

The Dynamic Transformation of a Principal Preparation Program: A University-District Collaborative

This manuscript has been peer-reviewed, accepted, and endorsed by the International Council of Professors of Educational Leadership (ICPEL) as a significant contribution to the scholarship and practice of school administration and K-12 education.



Jafeth E. Sanchez
University of Nevada, Reno

Melissa M. Burnham
University of Nevada, Reno

Salwa Zaki
Washoe County School District

In order to better serve our nation's youth, educational leadership preparation programs must be willing to transform current preparation practices. This paper emphasizes the need to develop high quality school leaders to successfully create and sustain necessary changes in schools. The dynamic transformation of a principal preparation program, which stemmed from a university-district collaborative, is discussed in detail. Key areas of the transformation and partnership are shared, such as the foundational needs, the stakeholders involved, the course sequence redesign, the course and syllabi revision process, the co-teaching model, the internship, culminating experience, and current funding sources. Finally, conclusions and recommendations for transforming principal preparation program partnerships to support all children.

In the annual *Quality Counts* (2017) report, a hallmark report card on the quality of education for states and the nation, Nevada was ranked 51st among the nation's 50 states and the District of Columbia. Specifically, the state posted an overall grade of a D, while the average grade across the nation was a C. Moreover, although the index for K-12 Achievement had not been updated, it was reported that the state earned an F, and the average was a D across the nation (Quality Counts, 2017). Thus, continuous efforts to enhance Nevada's educational performance are critical. Educational changes must occur in order to better serve our nation's youth.

At the same time, the role of effective educational leaders continues to serve as a key factor impacting student learning and achievement (Wallace Foundation, 2016). Indeed, "leadership effects on student learning occur largely because leadership strengthens professional community; teachers' engagement in professional community, in turn, fosters the use of instructional practices that are associated with student achievement" (Wahlstrom, Louis, Leithwood, & Anderson, 2010, p. 10). Ultimately, high-quality school leaders are able to develop strong school cultures that support student learning and encourage teacher retention (Loewenberg, 2016).

A principal's ability to develop a strong school culture to impact learning and enhance teacher retention is particularly essential in Nevada, even more so with its ongoing teacher shortage crisis (State of Nevada Department of Education, nd). From an asset-based perspective, we argue that Nevada's unique circumstances have created an opportunity to intentionally and strategically enhance leadership preparation. Collectively, Nevada's needs for improvement, the critical role of the principal in student learning, and a redesigned program model serve as the rationale for the University of Nevada Reno's leadership preparation program, Nevada Leads.

Nevada Leads at a Glance

Nevada Leads is an innovative, university-district partnership designed to improve the preparation of effective educational leaders. Nevada Leads represents a revised sequence of coursework that is aligned with the Nevada Educator Performance Framework for Administrators and the national 2015 Professional Standards for Educational Leaders (formerly ISLLC standards). It uses a cohort model, and a flipped-hybrid course format, with co-instructor teams of one faculty member and one or two current practicing principals teaching every course. Across the span of the two-year program, cohort students are also mentored by practicing principals outside of the students' own school setting. Furthermore, mentor principals engage in ongoing professional learning to ensure that internship experiences are aligned with each semester's course content and student learning objectives. Thus, the dynamic transformation of the principal preparation program will be discussed in detail, including its foundational needs, the stakeholders involved, the course sequence redesign, the course and syllabi revision process, the co-teaching model, the internship, culminating experience, and current funding sources. The purpose of this paper is to disseminate information about the dynamic transformation of our principal preparation program so that others may enact similar changes to more effectively prepare future school leaders to support *all* children.

Literature Review

The inconsistent quality of principal preparation programs reported across the county necessitates program improvement among higher education institutions (Wallace Foundation, 2016). Improvement efforts should occur through (a) a clear redesign of program models to reflect a current principal's job, (b) strong connections between universities and districts, and (c) state policymaker

structures to support and actively encourage the process (Wallace Foundation, 2016). Reed and Kensler (2010) cautioned that improvement for programs would remain intangible, however, unless total redesign efforts are undertaken. In these redesign efforts, it is also imperative that models reflect key characteristics of elite leadership preparation programs that successfully develop high-quality school leaders. Campanotta, Simpson, and Newton's (2016) work highlighted characteristics among the nation's five elite leadership preparation programs. The researchers concluded that successful programs included the following characteristics:

- Formal interviews, as a part of the selection process, provide a beneficial component in identifying the strongest candidates.
- Internships, up to one year, provide multiple opportunities for learning and leading during day-to-day situations.
- Effective principals serving as mentors and/or coaches provide beneficial support to the students.
- Coursework integrated with field experience, connecting research, theory, and practice, appears to better prepare principals to lead and impact change.
- Cohort models allow for powerful conversations among group members, bringing diverse experiences to the discussion.
- District partnerships appear to be beneficial to programs and districts.
- Visiting exemplar university programs could prove beneficial for leadership preparation programs (Campanotta et al., 2016, pp.16-17).

A school leader cannot simply meet licensure requirements to be effective; rather, principals must be able to “lead students to higher achievement levels” (Ash, Hodge, & Connell, 2013, p. 95). Their preparation for school leadership is essential to meeting the responsibilities of today's school leaders. Yet, the adequate preparation of principals is of frequent debate in the United States (Dodson, 2015). Consequently, there is a long-standing demand for the redesign of educational leadership programs. Since 2002, for example, the Southern Regional Education Board (SREB) highlighted universities with leading redesign efforts of principal preparation programs. The SREB (2002) reported successful programs as having a strong university-district collaboration, and a departure from a traditional model to an increased focus on specific strategies, such as problem-based learning, mentoring, and extensive, integrated field-experiences. Thus, the focus on meaningful field experiences has increased among leading preparation programs in order to showcase the role of the leader when preparing aspiring leaders. For the last decade, this focus has been captured in the literature, as well (e.g., Fry, Bottoms, & O'Neill, 2005; New York City Leadership Academy, 2015). But while the relationship between these field experiences or internships and education quality remains vague (Dodson, 2015), such redesign efforts continue to be a prominent and critical feature among the principal preparation improvement process (Davis, 2016).

Improvements for effective or innovative principal preparation programs include a coherent program of study, embedded field experiences, cohort-selection models, connections between theory and practice, strong district-university partnerships, and effective principals serving as mentors or coaches (Campanotta et al., 2016; Davis & Darling-Hammond, 2012). These improvements are essential because the course of study required in many programs, in particular, is often not reflective of the principal's job (Davis, 2016). The coursework should reflect what principals need to know under the guidance of faculty members who encompass research expertise and practitioner experiences. Indeed, Campanotta et al.'s (2016) findings on elite leadership

preparation programs affirmed that principals are better prepared for their roles when coursework integrates field experiences with research, theory, and practice.

Foundational Needs

While the current literature addresses a need for principal preparation program improvements and Nevada was well-positioned to pursue such changes, there were no particular initiatives or plans to drive the process for change within the Educational Leadership program at our institution. However, in the summer of 2015 the Associate Dean of the College of Education and the Director of Professional Learning for the local school district (Washoe County School District [WCSD]) arranged a casual lunch meeting to discuss administrator preparation. The Director of Professional Learning noted that incoming principals needed to participate in the district's principal academy to bring novice principals up to speed on current competencies required of building leaders and to understand district goals. Ultimately, the district needed to provide remediation for principals after they obtained their graduate degree from the university. From the university's perspective, this created some major concerns. Aspiring school leaders should clearly be prepared without the need for district remediation.

Moreover, a review of recent enrollment trends showed that approximately six students were being admitted to the master's program each year, which was not nearly enough to replenish the supply of administrators for a relatively large school district serving approximately 64,000 students. Also, in a general working group of graduate students in the program, one out of four students tended to state a true interest in plans to pursue the principalship. Thus, through that casual lunch conversation emerged the idea and commitment to redesign and dynamically transform the principal preparation program as a university-district collaborative.

Stakeholders

From the spark of an idea that ignited over lunch stemmed a partnership in which both entities' leaders also became committed to dynamically transforming the program. On the university end, the associate dean affirmed commitment from the dean to support the process toward change. Then, current professors were invited to join the change process. At first one senior faculty member committed to the process; however, after some deliberation, the professor decided to maintain current roles and responsibilities and not participate in the program revision. As a result, a junior faculty member who taught in the program was sought for program support and agreed to participate in the change process. On the district end, the director of professional learning assembled a team of three retired principals and a junior faculty member from the university to review state and national standards and provide a crosswalk of the current Nevada Educator Performance Framework for Administrators to those national standards. In the spring of 2016, the growing "design team" included various former school principals and current district leaders, as well as the university's junior faculty member. Upon completing a crosswalk of the national and state standards, the next was to review current course layout for standard- and curriculum-mapping.

Course Sequence Redesign

A consultant, who was a local, recently retired central office administrator from the school district, was recruited to support the course layout review and the potential standard- and curriculum-

mapping. That same fall of 2016, a full workday was organized for the design team, along with a select few mentor principals, two faculty members, and two college administrators. The day's agenda consisted of team/trust-building activities and an exercise to share hesitations, fears, and dreams about the change process. Participants reviewed the crosswalk of standards; then, in small groups, the standards were reviewed against each course and its original objectives. This provided an opportunity for standard and curriculum mapping, while comparing efforts against state licensure requirements. Four major changes occurred during this phase. First, the courses were re-sequenced to better mirror the principal's academic calendar and needs. For example, the course on data-based decision making and supervision and evaluation was scheduled for the fall semester to align with principals receiving testing results and other data outcomes, as well as to focus on the required teacher evaluation calendar. Second, a long-standing course (i.e., the Principalship) was removed from the curriculum with the understanding that every course would certainly encompass direct aspects of the principalship. Third, the removal of one course, allowed for three credits to be considered elsewhere in the program. Consequently, while the internship used to be a three-credit portion at the end of the program, this was extended to a six-credit embedded internship across each semester, including summer (one-credit internship for six semesters). Finally, as clarity was gained on the course sequence redesign (see Appendix), it was decided that each course would be co-taught with a current practicing principal (or appropriately experienced district personnel) to provide a stronger practitioner focus throughout the program.

Course and Syllabi Revision Process

To undertake the daunting task of course and syllabi revision and to incorporate a true co-teaching model, the consultant, along with the director of professional learning, faculty member and associate dean of the college, put small teams together to focus on the first two courses in the new course sequence, EL 700 Basic Principles of Education Administration and EL 703 Administration and Curriculum Improvement. Each course revision team met on many occasions for approximately 2-4 hours to review previously existing syllabi, texts, and assignments, and to consider new objectives, materials, instructional practices, and how to ensure that internship experiences supported course content. Each team collaborated using the activity, "Making Toast" (TED, 2015), to identify multiple objectives and efforts for the course and then narrow in on key themes and concepts, as well as specific needs and course objectives that directly aligned to the 2015 Professional Standards for Educational Leaders (PSEL).

This course revision process has occurred every semester with two teams working on the two subsequent semester's courses. The process began in Fall 2018 and concluded in Summer 2018. Once the course and syllabi revision teams concluded their multiple meetings of approximately 4 four hours each, two or three of the current principals on the team volunteered to co-teach the course with a current faculty member. In some instances, all principals were interested in serving as co-instructors and, literally, a drawing of names occurred to choose a co-instructor. In other instances, two principals volunteered with one focusing on the elementary level and the other focusing on the secondary level; in those cases, it was decided that both principals could rotate teaching weeks to provide elementary and secondary perspectives within the course content. Once the selection of co-instructors was made, the faculty member and co-instructors (current principals) met individually to refine the weekly lesson plans and activities related to the newly revised courses and syllabi

The Co-Teaching Model

As co-instructors revised syllabi, the junior faculty member suggested the co-teaching model occur as a hybrid, flipped classroom. Having explored with multiple course structures, the aim was that such a model could align with aspiring principals' (i.e., current teachers') schedules more cooperatively. In doing so, many of the readings and some of the course content would be offered online for half of the credit hours, and the remaining half of the credit hours would occur in a face-to-face format. A further aim of the co-teaching model was that the in-person time could more strongly allow for strategic and intentional activities to take place with a theory-to-practice perspective.

The design team agreed to use this structure within the co-teaching model. Certainly, co-teaching has typically been part of K-12 education but has only recently reached higher education (Lusk, Sayman, Solkoski, Carrero, & Chui, 2016; Morelock et al., 2017). The co-teaching used in this model represents "two or more professionals delivering substantive instruction to a diverse, or blended, group of students in a physical space" (Cook & Friend, 1995, p. 2). Consequently, all components of the course were prepared, finalized, and carried out together among the faculty member and practicing principals (co-instructors).

The Internship

As the courses and syllabi were revised, the internship experience also required revision. The internship had traditionally been as three credits taken during the final semester of the program, with the experiences determined largely by individual principal supervisors, and often in the students' own schools. Because it was determined that a one-credit internship course would occur in conjunction with each semester's coursework, individual syllabi for the internship course were created with a per-semester focus. Therefore, the syllabus for each internship experience was directly aligned with coursework and objectives during each semester.

Mentor Principals

The professional learning director, in collaboration with other district leaders, identified effective mentor principals in the school district to support students' growth in the internship and across the two-year span of the program (e.g., Spring 2017 to Fall 2018, including summer sessions). The in-person recruitment efforts included inviting 13 highly respected principals to serve as mentor principals for approximately 25 potential students in the program, and yielded 12 who accepted the honor. All principals agreed to serve as mentor principals, despite not having been offered any specific monetary compensation for their service. Upon agreement to serve as a mentor principal, the mentor cohort participated in a one-day professional learning session to familiarize principals with the 2015 PSEL, the course and syllabi revisions, and overall purpose of the program redesign. Three additional support sessions occur with mentor principals across the span of the program and are led by the consultant and district's director of professional learning. These professional learning sessions ensure that fidelity and consistency exist among students' internship experiences, while also sustaining meaningful and embedded internship experiences that are aligned with each semester's course content.

To augment the meaningful internship experiences for students, the program requires that three substitute teacher days occur with the mentor principal's school each semester. This is essential, as the mentor principals are not located at the students' current school settings. As a result, students are exposed to a school setting different from their own and within a different educational level (e.g., teacher's own elementary school versus mentor principal's high school). To enhance the focus on the internship, a supervisor guides the students through the process, while also directly collaborating with all mentor principals. The internship supervisor supports and problem solves with students and mentor principals to strengthen the experience for everyone involved, ensure that experiences are aligned with coursework, and provide feedback to students regarding their learning reflections.

Funding

The involvement of individuals in the dynamic transformation of the principal preparation program, Nevada Leads, occurred in a synergistic manner. While the idea for the program redesign emerged over a casual lunch meeting, each subsequent planning meeting took place with specific intent to change the program. The initial efforts for the redesign occurred without any funding support. However, in the summer of 2016, the associate dean, junior faculty member, director of professional learning at the district, and the consultant collaborated to submit an application for the state department of education's Great Teaching and Leading Fund, to support the desired program changes. The funding was approved at approximately \$127,000 for one year and included financial support to: (a) hire co-instructors with Letters of Appointment for the program, (b) pay for \$500 in textbooks for each aspiring principal in the program, (c) provide a \$560 stipend for individuals involved in the course and syllabi revision process, (d) continue contracting with an educational leadership consultant during the change process, and (e) provide each student with the opportunity to attend a national educational leadership conference as a cohort. During their respective first semesters, both Cohorts I and II, along with key members of the design team, attended the annual ASCD Conference, formerly the Association for Supervision and Curriculum Development, as a kick-off in the leadership journey.

In the summer of 2017, another proposal was submitted to the state, which was funded for two years (through June 30, 2019), with approximately \$248,000 per year. The additional grant request as compared to the prior year, included \$1,000 stipends for the mentor principals, travel funds to disseminate program changes and related research, a second consultant to serve as a part-time university-district liaison to support ongoing planning needs for the program revision and candidate recruitment, and a faculty member overload contract for research time to focus on data collection and program research. Ultimately, with just a few visionary individuals involved, a small amount of financial support from the state, and an undying commitment to change the program in order to develop high-quality school principals, Nevada Leads was born. In the fall of 2018, the first cohort of 25 aspiring principals will graduate from Nevada Leads, followed by second cohort of 20 aspiring principals in the fall of 2019.

The Culminating Experience

The final component of the program that students will complete before graduating from Nevada Leads will be the culminating experience and a one-credit comprehensive exam. The exam will include the commonly known Praxis exam, *Educational Leadership: Administration and*

Supervision (5411), and the culminating experience will include several activities to further assess students' knowledge and skills related to each of the PSEL as a final stage of program completion. The culminating experience was developed by core design team (four individuals, including the WCSD's director of professional learning, the two consultants, the associate dean of the college, and the junior faculty member) over approximately 10 planning meetings that consisted of 3-hour sessions.

The team utilized the well-known *Understanding by Design* (Wiggins & McTighe, 2005) strategy of backwards planning by first identifying expected outcomes and their alignment with the 2015 PSEL and holistic program expectations and experiences. The next step was to brainstorm various activities that would meet the intended outcomes, address the standards, provide a unique modality, and be logistically possible to use to provide feedback to students, reasonably assess, and carry out effectively with minimal costs.

The team narrowed the list down to seven activities. Two of the activities will occur over the entire semester and include student reflections and an exit interview with their mentor principal. The five remaining activities will occur over a culminating experience day, and will include: (a) viewing a teacher's lesson and writing formative evaluation feedback; (b) providing a 30-minute presentation focused on a 90-day entry plan based on data analysis of a local school profile; (c) a writing activity with various scenarios presented that require differentiated responses; (d) a job interview with six interview questions from a panel of current school leaders and human resource representatives; (e) and an in-basket activity in which candidates will prioritize various school circumstances, provide a brief justification for their order, and provide extended explanations for two prioritized scenarios.

Throughout the culminating experience, students will rotate among activities and receive written and oral feedback from mentor principals and other educational leadership experts selected to review and assess students' progress using rubrics aligned to the 2015 PSEL. Mentor principals and participants will be provided professional learning specifically focused on the culminating experience activities to adequately assess and evaluate students in a way that is calibrated across activities and validated via a rubric for each activity. This culminating experience will serve as a rigorous opportunity to provide students with specific, timely, and meaningful feedback prior to concluding their program, while also celebrating accomplishments and program completion at the conclusion of the day's event.

Recommendations

The dynamic transformation of a principal preparation program with a university-district collaborative has served as a tremendous opportunity to better prepare aspiring school leaders for the current demands of the principalship, which in turn, is anticipated to strengthen K-12 students' academic achievement. This transformation is important, particularly as it has become increasingly "imperative that universities establish exemplary preparation programs that cultivate principals who feel prepared and who demonstrate competency" (Figueiredo-Brown, Ringler, & James, 2015, p. 37). This often leads to the establishment of district partnerships; Stearns and Margulus (2013) addressed the importance of partnerships but highlighted the need for professors to immerse themselves in districts system, remain flexible in understanding that the needs of educators must be met through curricular revisions, and be willing to build relationships, and use a team approach. Certainly, the Nevada Leads transformation faced a number of triumphs and challenges with the

partnership and change process that can also be useful for ongoing and future principal preparation program redesign efforts.

Several recommendations can be derived from the leadership program transformation. Primarily, the team leading the charge does not need to be large. In this case, approximately three to four individuals were involved in each key aspect of the dynamic transformation. What is necessary, however, is for each individual to have a true commitment to creating change for improvement. Also helpful is having people on the team who have sufficient authority to enact change. Both college-level and district-level administrators helped to ignite the change process, and demonstrated an ongoing commitment to the program.

Next, transparent communication is essential. For this process, daily communication has occurred among the leading change agents, along with frequent meetings to address specific purposes and needs. Along with that communication, a mutual willingness to change is critical. While the university's college has created a clear commitment to change, the district has also done so by recruiting mentor principals and co-instructors, while also re-imagining how their own principal academy (previously created to "remediate") will evolve to complement the skills and knowledge the students already gained through their six semesters in Nevada Leads. Indeed, school leaders have preferred district's job-embedded learned experiences over university preparation (Johnson, 2016). The district's support in recruiting and establishing mentor principals across the entire program experience has also been vital to the dynamic transformation. This is particularly noteworthy because aspiring principals want more time and interaction with mentor principals in order to improve their practice (Gray & Lewis, 2013).

Lastly, funding sources do not need to be exhaustive to enact change. For this dynamic transformation, its beginning occurred with no extra monetary support. The first set of state funding provided resources to jump-start the process for change and develop momentum. The ongoing funds helped to strengthen the program's sustainability, especially by providing stipends for mentor principals, funding to hire co-instructors, and financial support to have each candidate attend a leadership conference.

Each of the aforementioned recommendations has served to positively impact the dynamic transformation, but there is also much that has been learned through challenges experienced in the process. To begin, the time to plan and carry out design efforts has been incredibly challenging, particularly because the associate dean, faculty member, and director of professional learning at the district took the role of program redesign as an additional responsibility to existing work demands. In addition, while time for professional learning is provided for mentor principals, the internship supervisor must still work closely with students and mentor principals to problem-solve and ensure that fidelity across the internship experiences is consistent for each student. Furthermore, co-instructors, in most cases, need to further develop the unique skills involved with co-teaching a graduate-level class in a higher education setting, which requires increased support and guidance from the faculty co-instructor. The relationship between the faculty member and co-instructing principals must be trustworthy and fully collaborative to be effective. Finally, varying calendar schedules between the district and university and among schools within the district lead to challenging decisions about course offerings and times, especially during the summer months, which require students to take coursework together.

As students take courses and complete the program in a cohort format, the ability to gain funding to sustain the model and the program remains questionable over the long term. Moreover, the institution must still find ways to support all stakeholders and aspiring principals outside of the university-district collaborative. Consequently, the new model makes it challenging to admit

students from other urban and rural areas, as compared to those within the original university-district collaborative. However, because there is only one large school district with close geographical proximity, and because of the shared commitment of the innovators involved, the decision to first partner with this district was a logical one. Currently, efforts are underway to recruit mentors and students from other Nevada districts, as well. Cohort II, for example, includes five students and two mentors from a neighboring smaller district.

Conclusions

Innovative and successful strategies to adequately prepare all aspiring educational leaders remain paramount to the effectiveness and dynamic transformation of principal preparation programs. While only a few individuals worked to transform a traditional principal preparation program, each component focused on key aspects of effective programs. Even more, the hybrid, flipped classroom format with faculty and current principals as co-instructors is a unique and uncommon feature to this type of change effort. Therefore, as experienced in the creation of Nevada Leads, successful change is possible. But even more, change is necessary to help develop high-quality school leaders who are better prepared to support our nation's youth.

References

- Ash, R. C., Hodge, P. H., & Connell, P. H. (2013). The recruitment and selection of principals who increase student learning. *Education, 134*, 94-100.
- Campanotta, L., Simpson, P., & Newton, J. (2016). Program quality in leadership preparation programs: An assessment tool. Paper presented at the summer conference of the National Council of Professors of Educational Administration, Detroit, MI. Retrieved from <http://www.ncpeaprofessor.org/2016-detroit-conference.html>
- Cook, L., & Friend, M. (1995). Co-teaching: Guidelines for creating effective practices. *Focus on Exceptional Children, 28*, 1-16.
- Davis, J. (2016). Improving university principal preparation programs: Five themes form the field. Retrieved from <http://www.wallacefoundation.org/knowledge-center/Documents/Improving-University-Principal-PreparationPrograms.pdf>
- Davis, S. H., & Darling-Hammond, L. (2012). Innovative principal preparation programs: What works and how we know. *Planning and Changing, 43*, 22-45.
- Dodson, R. L. (2015). What makes them best? An analysis of the relationship between state and education quality and principal preparation practices. *International Journal of Education Policy and Leadership, 10*, 1-21. doi: <https://doi.org/10.22230/ijep.2015v10n7a634>
- Figueiredo-Brown, R., Ringler, M. C., & James, M. (2015). Strengthening a principal preparation internship by focusing on diversity issues. *International Journal of Educational Leadership Preparation, 10*(2), 36-52.
- Fry, B., Bottoms, G., & O'Neill, K. (2005). *The principal internship: How can we get it right?* Retrieved from <http://www.wallacefoundation.org/knowledge-center/Documents/Principal-Internship-Get-it-Right.pdf>
- Gray, D. L., & Lewis, J. P. (2013). Lessons learned in preparing principals to become instructional leaders. *International Journal of Educational Leadership Preparation, 8*(1), 140-143.
- Johnson, A. D. (2016). Principal perceptions of the effectiveness of university educational leadership preparation and professional learning. *International Journal of Educational Leadership Preparation, 11*(1), 14-30.
- Loewenberg, A. (2016). *Why Elementary School Principals Matter*. Washington, DC: New America Foundation.
- Lusk, M., Sayman, D., Zolkoski, S., Carrero, K., & Chui, C. (2016). Playing well with others: Co-teaching in higher education. *The Journal of the Effective Schools Project, 23*, 52-61.
- Morelock, J. R., Lester, M. M., Klopfer, M. D., Jardon, A. M., Mullins, R. D., Nicholas, E. L., & Alfaydi, A. S. (2017). Power, perceptions, and relationships: A model of co-teaching in higher education. *College Teaching, 65*, 182-191. doi:10.1080/87567555.2017.1336610
- New York City Leadership Academy (2015). Taking charge of principal preparation: A guide to NYC leadership academy's aspiring Principals program. Retrieved from <http://www.wallacefoundation.org/knowledge-center/Documents/Taking-Charge-of-Principal-Preparation.pdf>
- Quality Counts 2017: Report and Rankings. [Special Issue]. (2017). *Education Week, 36*(16). Retrieved from <https://www.edweek.org/ew/toc/2017/01/04/index.html?intc=EW-QC17-LFTNAV>

- Reed, C. J., & Kensler, L. A. (2010). Creating a new system for principal preparation: Reflections on efforts to transcend tradition and create new cultures. *Journal of Research on Leadership Education*, 5(12.10), 568-582.
- Southern Regional Education Board (2002). *Universities in the lead: redesigning leadership preparation for student achievement*. Retrieved from <http://www.wallacefoundation.org/knowledge-center/Documents/RedesigningLeadership-Preparation-for-Student-Achievement.pdf>
- State of Nevada Department of Education (nd). *Teacher Shortage Area Loan Forgiveness Area*. Retrieved from http://www.doe.nv.gov/Topic/Teacher_Shortage/
- Stearns, M. A., & Margulus, L. S. (2013). Answering the sustainability question: A 3 year follow-up report on a Wallace Foundation training grant program and what did participants see as important? *International Journal of Educational Leadership Preparation*, 8(1), 15-30.
- TED (2015, February 5). *Tom Wujec got a wicked problem? First, tell me how to make toast* [Video File]. Retrieved from https://www.youtube.com/watch?v=_vS_b7cJn2A
- Wahlstrom, K., Louis, K. S., Leithwood, K., & Anderson, S. E. (2010). *Investigating the links to improved student learning: Executive summary of research findings*. Retrieved from www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/Investigating-the-Links-to-Improved-Student-Learning-Executive-Summary.pdf
- Wallace Foundation (2016). *Improving university principal preparation programs: Five themes from the field*. New York: Author.
- Wiggins, G., & McTighe, J. (2005). *Understanding by Design*. Alexandria, VA: ASCD.