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Reflections on leadership preparation research and current directions

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This reflection addresses the need for research on how leadership preparation features develop candidates' leadership skills and practices, as aligned to recent research on how principals best influence student learning. It reviews the nature of leadership preparation research, the investments in preparation programs, how the field has promoted leadership preparation research, and new developments in related research. Guskey's program evaluation framework—which emphasizes evaluating the effects of professional learning on what candidates learn and do and the impact on their organizations—is useful in highlighting current shortcomings in how preparation features have been evaluated and identifying areas for further, more strategic research.

KEYWORDS

leadership development, assessment, preparation programs, principals, evaluation

1. Introduction

Recent research has drawn attention to how key leadership practices influence school quality and student learning and has underscored principals' strong influence on student performance particularly for those students who have been historically most marginalized and underserved (Hitt and Tucker, 2016; Grissom et al., 2021). Grissom et al. (2021) compared principals based on their above-and below-average ratings and found statistically significant differences in their impact on students' math and reading performance. Given the scope of a principal's effects, they concluded that principals are the single most important school-related influence on student learning. From their large-scale review of available qualitative and quantitative research studies, they identified three principal behaviors as most influential: "engaging in instructionally focused interactions with teachers...building a productive school climate...(and) managing personnel and resources strategically" (p. xv). Hitt and Tucker (2016) similarly synthesized the available research literature to identify key leadership practices. Drawing from research and theoretical literature, they identified 28 key leadership practices and organized these into five domains, which is similar to the Grissom and others' focus on engaging with staff and supporting student learning, but also emphasizes establishing a vision and engaging with external partners.

Given new insight into effective leadership and critical leadership practices, it is essential that the leadership preparation field learn more about how to translate these insights into effective curriculum and pedagogical practices that ensure the readiness of aspiring leaders. Effective preparation depends upon knowing what to teach and how to develop these skills, how to advance skills further through applied field-based experiences and how to scaffold learning coherently. Without well-designed research that investigates deeply the relationship between pedagogy, learning and subsequent leadership practice, however, understanding how and in

what ways preparation programs can effectively develop these leadership skills and candidates' potential success remains elusive.

Yet, such research has been limited historically. Available research has shown that qualitative differences in preparation content and field experience yield different outcomes in subsequent leadership practice (Orr and Orphanos, 2011; Orphanos and Orr, 2014). This research, while confirming the value of leadership preparation, relied on general measures of program characteristics and lacks detail on how these features were operationalized to yield effective leadership capabilities. What is missing in the field is evaluation research on how specific program content, field experience and program organization actually develops the readiness of aspiring leaders and their eventual success in strengthening school quality and student learning. For example, what mix of content, assignments and assessments best develop candidates' knowledge and skills and their use in subsequent leadership practice. Such evaluation research requires a longitudinal mixed methods approach to trace how specific learning experiences actually contribute to subsequent leadership practices and in what ways. But designing and conducting such research, particularly for critically needed leadership skills, has been and continues to be challenging.

The first set of challenges centers on the nature of leadership preparation research and the limits of what has been learned thus far. The second challenge centers on the need for funding for large scale research, as juxtaposed against the lack of in-depth evaluation research tied to recent public and private investments in leadership preparation, despite their aim to promote specific innovative program approaches and workforce goals. The third challenge relates to the methodological challenges of evaluating leadership preparation programs. Despite these challenges, several recent studies have tried to gauge the prevalence of quality preparation program features generally among university-based programs, as benchmarks of the field as a whole, and other smaller scale studies explore potentially innovative features and approaches showing on-going efforts.

The field needs research that can interrogate the relationship between preparation approaches and strategies and the leadership and organizational successes of program completers. Guskey's program evaluation framework is useful in clarifying how best to evaluate the relationship between preparatory experiences and outcomes (Guskey, 2000). This framework includes documenting the nature of the programmatic experience provided (understanding how it works pedagogically), assessing participants' reaction and learning through the experience, and evaluating how graduates' use their new knowledge and skills, as well as the impact on the schools and students as a result of these skills. This reflection ends on a call for more focused and strategic evaluation research, as outlined by Guskey's framework.

2. Nature of leadership preparation as a field of study

The first challenge centers on how leadership preparation became defined as a field. Only in the last 20–30 years has leadership preparation been viewed as a worthy field of study. Historically, programs had given priority to preparation in school administration, borrowing heavily from management science (Strayer, 1944; Murphy and Hallinger, 1987; Clark and Clark, 1996). In fact, there were debates about the content and approach to the preparation of school and

district leaders, including whether aspiring leaders needed training in curriculum and instructional matters and debates about initial leadership preparation internship (Douglas, 1992; Bjork and Ginsberg, 1995; McCarthy, 1999; Fink and Resnick, 2001; Frye et al., 2006). The development and subsequent revisions of national leadership standards helped to set these debates and pushed the field toward emphasizing social justice and instructional leadership and leadership for school improvement (Council of Chief State School Officers, 1996, 2008; National Policy Board for Educational Administration, 2015).

The field of leadership preparation gained its own identity in the early 2000s, concurrent with large scale study findings that school leadership matters for school improvement and students' academic progress (Leithwood and Riehl, 2005; Sebring et al., 2006; Robinson et al., 2008). With accountability policies redefining and measuring schools' effectiveness based on achievement (Spillane and Kenney, 2012), critics blamed leaders and their preparation for differences between low and high performing schools, and began to target leadership preparation as a modifiable area to improve educational outcomes (McCarthy, 2001; Herrington and Wills, 2005; Frye et al., 2006; Hess and Kelly, 2007). Despite weak research undergirding the criticisms of seemingly inappropriate preparation program content and outdated approaches (Levine, 2005; Young et al., 2005), new attention became directed at uncovering the attributes of quality leadership preparation and how preparation can influence subsequent school leader practices and their impact.

Until then, most leadership preparation research consisted of small-scale studies of single programs' designs and operations and single cohorts of students' reactions to their experiences and career aspirations (Orr, 2009). One exception was an evaluation (Leithwood et al., 1996) of the relationship between program features and leadership practices for 11 foundation-funded programs, surveying teachers of schools led by program graduates. The authors found that an instructional leadership program focus was strongly associated with the teachers' perceptions of leadership quality.

In response to the criticisms and inadequate research base, several university faculty members from around the country collaborated to study the relationship between program features and graduates' perceptions of what they learned and initial career outcomes (Orr, 2011). They designed and fielded a joint survey of their graduates for 17 programs from 13 institutions. They found that the programs had many of the recommended program features (Jackson and Kelley, 2002; Orr, 2006), but varied somewhat on content coherence, use of active learning instructional strategies (such as problem-based learning, small group work and action research) and internship quality (based on length, breadth and leadership opportunities). The strength of these features was positively associated with graduates' ratings of what they learned about leadership. Having had a challenging internship and content rich program experience was positively associated with graduates' intentions to becoming principals.

At the same time, the Wallace Foundation funded a large-scale study to identify and evaluate. Innovative leadership preparation programs using case studies and a national sample of principals (Darling-Hammond et al., 2010). This research led to a distillation of effective program features that serve as a guiding principles for the field: meaningful authentic and applied learning opportunities; curriculum focused on developing people, instruction and organization; expert mentoring and coaching; and program structures

that support collegial learning, targeted recruitment and selection (Darling-Hammond et al., 2010).

Further analysis of the survey results from this national study, showed that having completed an exemplary leadership preparation program (based on these quality content and internship experiences) was positively associated with principals reports of what leadership they learned and practiced (Orr and Orphanos, 2011). Moreover, frequent use of effective leadership practices was positively related with the principals' ratings of school improvement progress and school effectiveness climate. When controlling for the strength of program and internship quality, these results were even stronger.

An investigation of the subset of principals who had completed an exemplary leadership preparation program in this study analyzed the teachers' perceptions of their principal and their school climate (Orphanos and Orr, 2014). The study found a statistically strong relationship between innovative leadership preparation and effective principal leadership practices, and an indirect influence on teacher collaboration and job satisfaction.

Only one recent study has linked measures of preparation quality to teacher and student outcomes. Campoli and Darling-Hammond (2022) investigated the relationship between program features (as defined by prior work on quality preparation features) and teacher retention and student achievement, drawing on a survey of California elementary and middle school principals (with 0–5 years of experience) linked to state administrative data on schools. They found that overall preparation quality was statistically significantly related to teacher retention, as were program emphases on developing people and meeting diverse learners' needs. Internship quality was significantly associated with student ELA learning gains.

Taken together, these studies demonstrated the feasibility of differentiating preparation quality in programs and documenting the impact of leadership preparation on leadership and school outcomes. They also show the feasibility of evaluating program effects over time, into the field of practices and school outcomes. Nonetheless, while useful in providing direction, such research only provided a general assessment of the relationship between the leadership preparation program features and leadership outcomes, because they are based on graduates' self-reported experiences and practices, as measured by their ratings and perceptions of these. More specific understanding of how and in what ways programs actually develop specific leadership skills and capabilities cannot be determined, given this approach. It is noteworthy, that most of the studies were foundation-funded, while only one was field-initiated.

2.1. Learning from funding for leadership preparation

The accountability-driven focus on educational leadership and its preparation in the late 1990s and early 2000s, led to significant foundation and federal and state governmental investment in leadership preparation often built on recommendations of best practices and innovative approaches (Carr et al., 2003; Orr, 2006; Vanderhaar et al., 2006) and standards-setting efforts (Barnett, 2004). Five major foundation and government grant programs targeted funding for innovative approaches in leadership preparation, often with expectations for near term impact on career advancement and

school improvement. Yet, as will be illustrated, there was little research on the nature and effectiveness of these approaches, despite the opportunity and expected outcomes.

For example, from 2002 to 2013, the Broad Foundation provided \$45 million dollars in grant funds for principal development in eight urban cities, using a residency approach in public and charter schools (Broad Foundation, ND). Similarly, there was no research on the funding's impact, except to report that 80% of the graduates were school leaders two years later and studies based on individual programs (Orr and Barber, 2006; The Urban Educational Collaborative, 2010).

Next, between 2010 and 2015, the US Department of Education provided \$7.7 million in new grants and \$5.7 million in continuing grants to districts, nonprofits and universities for leadership preparation and development efforts. In all there were 41 new awards, primarily to support programs in urban districts. Despite this investment, there was no systemic study of the approaches and impact of these programs for leadership development, except for an analysis of evaluation plans and individual program evaluations (Sanzo et al., 2011).

Then, in 2014 and 2015, 5 school districts and 6 universities or nonprofit organizations received federal Turnaround School Leaders Program three-year grants (\$20.5 million) to prepare current and aspiring leaders to turnaround federally designated low-performing schools. The programs combined targeted recruitment, existing leadership courses, field-based projects and portfolios of accomplishments. Ninety percent of the participants were aspiring leaders and 43 percent were placed in turnaround schools within one year of program completion (Aladjem et al., 2018). Despite this investment, no further evaluation research exists.

In 2016, the federal approach shifted to the Teacher and School Leader Incentive Program, as part of the reauthorized Every Student Succeed Act (ESSA). This program's leadership approach focused on leadership pipeline development, educator evaluation, and creating systems to recruit and retain leaders. Between 2016 and 2021, the government made 63 awards to states, intermediaries, and local districts for a total of \$165 million dollars. An evaluation report of the 2017 grants reviewed what districts invested in, against the grant priorities. All the districts invested in workforce development (primarily on-going development investing in coaching, mentoring and induction). More than half, prioritized a teacher leader program to support other teachers. Only a few used the funds for leadership training for school leaders. Again, despite these significant investments, there was no research on the program approaches, contributions and impact.

Finally, the Wallace Foundation has supported a series of system-change efforts to improve leadership preparation. The first was its principal pipeline initiative (PPI), aimed at strengthening and linking principal preparation, development and support within six urban districts (Turnbull et al., 2013, 2016; Brown, 2019) Their initial findings emphasized the program design features for preparation, selection and evaluation, implementation experiences and challenges, and the overall impact on the districts' leadership pipelines (Gates et al., 2019). Gates et al. (2019) compared PPI district schools with newly placed principals with comparison schools and found measurable differences in student achievement outcomes and principal retention. The emphasis of the research was on the creation and use of specific systems and structures for a leadership pipeline and

less on the unique programmatic and developmental experiences that contributed to the outcomes.

In 2016, the Wallace Foundation funded seven district-university partnerships to redesign preparation programs around earlier identified quality features (Darling-Hammond et al., 2010), with the expectation that such redesign work would yield more, highly qualified leaders who are better able to, improve school outcomes. The Rand Corporation conducted a seven-year study of this University Principal Preparation Initiative (UPPI), but focused at the system level—program redesign, district-university partnerships, district support and state-level efforts. The programs were aligned to exemplary program features with an emphasis on active learning, curriculum coherence and internships that required realistic leadership activities linked to coursework. By working with districts, the programs targeted recruitment for specific applicant qualifications, gain input and perspective on the redesign work and engage in continuous improvement. At the same time, the districts developed leader tracking systems to track current and aspiring leaders (Herman et al., 2022). No evaluation report, however, explains the specifics of the redesigned programs or their relationship to expected outcomes.

Thus, despite significant financial investments in leadership preparation, little new insight has been gained from these public and private investments beyond identification of potential exemplary preparation program features and district partnerships. Thus, if using the Guskey (2000) evaluation framework, the related research is focused on process and not what graduates learned or were able to do as a result. The one exception is the Wallace Foundation's PPI initiative that documents the impact of the preparation investments on student achievement, but without insight into which investments and leadership preparation practices were most influential, and understand how and why. Moreover, much of the research produced from these efforts remains in foundation-funded reports and has not been otherwise published, making their results somewhat inaccessible. Consequently, because of the lack of research about these preparation investments and the narrow availability of the results, little has been learned from these investments. At the very least, future public and private investments in leadership preparation should include investigations of how preparatory experiences foster critical learning and subsequent leadership practices.

2.2. Research on leadership preparation

Independent of these funding initiatives, the leadership preparation field has taken steps to improve the quality of leadership preparation by elevating it as a recognized area for research and innovative development. Such efforts have yielded substantial new insights into the relationship between preparation approaches and candidate outcomes in learning and enacting effective leadership practices. Three key strategies have been instrumental: publications, collaboration and researcher initiative. These strategies have helped to push the field forward to understanding better what works, under what conditions, and with which outcomes.

In 2006, The University Council of Educational Administration (UCEA) launched a research journal—*Journal of Research on Leadership Education*—dedicated to publishing such research. Since its launch, it has produced four issues annually (with 3–5 articles per issue) for 14 years on a variety of topics including program content,

approaches, organization and outcomes for leadership preparation and development. While other publication outlets exist for leadership preparation research, this is the only outlet dedicated to such research and has been significantly instrumental in making available research accessible.

In 2009, UCEA published a research handbook that included an exhaustive review of research on all facets of leadership preparation (admissions, organization, curriculum, internships, and supports) as well as the history of the field, related policy, and evaluation findings (Young et al., 2009). A new, similar handbook was published by UCEA in 2016, providing updates on pedagogical and curricular approaches, and recent policy influences on leadership and its preparation (Young and Crow, 2016). Both reviews frame what is currently known from available research, the gaps that exist and where further research is most critical.

Current research on leadership preparation continues to be primarily reliant upon individual program studies or small-scale investigations of individual strategies, content (leadership theory, supervision, research methods, law, moral reasoning, social justice, and culturally responsive practice) and program models (masters or doctoral). Much of the research has been and continues to be challenged by the lack of comparison groups, limited consideration of controls, and measurement issues (Orr, 2009).

The one significant exception was a field-initiated research collaboration among leadership preparation program faculty, first convened through the American Educational Research Association (AERA) Learning and Teaching in Educational Leadership Special Interest Group (LTEL-SIG) and later expanded in collaboration with UCEA (Orr, 2008). Over several years, faculty from 13 leadership preparation programs developed a shared research agenda—to evaluate the comparative benefits of their programs' features on their graduates' leadership learning, dispositions, career plans, and near-term leadership outcomes. By using Guskey's (2000) evaluation framework, they co-constructed and individually fielded a follow-up survey of their graduates at their institutions, that included self-reported measures on ratings of their program experiences, what they had learned and their career intentions. Through this collaborative work, they found that most programs had the recommended program features and these were positively associated with graduates' learning in five areas of leadership, program satisfaction, and their beliefs about the principalship (Orr, 2011).

Taken together, through the published research handbooks and dedicated journal, leadership preparation has become a recognized field of research. Despite these advances, however, educational researchers still struggle to conduct research that can investigate the relationship between preparation, candidates' experiences and their leadership outcomes. Much of the research is limited to exploring the relationship between specific program features and candidates' reactions and experiences, within individual programs. The field-initiated research collaboration demonstrates how the field can overcome the limitations of program-specific research without external funding support.

2.3. Studies of the field broadly

Despite these resource and methodological limitations, a few researchers have been able to track improvements in leadership

preparation practice to determine whether and how programs may be changing in alignment with recommended features. While limited to self-reports by program chairs and current principals, these studies provide insight into the state of current leadership preparation practice.

First, [Robey and Bauer \(2013\)](#) surveyed chairs of all nationally accredited university programs about the addition of design characteristics of their programs in 2002 and 2010. They found that 75–90 percent of the program chairs reported that they already had most quality program features (as defined by research on best practices) in 2002. The most striking shifts that they found during this period were that programs reported increased use of assessment data systems, use of assessment data for program improvement, addition of on-line courses, and partnerships with school districts (which most had by 2010). Most chairs agreed or strongly agreed that their programs' field experiences had improved with increased emphasis on alignment to national leadership standards, required projects, and integration with coursework. [Robey and Bauer \(2013\)](#) concluded that universities have responded substantially to the calls for improved preparation, standards and accreditation requirements and research on quality program features.

Second and more recently, [Darling-Hammond et al. \(2023\)](#) completed a national study of principal preparation program features as reported by current principals (who likely completed their programs at least 3–5 years earlier). The authors found that over 80 percent of a national sample of surveyed principals reported having had a least minimum access to important leadership preparation content areas, but less so in areas related to teacher recruitment and retention, deeper student learning, student physical and mental support and meeting the needs of English language learners. Yet, authentic learning and field experiences were less common, with few reported having completed a field-based project, and just over half reported that they had problem-based program experiences. While the majority (77%) had internship experiences, only about half agreed that it was adequate preparation or enabled them to take on typical educational leadership responsibilities ([Darling-Hammond et al., 2023](#)). The authors noted that these patterns were slightly better than the preparation experiences surveyed principals reported ten years earlier, suggesting modest field progress in improving preparation quality.

A comparison of the results from the two studies—one of department chairs and one of principals—yields similar results on some of the common features of leadership preparation, showing that the majority of programs incorporate important content areas and support adequate or better field experience. The major differences in the two sets of findings relates to which features were investigated and field-based project experiences.

3. New directions

Given that most research that investigates how preparation develops aspiring leaders is limited to small scale studies, it is important to highlight areas of current research. Three new areas of focus have emerged in recent years, focused primarily on specific content and strategies and related learning theories. The exception is larger scale studies on assessments and their use in evaluating candidate readiness, as discussed below.

One is the pedagogy of leadership preparation and development that explores experiential learning modalities: active learning ([Cosner, 2020](#); [Honig and Honsa, 2020](#)) and simulated practice ([Staub and Bravender, 2014](#); [Gilbert, 2017](#); [DeJong and Grundmeyer, 2018](#)) Such a focus also extends to the “pedagogy” of the internship experience, in the content ([Sutton, 2019](#); [Drake, 2022](#)), in emphasis on diversity issues ([Figueiredo-Brown et al., 2015](#)), and in the means of mentoring and coaching in an internship or field-based experience ([Jamison and Clayton, 2016](#); [Thessin et al., 2020](#)). These studies look carefully at unpacking what happens inside these experiences to learn more about the substance of learning that is being created, and advocating for more extensive experiential learning as a superior modality for leadership development.

The second new area of focus is on developing equity-minded, socially just leaders as a priority for leadership preparation ([Merchant and Garza, 2015](#); [Berkovich, 2017](#); [Jones and Ringle, 2021](#)). Building on various conceptions of social justice leadership are recent investigations of pedagogical approaches to its development, through reflection ([Genao, 2021](#)) and appreciative inquiry ([Dos Santos, 2022](#)).

The third is on the assessment of leadership candidates and their readiness for initial school leader work. The two most common forms of state licensure assessment are the School Leaders Licensure Assessment (SLLA) developed by the Educational Testing Service (ETS) to assess the candidate's knowledge ([Grissom et al., 2017](#)) and as of 2018 required in 18 states and performance assessments as developed and used in a few states (e.g., California and Massachusetts) ([Orr et al., 2019](#); [Reising et al., 2019](#)). [Grissom et al. \(2017\)](#) analyzed ten years of all Tennessee SLLA test takers and found different outcomes based on the passing score rate used. While higher SLLA scores were associated with the likelihood of being hired as a school, the authors found no relationship with principal job performance ratings or job changes and could not identify program type differences.

Performance assessments appear to be more promising indicators of future leadership performance. An evaluation of those who completed Massachusetts' Performance Assessment for Leaders (PAL) (a four-part, field-based performance assessment) showed that completers of the assessment with higher passing score requirements advanced into initial leadership positions more quickly than did those with lower or no requirements. Moreover, a comparison of assistant principals licensed before and after the PAL requirement showed that those who completed PAL were more likely to advance to the principalship or be retained in their position within two years and to be rated exemplary on their educator evaluations ([Orr and Hollingworth, 2023](#)). Again, no systematic differences by preparation program type were evident.

Modest efforts exist at the program level to design and test performance assessments. [Doss et al. \(2021\)](#) investigated the relationship between performance assessment measures of four sets of principal competencies during preparation in a national intermediary program and subsequent school outcomes for those who advanced to principal positions. They found a positive association between human capital competency ratings and principals' student performance gains, and between cultural capital competency ratings and principal placement and retention within two years.

In summary, these current areas of research emphasize the importance of investigating how preparation approaches lead to improved learning and highlight the feasibility of designing independent measures of leadership readiness. Missing is the link

between preparatory experiences and valid measures of readiness. More research that unpacks what happens within preparatory experiences is needed, particularly when linked with outcomes.

4. Implications

Several implications can be drawn from these findings. First, available survey research about preparation program content and design shows that the field has moved toward enacting exemplary program features and that the greater such adherence, particularly for coherent content, active-learning pedagogy and authentic field experiences, the greater the quality leadership and school improvement results. But a gap exists between investments in innovative preparation and the need for systematic and large-scale evaluation of results that unpacks how preparatory content and experiences influences learning and leadership skill development. Second, there continues to be considerable scholarly interest in innovative practices, as illustrated by the studies noted. But most of the focused evaluation research is of small-scale endeavors. Federal and foundation funding that invests in large scale efforts does not sufficiently evaluate their impact on the leaders that are being prepared or the schools these leaders serve. Ideally, future public and private investments would incorporate Guskey's (2000) framework to provide more in-depth evidence of how preparatory features functions, what is learned and what leaders are able to apply in practice. Recent developments in standardized leadership performance assessments expands ways in which the effects of program approaches can be evaluated in the near term, particularly against independent assessments.

More is needed, however, to research more finely how and in what ways innovative approaches positively impact graduates' leadership practices and the school results their work yields. In the absence of public and private funding, perhaps it is time for programs to engage collaboratively again to co-construct an evaluation of their innovative approaches and outcomes, adopting shared measures and methods,

aligned to Guskey's (2000) framework. Such collaborative research would enable scaling up inquiry to better understand how quality leadership preparation, through rigorous and strategic program content, pedagogy, field experience and assessment can and does improve leaders' capacity to improve student learning outcomes, particularly for more equitable and just schooling.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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