students in all-English programs on end-of-grade exams in math and reading (Thomas & Collier, 2010).

Factors to Consider When Implementing Bilingual Programs

Emphasis on English as a Deterrence. Despite the potential benefits of bilingual education particularly for EB students, a number of challenges impede the implementation of these programs in schools. Historically, political rather than research-based pedagogical motives have inhibited the proliferation of bilingual education programs (Bybee, Henderson, & Hinojosa, 2014). For instance, ballot initiatives, such as Proposition 227 in California (passed in 1998 and repealed in 2016) and Proposition 203 in Arizona (passed in 2000), aiming to end decades-long bilingual programming, were backed by the idea that English immersion programs are the ideal way to ensure academic achievement and English acquisition for EBs. Some educational stakeholders, including parents of bilingual students, subscribed to this common-sensical belief that teaching two languages via bilingual education may be counterintuitive (Crawford, 2007). These arguments and language policies opposing bilingual programs were grounded in some of the earliest evaluations of bilingual programs (Baker & de Kanter, 1981; Rossell & Baker, 1996), many of which had methodological flaws that narrowly focused on discrete English learning outcomes in the short term without taking into account bilingual programs' long-term academic achievement and the school-based input processes (e.g., school leadership and faculty with a strong knowledge base about bilingual learning and instruction) that make bilingual programs successful. When English-only programs prioritize performance on English assessments, they may do so at the expense of the unique linguistic and cultural assets that EBs bring to the classroom; EBs in monolingual programs show lower academic outcomes and higher dropout rates but also lose their home language due to subtractive schooling experiences in English-only settings (Menken & Kleyn 2010). In contrast, EBs' assets may instead be used to enrich the cultural and language learning experiences of their monolingual English-speaking peers participating in the same bilingual program (Steele et al., 2017) as well as enhance their own learning due to the interdependence between their languages (Cummins, 2017; Lindholm-Leary & Block, 2010).

Fidelity to Evidence-based Bilingual Program Design Features. Research has identified multiple factors and challenges relating to the implementation of bilingual programs (Howard et al., 2018; Lindholm-Leary, 2001). A strong program model outlining clear goals and expectations is critical for its sustenance and for ensuring students' success. Features of such a model include providing 4 to 6 years of bilingual instruction in early schooling; providing an equal distribution of language and literacy instruction across languages; and curricular materials that align with language and content expectations of a bilingual program. Professional development focusing on implementation of effective bilingual programming is also critical to ensure fidelity to program goals. For this reason, knowledge about bilingual programs and their defining features and support from school, district, and state leadership are critical for these programs' success.

Teacher Preparation and Recruitment. For those who are successful in establishing a bilingual program, often the biggest logistical challenges they face are related to finding qualified teachers and adequate resources to conduct the program. Because many adults had childhood bilingual experiences but also experienced subtractive schooling via English-only education, finding bilingual teachers with high proficiency in the target language even among minority groups is often a difficult task (Arroyo-Romano, 2016). Sometimes those who are bilingual are unfamiliar with academic language needed in the classroom and most certainly have not been trained in bilingual teaching practices (Howard et al., 2018). Some states look to recruit teachers of the target language from abroad while others build their own bilingual teacher education programs, following a "grow your own" initiative (Sutcher et al., 2016). Cohesive national and state standards for certifying bilingual teachers are lacking and undeveloped, and there is little guidance about what to look for when hiring a bilingual teacher (Boyle et al., 2015). Simultaneously, concerns exist for the dismal numbers of entry and sustenance of teachers of color in the profession, and efforts at recruitment and retention of teachers of color is a priority for the field (Brown, 2014; Haddix, 2017). Teachers who share similar back-

grounds of their students tend to comprehend their unique experiences, leverage their students' linguistic and cultural assets in the classroom, and are often described as having strong commitments to their communities and serving as agents of social change (Egalite, Kisida, & Winters, 2015; Howard, 2010; Irizarry & Raible, 2015).

Equitable Access to Bilingual Programs. A concern exists for the ways that bilingual programs might reify the inequities the bilingual education movement aims to address. As two-way dual language programs have expanded across the country and thus enrolled English-speaking students, a "metaphorical gentrification" has occurred (Valdez et al., 2016). For instance, bilingual programs in Utah grew by 300% between 1997 to 2005, and the state is now considered a leader in the nation of bilingual education; however, a majority of their programs are one-way based on a foreign-/second-language immersion model aiming to serve proficient English speakers rather than language minority students (Valdez et al., 2014). Scholars have also noted how bilingual programs have shifted their focus disregarding EBs for whom these programs were designed to serve as a result of inequitable enrollment policies (Wall et al., 2019) and biased instructional practices (Cervantes Soon et al., 2017).

Funding. A major factor often left out of empirical research is the cost of programming for EBs. Certain states allocate funds to establish and support bilingual programs. For instance, through formula funding, Texas in 2009-2010 budgeted about $1.2 billion for all bilingual/ESL programs, an average of $253 per student (Faltis, 2011). In Utah, funding for bilingual programs for the 2014−15 school year was $2.3 million, and they supplemented these funds supplemented these funds with $500,000 from the Department of Defense (U.S. Department of Education, 2015). Despite state funding allocations, it is important to also note that top-down mandates for bilingual programming may not be practical if essential resources and funding are not supplied in support of strong bilingual program models, thereby signaling the importance of coordination across state, district, and school levels

Implications for Policy and Practice

To promote the emergence and sustenance of bilingual programs, Nevada could adopt new language policy and/or provide guidance on the implementation of bilingual programs (e.g., California's English Learner Roadmap). The following serve as recommendations for state and local stakeholders.

Funding Bilingual Programs in Nevada. Many bilingual programs attribute their success to being shaped by local decision making and bottom-up, grassroots initiatives that have been supported by government or private grants (Darling-Hammond, 1990; Christian et al., 1997). The state of Nevada may consider providing grant competitions for schools to develop bilingual programs as was done by Washington's Office of Public Instruction. Similar efforts were initiated by former Nevada Assembly Majority Whip Heidi Swank through Assembly Bill 139 in 2017 but did not move forward. Although startup funds may be initially needed to develop and purchase bilingual curricula and assessments, typically there are no additional costs associated with paying bilingual teachers. Moreover, Title III funding designated for EBs may also help to defray expenses. Because Nevada made changes to their funding structure through Senate Bill 543 this past year, funds may be better allocated to meet the needs of EBs through bilingual programs.

Fostering Equity for Emergent Bilinguals. There should be careful planning to ensure that bilingual programs continuously align to their goals of educational equity for EBs. A key component of bilingual program design is determining student enrollment expectations and policies. While bilingual education originated as a movement to serve EB students, it has become of growing interest to monolingual English-speaking students and their families as well, often leading to the implementation of a two-way model. To foster equity, school leaders should ensure greater access to these programs is given to EBs. While 16 states and DC have issued guidance on the student enrollment ratio between English-speaking and partner-language speaking students for their two-way dual language programs, only three states have set specific requirements. The state of Nevada could set requirements that will accord rights to a bilingual program to EB students. In New York, students have the right to a bilingual program by (1) establishing one in the same school when there are 20 or more grade-level students that speak the same home language or (2) allowing students to transfer if the original school does not offer such a program.

Building a Bilingual Teacher Pipeline. A major component needed to develop and increase staffing in bilingual programs is the need for pre- and in-service teacher education focusing on bilingual pedagogy and language development. Fortunately, Nevada established an endorsement (NAC 391.242) for teachers to become specialized for these programs. To our knowledge, University of Nevada, Las Vegas and Nevada State College are the only higher education institutions offering coursework leading to this endorsement. However, these programs are currently under-enrolled due to the lack of PK-12 bilingual programs in Nevada. As bilingual programs expand, more interest in bilingual teacher education programs would be likely. University-school partnerships could create a pipeline between enrollment in bilingual teacher education programs and staffing of PK-12 bilingual programs.

Further into the future, the opportunity also exists for a "grow your own" initiative whereby graduates of Nevada bilingual PK-12 programs then become bilingual teachers in their own communities. These efforts in teacher education could serve to not only staff bilingual programs but also to promote a more diverse teaching corps that is representative of and well-equipped for the multilingual/multicultural PK-12 student population. The current teaching corps mostly consists of White English-speaking, middle-class females (U.S. Department of Education, 2016), and the cultural gap between an increasingly diverse student population and their teachers has grown (Boser, 2014; Villegas et al., 2012). If highly qualified bilingual teachers are difficult to find and teacher education programs are not yet established, different configurations permit the involvement of general education teachers. Ten states issue guidance on differing staffing configurations (e.g., single teachers using both languages; separate teachers teach in English and the partner language). While Nevada builds up its bilingual teaching corps, schools could determine the best teaching configuration given the number of available eligible bilingual teachers.

State and District Guidance on Effective Program Features. An important question is how to ensure bilingual programs are following evidence-based policies and practices. Certain states provide information, guidelines, and incentives about program components to help inform local decision making. Schools can choose from an array of models allocating different amounts of time to English and the partner language (e.g., 50-50 split throughout all grades). Few states have articulated specific state models or expectations for program design, with the exception of seven states, which specify time allocations for English and the partner language. Four states suggest specific course-taking pathways for offering bilingual programs at the secondary level, which may lead to the Seal of Biliteracy. Nevada should recommend the adoption of stronger forms of bilingual programming that equally use English and the partner language throughout a student's educational trajectory, and each district should ensure their adherence to effective program features through ongoing professional development and evaluations of their effectiveness.

Emphasizing Bilingual and Biliterate Proficiency. Despite not being required under federal law, states have adopted language proficiency standards and assessments of partner languages. These standards cover the content and language skills that teachers should be teaching in bilingual programs. Although 42 states have adopted world language proficiency standards, only five states require bilingual programs to assess partner language skills. Assessment in the partner language could ensure there is greater fidelity to defining features that render a bilingual program effective. In other words, teachers and administrators may better adhere to teaching for biliteracy because students' performance in two languages is valued for accountability purposes. Relatedly, 41 states including Nevada already reward students through the Seal of Biliteracy for their commitment to bilingualism throughout their education and for demonstrating biliterate competency. To foster bilingualism and biliteracy for all students (language minority and monolingual English students alike), the state of Nevada should allow the assessment of content knowledge in English and other languages for accountability purposes. This change could increase the number and diversity of students who are awarded the Seal of Biliteracy and open the door for all students to become bilingual/biliterate at an early age rather than relegating second-language learning to their later schooling.

Conclusion

Bilingual education has shown to be a great equalizer that requires relatively low-cost investments

and yields long-term, sustained rewards: improving educational outcomes for both language minority and monolingual English learners, diversifying the teaching workforce, and increasingly making Nevada a globally competitive, attractive state. With greater attention to EBs' home languages resulting from ESSA directives and recent changes in Nevada's funding structure for EBs, bilingual education is a viable educational alternative necessitating further state and local guidance on its implementation.

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