Redesigning University Principal Preparation Programs

A Systemic Approach for Change and Sustainability

FULL REPORT

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About This Report

This report shares lessons learned from redesigning university principal preparation programs. From 2016 to 2021, seven university principal preparation programs, with their district and state partners, fundamentally reshaped their principal preparation programs under The Wallace Foundation's University Principal Preparation Initiative (UPPI). The RAND Corporation conducted a study of UPPI. Initial implementation findings are reported in *Launching a Redesign of University Principal Preparation Programs: Partners Collaborate for Change* (Wang et al., 2018; www.rand.org/t/RR2612), and findings on state-level change are reported in *Using State-Level Policy Levers to Promote Principal Quality: Lessons from Seven States Partnering with Principal Preparation Programs and Districts* (Gates, Woo, et al., 2020; www.rand.org/t/RRA413-1). Final findings are reported in a series of five reports:

- three reports targeting specific audiences:
  - principal preparation programs: *Collaborating on University Principal Preparation Program Redesign: A Summary of Findings for University Principal Preparation Program Providers* (Herman, Wang, and Gates, forthcoming)
  - school districts: *District Partnerships with University Principal Preparation Programs: A Summary of Findings for School District Leaders* (Wang, Gates, and Herman, forthcoming)
  - state education organizations: *State Partnerships with University Principal Preparation Programs: A Summary of Findings for State Policymakers* (Gates, Herman, and Wang, forthcoming)

- a report in brief reporting findings for a range of readers: *Redesigning University Principal Preparation Programs: A Systemic Approach for Change and Sustainability—Report in Brief* (Herman, Woo, et al., 2022; www.rand.org/t/RRA413-4)

- and this full report. This full report is primarily intended as a secondary resource for readers who would like more detail about the study's findings and methods.

This study was undertaken by RAND Education and Labor, a division of the RAND Corporation that conducts research on early childhood through postsecondary education programs, workforce development, and programs and policies affecting workers, entrepreneurship, and financial literacy and decisionmaking. The study was commissioned by The Wallace Foundation, which seeks to foster equity and improvements in learning and enrichment for young people and in the arts for everyone.

More information about RAND can be found at www.rand.org. Questions about this report should be directed to bherman@rand.org, and questions about RAND Education and Labor should be directed to educationandlabor@rand.org.

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University Principal Preparation Programs: A Systemic Approach for Change and
Sustainability—INSPIRE Data
(Tiffany Berglund, Jonathan Schweig, and Rebecca Herman, www.rand.org/t/RRA413-3)

Boxes

1. Introduction

The job of the school principal has become much more complex and demanding over the past several decades (Tintoré et al., 2020). Principals' roles as instructional leaders have grown more important over time. Principals must know how to meet the needs of diverse learners in an increasingly diverse population and address technology in schools (Farley, Childs, and Johnson, 2019; Richardson et al., 2016; Riehl, 2000). More than just managers, principals have become change agents, driven in part by the publication of *A Nation at Risk* (National Committee on Excellence in Education, 1983) and the site-based management movement in the 1980s (Fullan, 2001; Goodwin, Cunningham, and Eagle, 2005; Tintoré et al., 2020). Federal policy under the two most recent reauthorizations of the Elementary and Secondary Education Act, No Child Left Behind in 2001 and the Every Student Succeeds Act in 2015, held districts—and by extension, principals—accountable for improved student academic outcomes (Farley, Childs, and Johnson, 2019). Principals' responsibilities have extended beyond academics. Social and policy changes—such as developing equitable conditions for learning and fostering social and emotional skills—are playing out in schools, under the direction of school leaders. Despite the additional responsibilities, principals still spend much of their time on management (McBrayer et al., 2018), with additional responsibilities layered on. Goodwin, Cunningham, and Eagle (2005) frame the change in the principal's role as "an accumulation of expectations that have increased the complexity of the position" (p. 1).

The lion's share of preparing principals for these responsibilities falls on university-based principal preparation programs (PPPs; Briggs et al., 2013). Research has identified the programs with the following qualities are associated with positive principal, teacher, and student outcomes: proactive recruitment of candidates into the program; authentic learning opportunities for principal candidates; course content on developing instruction, personnel, and organizational features of the school; a cohort structure to provide collegial support; problem-based pedagogy; clinical experiences; and experienced mentors or coaches (Darling-Hammond et al., forthcoming; Darling Hammond et al., 2007; Davis and Darling-Hammond, 2012; Orr and Pounder, 2010; Perrone and Tucker, 2019). In a landmark study commissioned by The Wallace Foundation, Darling-Hammond and colleagues (2007) looked at four exemplary PPPs and four exemplary professional development (PD) programs for principals, using interviews, surveys, document analysis, and observations. This study identified the following features of high-quality programs, since supported by additional research: a coherent curriculum that integrates theory and practice through active learning, supervised clinical experiences using realistic leadership activities and linked to coursework, active recruiting and selection of high-quality principal candidates, and a cohort structure to support principal candidates. Research suggests that cohorts facilitate mentorship and formal support for candidates, as well as peer support (see Darling-

Hammond et al., 2007; Barnett et al., 2000; Browne-Ferrigno and Muth, 2001). Moreover, strong programs use cohorts as "a pedagogical tool to teach teamwork and model distributed leadership" (Darling-Hammond et al., 2007, p. 97) and help promote learning and attitude shifts (Kaagan, 1998). Darling-Hammond et al. (2007) also identified program leadership, university-district partnerships, and financial support as facilitating conditions for exemplary programs. These elements are integrated into a coherent learning experience within and beyond the program itself to build principal candidates' skills and knowledge (Darling-Hammond et al., 2007; Ikemoto, 2021; Larsen et al., 2016a, 2016b). Darling-Hammond et al.'s findings were instrumental in shaping the design of UPPI and provide context for interpreting the types of changes the UPPI programs made. There are, however, some limitations to this research base, as there are not yet rigorous impact studies confirming the impact of these practices on student outcomes.

There is not yet a full survey of how well existing PPPs exemplify these qualities, but initial research indicates that these qualities are not widespread. According to recent research, the curricula focus areas of strong preparation programs are now in use in many programs across the county; however, other features—such as clinical experiences, active pedagogy, and mentoring—are less common (Darling-Hammond et al., forthcoming; Grissom, Mitani, and Woo, 2019; Hess and Kelly, 2007; Ni et al., 2016). Principal preparation programs based in universities have room to grow (Bottoms and O'Neill, 2001, Briggs et al., 2013; Manna, 2015). Those who prepare principals, those who hire the graduates, and the graduates themselves report dissatisfaction with university-based preparation programs (Bottoms and O'Neill, 2001; Briggs et al., 2013; Manna, 2015). More than one-third of program leaders indicated that their programs did not prepare graduates well, and 80 percent of school district superintendents reported that preparation was "less than effective" on common school leader competencies (Davis, 2016). Principals themselves agreed: 89 percent felt that their program did not prepare them to cope with classroom realities (Levine, 2005). In particular, the curricula focus more on technical knowledge than key leadership skills, clinical experiences do not consistently provide a range of leadership experiences or high-quality mentoring, and programs have a history of low admissions standards (Davis, 2016; Fry, Bottoms, and O'Neill, 2005; Hess and Kelly, 2007; Levine, 2005; Sherman and Cunningham, 2006). PPPs based in universities—often structured by university-wide rules and regulations—have struggled to remain relevant.

In 2016, The Wallace Foundation set out to rethink how school principals are traditionally prepared. Seven universities and their district and state partners stepped up to the challenge. This report documents their journey and what they were able to accomplish, with the goal of helping other preparation programs, districts, and states on their own paths. This is a story not of specific programs, but of how PPPs can redesign to prepare principals for today's schools. To set this initiative in context, we first look at the place PPPs have in a larger context.

Principal preparation programs are part of a system of organizations and stakeholders involved with school leadership

Effective principals are central for improved student outcomes, and university PPPs can be instrumental in developing effective principals (Branch, Hanushek, and Rivkin, 2012; Davis, 2016; Grissom, Egalite, and Lindsay, 2021; Grissom, Kalogrides, and Loeb, 2015; Grissom, Mitani, and Woo, 2019; Leithwood, Harris, and Hopkins, 2020; Liebowitz and Porter, 2019). As of 2016, 624 universities offered PPPs in the United States, producing over 25,000 graduates (Young et al., 2018).

Not all programs are equally effective. Even well-designed programs, with the features identified by Darling-Hammond et al. (2007), are limited in their impact if their graduates are not prepared to lead schools in the specific context of their districts and states. School districts send principal candidates to the programs and employ graduates. State agencies set policy that shapes both PPPs and the work lives of the graduates. Although universities traditionally design and operate university-based PPPs alone, these programs are part of a larger system engaged in promoting principal quality. A high-quality PPP would engage with its primary clients—school districts—and state leaders to create a program that meets their needs and contexts.

Further, a PPP is an influential element of a larger path to becoming a principal. Universities can extend the impact of research-based PPPs by working with partners to integrate programs into a coherent system of preparation, one that identifies teachers with promise, operates an effective PPP, and mentors and evaluates novice and experienced principals. See Figure 1.1 for an illustration of such an integrated system.

Figure 1.1. The Principal Preparation System
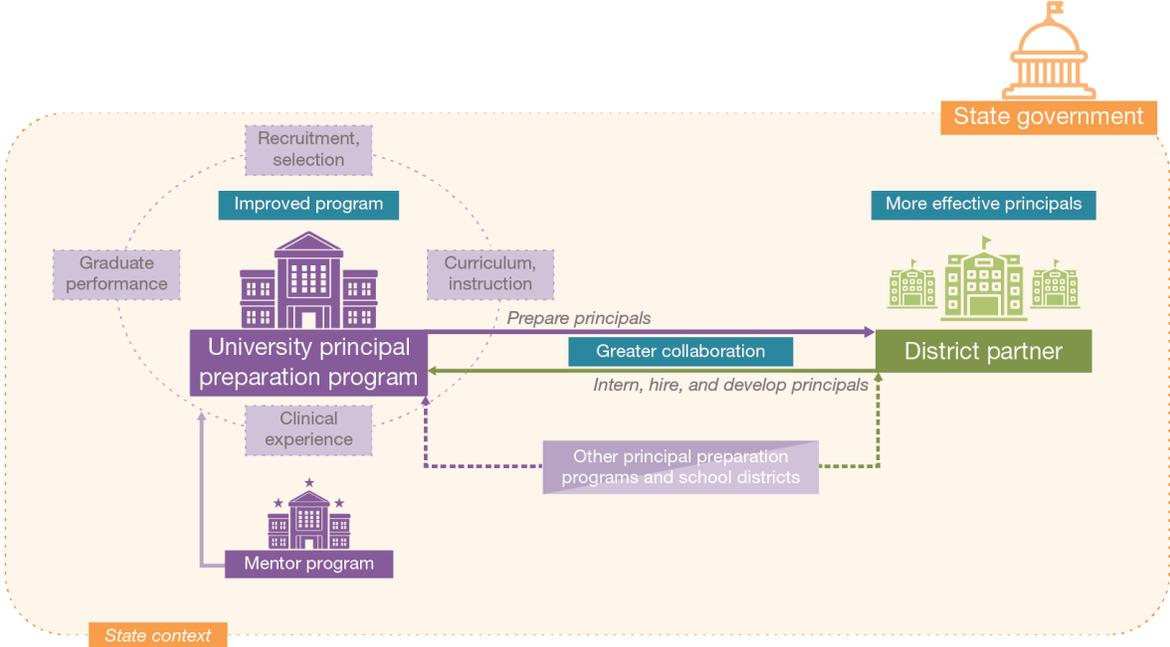
Overview of University Principal Preparation Initiative

Design features

The overarching question that The Wallace Foundation's University Principal Preparation Initiative (UPPI) seeks to address is: How can universities—in partnership with high-need districts, state agency leaders, and with the support of mentor programs that have already been through a redesign—improve PPPs to reflect the best available evidence? The initiative has two key design features. First, the initiative guides UPPI teams toward evidence-based practices, including those reviewed above. This means designing a comprehensive and coherent curriculum that integrates theory and practice; meaningful, well-supervised clinical experiences with opportunities to experience the real work of principals; higher standards for recruitment and performance-based assessments to guide selection; and a cohort structure that facilitates peer-to-peer support.

A second feature of UPPI is the centrality of partnerships among multiple organizations, all with a stake in developing strong principals; this reflects the idea that improving school leadership requires a systemic approach. The nature of the partnership may differ. For example, in a 2016 study of almost 100 PPP, 65 percent of University Council for Educational Administration (UCEA) programs partnered with districts on internships, but only 25 percent partnered on curriculum and program design (Anderson et al., 2018). At the grant proposal stage, each UPPI program identified district partners that would collaborate on the initiative. This partnership is critical since principal candidates will eventually seek leadership positions in school districts. Districts can provide insights into the needs and challenges of their schools and the qualifications of successful school leaders. District perspectives should also shape the curriculum and instruction of the program to be responsive to district needs, enrich field experiences, and support rigorous recruitment and selection of applicants. District commitment is also needed to support supervision and mentoring of principal candidates in the program and provide continuous feedback that supports iterative improvement of the program. One way to do so involves developing a leader tracking system (LTS)—a requirement of an explicitly funded aspect of UPPI—to support the collection and sharing of information about program participants between programs and districts. It would provide university programs information on the outcomes of program graduates (e.g., whether they have obtained an administrative position, their performance), that they can use for continuous program improvement. Recognizing that PPPs are situated with a greater policy environment, UPPI also deliberately required the engagement of a state agency partner. The goal was to stimulate state-level policy changes (e.g., on leader standards, program accreditation, principal licensure) that could broadly support systemic improvement of PPPs within the state.

Common UPPI processes and supports

As a group, the selected universities and their partners participated in a common process and had access to supports that defined UPPI. The Wallace Foundation provided structure and support for these efforts and established timelines for completion. The processes and supports included the following:

- **Quality Measures** (QM; Education Development Center, 2018). QM is a research-based program self-assessment tool and process that can be accessed as a stand-alone tool or with facilitation from the developers. QM is based on Darling-Hammond et al.'s (2007) research on exemplary principal preparation practices, and QM's rubric indicators and criteria, which describe effective practice, are linked with the Professional Standards for Education Leaders (PSEL; National Policy Board for Educational Administration, 2015). QM is designed to help PPP leaders and others assess pre-service principal training quality on six domains: candidate admissions, course content, pedagogy-andragogy, clinical practice, performance assessment, and graduate outcomes. Individuals provide ratings on each domain, then bring evidence to bear to support the ratings. The team convenes for about one and a half days (sometimes spread over multiple sittings) to review the evidence and agree on the ratings. Programs participated in QM multiple times as part of the grant.
- **Logic model development.** In the first year of UPPI, The Wallace Foundation asked each program and its partners to develop a program-specific logic model showing their vision for how the redesign features they plan under UPPI will lead to the graduates they envision.
- **Alignment to standards.** As with the logic models, The Wallace Foundation asked teams to align their program to existing national or state standards, including the PSEL.
- **Mentor programs.** At the outset of the initiative, universities and their partners selected a mentor program—a traditional or alternative PPP that has particular expertise in one or more areas that the UPPI university program is seeking to develop—to support their redesign. The scope of engagement and role of the mentor program evolved over time.
- **Technical assistance providers.** UPPI teams had access to such providers to help with specific tasks, such as facilitating standards alignment exercises and consulting on the design of the LTS.
- **Professional learning communities** (PLCs). About twice a year throughout the initiative, The Wallace Foundation hosted cross-site, cross-role PLCs as well as separate role-specific PLCs (e.g., for university-based leads, program faculty, state department representatives). At these multiday meetings, UPPI teams learned from other teams engaging in the redesign work and from invited guest speakers and experts in the area of school leadership development. They had the opportunity to further their work as a team.

Using these processes and supports, the UPPI partnerships had the flexibility to design the program components (e.g., curriculum, clinical experience) as they envisioned, applying available evidence to date about effective PPP practices to their own context.

UPPI universities and their district and state partners

The Wallace Foundation selected seven public universities from seven states to participate in UPPI beginning in the 2016–2017 school year and continuing through the 2020–2021 school year.[1] The programs were selected in part because they had begun working on redesign consistent with the UPPI design features and because they are located in states that were moving toward policies that supported improved principal development. Programs were expected to identify district partners that served a high-need population (e.g., a high proportion of students from low-income households or minority students, low-performing schools, or rural locations). Further, The Wallace Foundation sought—and achieved—a mix of grantees, so that the findings would be applicable in a variety of contexts. All seven grantees are public universities, but they vary on other features. Some are located in urban areas and some are in rural areas. Three are minority-serving institutions. Unlike prior studies, which focused on large universities and large, urban school districts, The Wallace Foundation intentionally focused on small and medium-sized universities and school districts. Once selected, UPPI programs were able to select a mentor project, from a roster of programs recommended by The Wallace Foundation, to support them on one or more aspects of the redesign.

Table 1.1 presents these institutions, along with their district, state, and mentor program partners. For details of these institutions, including baseline descriptions, please consult Appendix A of the first report on UPPI, *Launching a Redesign of University Principal Preparation Programs: Partners Collaborate for Change* (Wang et al., 2018).

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[1] The Wallace Foundation grants included a cost-sharing component, so universities absorbed more of the cost of continuing the work over the life of the grant.

Table 1.1. UPPI Universities and Partners

University	District/Consortium Partners	State Partner	Mentor Program(s)
Albany State University (ASU)	• Calhoun County • Dougherty County • Pelham City	• Georgia Professional Standards Commission[a]	• Quality-Plus Leader Academy • The Leadership Academy
Florida Atlantic University (FAU)	• Broward County • Palm Beach County • St. Lucie County	• Florida Department of Education	• University of Denver
North Carolina State University (NC State)	• Johnston County • Northeast Leadership Academy Consortium • Wake County	• North Carolina Department of Public Instruction	• University of Denver
San Diego State University (SDSU)	• Chula Vista Elementary • San Diego Unified • Sweetwater Union High	• California Commission on Teacher Credentialing	• University of Washington
University of Connecticut (UCONN)	• Hartford • Meriden • New Haven	• Connecticut State Department of Education	• University of Illinois at Chicago (UIC) • The Leadership Academy
Virginia State University (VSU)	• Henrico County • Hopewell City • Sussex County	• Virginia Department of Education	• Quality-Plus Leader Academy

Western Kentucky University (WKU)	• Green River Regional Educational Cooperative, with representation from five member districts:
	  – Bowling Green Independent
	  – Daviess County
	  – Owensboro Independent
	  – Simpson County
	  – Warren County
		• Kentucky Education Professional Standards Board	• University of Illinois at Chicago

[a] The Georgia Department of Education and the University System of Georgia also acted as informal partners by sharing learnings from UPPI across the state.

Brief overview of the study

The RAND Corporation conducted an independent study of UPPI for The Wallace Foundation. This report documents what the seven sites were able to accomplish, their key processes, and their collective lessons learned in redesigning their programs and spreading change throughout the local and state context.

Research questions

The specific research questions that guided our study are as follows:

1. **Program Changes:** To what extent and in what ways have university programs modified their principal preparation programs?

2. **Management of the Redesign Process**: How did the university-based leads—the individuals from each university leading the overall initiative at that site—manage the redesign process?
3. **Partner Engagement:** To what extent and how did partners (districts, state accrediting agencies, mentor programs) support the program change?
4. **Challenges and Mitigating Strategies:** What challenges were encountered in the program redesign process, and how were they mitigated?

Findings are organized in three sections: (1) program changes, (2) partnerships and engagement in the process of redesign, and (3) extending UPPI practices beyond grant activities.

Methods and data

A central goal of our study is to generate lessons that other university PPPs and their partners across the country can adopt or adapt as they undertake their own principal preparation system improvement efforts. As such, our analyses focused on identifying cross-site themes and patterns. Still, we also attended to the individual contexts of each program and its approach to UPPI. In this report, we feature examples from select sites to illustrate shared themes and unique approaches, identifying them accordingly. To clarify, this is not a study of specific programs; we focus on collective learnings across the seven sites. Neither is this an evaluation; it does not address the impact of the initiative on a set of outcomes (e.g., principal candidate skills or job attainment). Rather, we sought to document how seven universities and their partners redesigned PPPs and engaged in related activities to better prepare principals for today's schools. The primary goal of the study is to help other preparation programs, districts, and states on their own paths toward improving the preparation and development of principals.

In this final report on UPPI, we make use of data gathered from all formal rounds of data collection. In brief, we conducted spring and fall site visits in 2017–2019, during which we conducted interviews with the university-based lead (UL) heading the redesign effort, as well as persons leading the effort from the program, district partners, state agency partners, and mentor programs. In spring visits, we also interviewed university administrators. In spring 2017 and 2018, we conducted focus groups with program faculty, district-based mentor principals, and principal candidates to collect information about programs at baseline. The coronavirus disease 2019 (COVID-19) pandemic preempted the 2020 site visits. Instead, in spring 2020, we conducted phone or video interviews with only the UL, program leaders, district partner leads, and state partner leads. In fall 2020, we conducted a UL interview only. Finally, in spring 2021, we concluded with a full round of virtual data collection. We conducted phone/video interviews with all key informants and university administrators. We also conducted focus groups with program faculty, clinical coaches (if applicable), district-based mentor principals, and principal candidates.

In all, we completed over 630 interviews, focus groups, and observations across the seven sites (e.g., participants from the university programs, district partners, state partners, and mentor programs) from 2017 to 2021. In addition, we collected documents, such as program handbooks

and syllabi, that characterized the university program and relevant district and state policies prior to UPPI. See Table 1.2 for a summary of data collection. For more details, including a full count of data collection activities, see Appendix B. The appendix also includes the main topics addressed in our data collection protocols.

Table 1.2. Summary of Data Collection

Cycle	Interviews				Focus Groups		
	University-Based Lead of UPPI	Leads (i.e., of program, district partners, state partner, mentor program)	University Administrator	Program Faculty	Clinical Coaches	District-Based Mentors Principals	Principal Candidates
Spring 17	✓	✓	✓	✓		✓	✓
Fall 17	✓	✓					
Spring 18	✓	✓	✓	✓			✓
Fall 18	✓	✓					
Spring 19	✓	✓	✓				
Fall 19	✓	✓	✓				
Spring 20	✓	✓					
Fall 20	✓						
Spring 21	✓	✓	✓	✓	✓	✓	✓

We recorded all interviews and focus groups with permission, then coded and analyzed the transcripts in Dedoose (SocioCultural Research Consultants, 2021), a cross-platform internet application that assists with qualitative data. Analytical questions keyed to the first four primary research questions guided data analysis. For more information about data analysis, see Appendix B.

We administered the University Council for Educational Administration's (UCEA's) Initiative for Systemic Program Improvement through Research in Educational Leadership Preparation Program (INSPIRE-PP) Features Survey at two time points to all participating university programs: a *baseline* administration in spring 2019 and a *follow-up* administration in spring 2021. In order to characterize the valence of program changes under the UPPI reforms, we administered the INSPIRE-PP survey to all seven UPPI programs and to seven comparison programs that we selected within each state that were as similar as possible to the UPPI programs. We then descriptively analyzed differences in responses across these two groups and over time, identifying differences we considered substantial. We defined a substantial difference as any difference larger than 0.75 scale points or 10 percentage points. For more details on INSPIRE-survey related methods, see Appendix C.

These data are particularly well suited to answer questions about the process of change, as we closely tracked redesign activities at regular intervals throughout the grant period. Using multiple respondents also helped develop a strong picture of partnerships. We could compare different perspectives of the same topic (for example, a district leader's versus a UL's perspective of team communication) to reduce respondent bias. However, these data are not well suited to address questions of impact, because of the small number of cases (seven universities and seven comparison universities), late assessment of baseline data, and lack of random assignment to conditions.

There are some limitations to our approach. The study is framed to examine the implementation of the UPPI design features, highlighting lessons learned to inform similar initiatives. Neither the foundational research we drew on that characterized features of high-quality PPPs (e.g., Darling-Hammond et al., 2007) nor our study elicited potential negative effects of applying these design features. For example, districts that are more involved in selecting candidates can conceivably take advantage of their role to promote candidates that would not challenge their systems. And engaging district administrators in instruction could create new risks and challenges for universities and districts that may need to be navigated. For example, we do not know whether negotiating changes to university rules and regulations in order to hire different types of instructors could undermine universities' quality control measures. Neither the prior research nor our study tracks these potential unintended consequences, although of course we report them as they emerged.

Key terms

We use key terms consistent with how we used them in our report on the launch of UPPI (Wang et al., 2018). In reference to the work of the initiative, we use *partnership, site,* or *team* to refer to each of the seven multi-organization partnerships (including university program, district partners, state partner, and mentor programs) involved in UPPI. A *mentor program* supports the university in the redesign effort. We use the term *UPPI leadership team* to refer to the multi-organization team that leads UPPI activities at each site. The individual from each university leading the overall initiative at each site is the *university-based lead* (UL). Typically, there is one *lead* from each partner organization (e.g., district partner lead, state partner lead, mentor program lead). We use *program leader* to refer to faculty or other key university-based program personnel involved in the redesign work. Finally, we use the term *university administrator* to refer to the dean, provost, chancellor, or president with oversight of the program being redesigned. Throughout the report, we refer to organizations (such as "the university PPP") as shorthand to refer to the multiple respondents within those organizations whom we interviewed for this study.

With respect to components of the program and individuals involved in program implementation and delivery, we use the term *clinical experience* to refer to structured experiences to apply learnings from the program in a school environment. In this report, *clinical experience* includes what may otherwise be called field experience, practical experience,

internship, or residency. However, we recognize that there are nuances and that programs may use different terms from what we use in this report. We use the term *clinical supervisor* to denote the program staff members that oversee the principal candidates' clinical experience and *clinical coach* as those serving in a coaching role for the program. Meanwhile, *mentor principals* refers to active principals or district leaders who supervise principal candidates' clinical experience. They may or may not have a formal relationship with the PPP. In any one program, principal candidates had at least some, but not necessarily all, of these supports. Students enrolled in a PPP are *principal candidates* (or just *candidates*), whereas we refer to individuals applying to (but not yet selected or enrolled) in such a program as *applicants*. Where we use *students,* it refers to students in kindergarten through 12th grade (K–12).

Throughout the report, we use quantifiers to indicate the number of sites that engaged in a certain activity, expressed a certain idea, or discussed a certain theme. We use *few* or *some* to mean fewer than half (i.e., 1–3 of the sites), *most* to mean more than half (i.e., 4–6 of the sites), and *all* to mean all (i.e., 7 out of the 7 sites).

Organization of this report

The remainder of this report consists of five chapters:

- Chapter 2 focuses on the changes to various aspects of the UPPI programs—the recruitment and selection processes, curriculum and instruction, clinical component, and use of cohorts.
- Chapter 3 addresses how key actors within the school leadership system—namely district and state partners—collaborated with the university team to redesign the program and institutionalize the resulting changes.
- Chapter 4 highlights the influence of the program redesign effort on the larger principal preparation system of which the UPPI programs and partners are a part.
- Chapter 5 summarizes key findings and discusses attendant implications for various stakeholders interested in improving school leadership in their context, including other university-based PPP leaders, district leaders, and state policymakers.

Chapters 2–4 align with research questions 1–3, respectively. After presenting the major thematic findings within each of these chapters, we examine relevant challenges and mitigating strategies. Each chapter concludes with a discussion of whether and how the activities and findings reflect what is considered best practices—for example, as related to the design of effective PPPs or how to manage partnerships.

Following the main report, we include three appendixes. In the first, we profile the organizations participating in UPPI and provide a summary timeline of the initiative. In the second appendix, we detail research methods. The third appendix presents selected results from the two INSPIRE survey administrations. A comprehensive appendix of INSPIRE results is available online at www.rand.org/t/RRA413-3. Finally, we designed this full report as a

reference for readers interested in detailed study methods and findings. It is part of a larger set of reports intended to inform policy and practice:[2]

- three reports targeting specific audiences:

  - principal preparation programs: *Collaborating on University Principal Preparation Program Redesign: A Summary of Findings for University Principal Preparation Program Providers* (Herman, Wang, and Gates, forthcoming)
  - school districts: *District Partnerships with University Principal Preparation Programs: A Summary of Findings for School District Leaders* (Wang, Gates, and Herman, forthcoming)
  - state education organizations: *State Partnerships with University Principal Preparation Programs: A Summary of Findings for State Policymakers* (Gates, Herman, and Wang, forthcoming)

- a report in brief reporting findings for a range of readers: *Redesigning University Principal Preparation Programs: A Systemic Approach for Change and Sustainability— Report in Brief* (Herman, Woo, et al., 2022, www.rand.org/t/RRA413-4).

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[2] For readers interested in details on each site, please see the profiles in the appendixes for Wang et al. (2018) and Gates, Woo, et al. (2020). Some UPPI sites may also have site-specific publications related to UPPI that are publicly available.

2. Changes to UPPI Principal Preparation Programs

Each UPPI program began the initiative with some of the desired program elements in place and room to grow on others, as documented in the first report on UPPI (Wang et al., 2018). Some programs began UPPI with rigorous applicant selection processes in place, whereas others did not. All programs had identified fundamental course content areas (e.g., instructional leadership, organizational management, law), but most recognized that many courses were stand-alone and needed to be better integrated into a coherent whole. At baseline, most programs had already been trying to link coursework with the real work of principals by using authentic activities, inquiry learning, and performance-based assessments, or by including instructors with some degree of prior or current administrative experience; however, programs generally voiced a desire to strengthen the relationship. Initially, the clinical experiences offered by UPPI programs were mixed. Some programs offered intense, sustained clinical experiences in which the principal candidates worked in the principal role. Meanwhile, some programs required principal candidates teaching full-time to undertake their experiences in non-teaching hours, thus limiting their opportunities to engage in the real work of principalship. Finally, most but not all programs operated with a cohort structure, and some had a district-based cohort. Even so, UPPI programs sought to deepen the cohort approach.

In this chapter, we highlight the main ways in which the UPPI teams have redesigned their programs (see Figure 2.1). We focus on changes in the four aforementioned areas: recruitment and selection processes, curriculum and instruction, clinical experiences, and use of cohorts. We supplement thematic findings based on qualitative data with findings based on INSPIRE surveys and provide snapshot examples from specific programs to illustrate select findings. Following the characterization of program changes pre- and post-UPPI, we discuss challenges to the redesign effort and mitigating strategies. The chapter concludes with a summary of the major changes and a consideration of their alignment with best practices for PPP design.

Figure 2.1. The Principal Preparation System, University and District Partnership
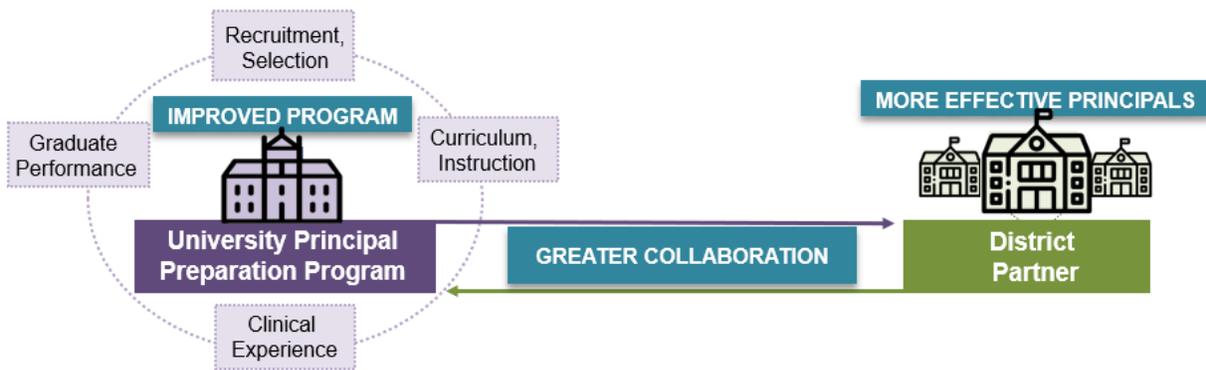
Recruitment and selection processes became more deliberate and selective

The program redesign resulted in three major shifts in the recruitment and selection processes: district engagement, targeted recruitment, and performance-based tasks. We describe these below.

Districts engaged deeply in recruitment and selection

The recruitment and selection processes shifted from a university-driven (or sometimes university-only) process to one that involved active district engagement. According to INSPIRE survey results, district involvement in nominating and selecting applicants increased in UPPI programs from 2019 to 2021. In comparison programs, district involvement in nomination but not the selection process increased during the same time period. On average, on the INSPIRE survey, UPPI programs rated district engagement in the *selection* process at 45.7 on a scale of 0 to 100 early in UPPI implementation, increasing to 66.7 (21 points) later. In the same period, comparison programs raised their rating of district engagement in selection by a smaller amount, from 26.5 to 31.75 (about 5 points). Although comparison program engagement in *nomination* rose 26 points while UPPI programs increased only 12 points, UPPI programs had higher ratings of district engagement in both *nomination and selection* both early and later in UPPI implementation.[3]

The survey finding about increased district involvement is consistent with insights we gained through interviews and focus groups. District staff reported participating in candidate recruitment and assessments events or serving as full selection committee members. Some districts led the first round of recruitment, actively encouraging promising candidates to apply. Some programs

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[3] We remind readers that our first INSPIRE survey administration was in spring 2019. UPPI had launched in spring 2016. It is possible, and in fact quite likely, that responses from UPPI programs reflected a partially redesigned program.

obtained district input by requiring that program applicants receive district endorsement. As for selection, district staff involvement included interviewing candidates or observing their interactions and responses during performance task activities (described below), rating applicants, then debriefing with the selection team.

District engagement in recruitment and selection is valuable for both the program and the districts. Both the program and districts feel assured that program participants are those identified to have great potential to be strong leaders. In nominating applicants, districts bring their perspectives on key characteristics of principals that thrive in their districts. As one UL said, "Right now, we are very confident when we get candidates because they have been vetted. . . . We trust our district partners that . . . they have a pretty good understanding of [candidates'] dispositions." District engagement also helps assure that program participants can handle both the demands of the program and their full-time role, given that teachers may require significant time away from the classroom to fulfill clinical experiences. District leaders believed that their engagement in recruitment and selection could bolster program graduates' likelihood to remain in the district. District leaders reasoned that if they tap individuals to apply to the program, the program participant may feel committed to staying in the district and taking on a leadership role there. In that respect, the district's investment in the candidate and the program will have been worthwhile for the districts. Some program participants had similar thoughts, saying they believed that the district involvement in program recruitment and selection meant they were likely to secure a position in the district upon graduation. No participants voiced concerns about district engagement in recruiting, although adverse effects are theoretically possible.

Programs targeted recruitment efforts to draw principal candidates with specific qualifications

Instead of generally recruiting applicants who meet prerequisites to the program, programs engaged in more targeted recruitment post-UPPI. As mentioned above, one primary way in which they did this was through involving districts. Programs intended for districts to identify educators in good standing at their district who would be excellent candidates, who could benefit from the rigor of the program. As one district leader said, "There was a push to be really selective in who we are endorsing . . . who we are actually promoting or supporting for the role." While programs and districts still permitted self-nominations, this process, along with perfunctory sign-offs from district leaders, has largely given way to a district-nominated process. Beyond this, with the support of districts again, programs also purposefully recruited candidates who aligned with their mission—for example, applicants who desired to be equity-driven leaders and applicants whose goal was to become principals rather than stay in teaching. One district leader remarked, "If you do a better job of recruiting those kinds of candidates, then as [they] move through the program, they come out with not only the knowledge, but they already have the fit." Multiple programs also considered the diversity of their applicant pool, wanting to

ensure that educators from historically underrepresented populations are encouraged toward school administration.

To identify people that they want to encourage to apply to the UPPI program, districts employed a range of strategies. Smaller districts tended to be aware of most of their educators with leadership ambitions. Larger districts with access to data systems and records that track information such as professional learning used these tools to identify promising applicants. One large district disseminated information about the program to all teachers through its email system in order to be inclusive; however, district leaders subsequently recommended the strongest candidates for the program. Programs themselves also strategized to recruit applicants with specific qualifications or characteristics. For example, one program identified communities where the leadership did not represent the diverse student and teacher population, and aimed to market the preparation program, especially in those communities. Another program already known for its rigor clarified the program expectations and goal to develop strong principals during information sessions. As a result, the program leaders believe that their applicants are serious about becoming a principal, whereas their competitors attract many more applicants who want the certification primarily for a pay raise, with no intention of serving as school leaders.[4]

Between 2019 and 2021, both UPPI programs and comparison programs increased the percentage of African American graduates (see Table 2.1). Because the recruitment and selection changes reported by UPPI programs may take several years to be visible in the graduating class, it is not clear yet whether efforts to improve the diversity of candidates is resulting in changes to the pool of graduates.

Table 2.1. Average Number of Graduates and Average Percentage of Graduates by Gender and Race/Ethnicity

Demographics	Pre		Post	
	UPPI	Comparison	UPPI	Comparison
Graduates (number)	32.3	40.1	29.6	32.3
Gender (percentage)				
Female	64.4	60.6	53.0	58.5
Male	35.6	39.4	47.0	41.5
Race/ethnicity (percentage)				
African American	29.4	10.3	33.2	19.0
American Indian	0.0	0.0	0.7	0.0
Asian	2.1	3.7	4.3	3.2
Latino/a	7.4	9.6	10.1	16.0
Pacific Islander	0.4	0.3	0.4	0.0
White	60.7	75.3	50.8	42.7
Other race/ethnicity[a]	–	–	–	–

[a] Numbers are not reported due to small sample size.

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[4] This concern about the career intentions of principal candidates is consistent with research that shows the oversupply of credentialed principals (Perrone and Tucker, 2019) yet the lack of qualified candidates (Shelton, 2012) or interest in becoming administrators (DeAngelis and O'Connor, 2012; Gajda and Militello, 2008). Ninety-six percent of U.S. school districts increase teachers' pay for a master's degree (Chingos, 2014).

Programs added performance-based tasks to the selection process

As alluded to above, UPPI programs reported making greater use of performance-based tasks in the application and/or selection processes to help them discern applicants' skills and dispositions and readiness for a rigorous PPP. These tasks reflect those practicing principals would undertake. UL reports on INSPIRE surveys, however, show only a small difference between UPPI and similar programs in the use of performance-based tasks such as simulations in 2021.

One UPPI program reported that, prior to UPPI, they tended to screen applicants via only an interview. Post-UPPI, in addition to the formal interview, applicants had to prepare responses to three tasks reflecting the real work of principals. One mimicked the teacher assessment process. Applicants were to watch a video excerpt of a teacher providing instruction, then prepare feedback for the teacher and role-play the conversation. The second task required candidates to bring and discuss an artifact that presents evidence that they have served effectively in a leadership role. The third task required that applicants read through a case study of an underperforming school. They had to identify goals and develop a 90-day plan for the school. Another program added a group task, during which assessors observed applicants' dispositions in interacting with others rather than their conceptual contributions. Programs also asked applicants to write in a response to a prompt, which helps gauge applicants' written communication skills. To support transparency and district partner engagement, most UPPI programs have formalized their recruitment and/or selection processes in handbooks and tools such as rubrics and other rating instruments, with some programs assessing interrater reliability (e.g., of writing samples). Some programs have begun using or intend to use the information gleaned from recruitment and selection-related performance tasks as baseline, from which they could develop professional growth plans for the accepted applicants. This, in turn, leads to differentiation of instruction and support throughout the program.

One program with a large number of applicants pointed to a key challenge in managing the scope of a rigorous, performance task-based selection process. A program leader said, "You want to make sure you get the information you need [to make the decisions with] with the fewest questions or scenarios as possible. . . . But you want it to be rich data." The program reported continuously revisiting its process and making adjustments to improve it.

Changes to curricula, assessments, and instruction resulted in greater program coherence

At each UPPI site, the redesigned curriculum is grounded in an overarching program framework. All redesigned curricula are also characterized by some combination of a more deliberate sequencing of courses to better scaffold learning, an intentional connection to clinical experiences, and greater alignment across faculty teaching the courses. Altogether, these changes resulted in greater program coherence because there were more explicit connections between courses, such that principal candidates' learning experiences build on each other as the program progresses. In the sections below, we elaborate on these themes.

Programs anchored curriculum redesign in an overarching program framework

According to documents that UPPI sites provided and interviews with ULs and program leaders prior to the redesign, the programs lacked a "structure" for their curricula. They described the courses within their curricula as "stand-alone" courses or "discrete" experiences. Without a guiding overarching framework, courses were typically disconnected from each other, resulting, at times, in redundancies across courses or, at other times, inadequate attention to certain topics, such as equity. Speaking of the curriculum prior to redesign, one UL said,

> that program was a set of siloed courses where whatever it was that was covered
> in class X really had no relationship with what was being covered in class Y. And

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so, it was more like, here are these sets of courses, you can take them in the order that you want. Once you've fulfilled them, you get your master's and you take the [state licensure assessment], and you're certified.

As part of the redesign, each site developed an overarching framework and used it to guide the redesign of its curriculum. The frameworks named the broad themes that recur throughout courses and experiences and provided sites with a set of beliefs and values around which to build their programs. For example, faculty members at one site described that their program's framework helped to communicate a central value of the program, equity, and clarified the goals of the program by visually demonstrating to candidates that equity is integrated throughout the program. At another site, the final redesigned syllabi reflected a process that ensured that the framework is integrated into the coursework, as each syllabus and every class session within the syllabus names the specific types of equity-driven leadership thinking addressed within the course. At a third site, the formative assessments aligned to their framework. Box 2.2 provides an example of how sites used their frameworks to anchor multiple aspects of their redesigned programs, including assessments and training for faculty.

Table 2.2 provides a summary of the frameworks for each UPPI site. While each site developed its frameworks independently of other teams, there are notable similarities across the frameworks. Most UPPI programs centered equity as a theme within the framework. The notions of collaboration, relationship-building, and developing others are also featured in nearly all of the UPPI programs' frameworks. Other shared themes include the use of data, reflective leadership, setting visions and cultures, and school improvement. Certain other framework components are more unique. For example, Albany State University (ASU) specifically emphasizes alignment to the regulatory context.

Table 2.2. Post-Redesign Program Frameworks

University/Name of Framework	Framework Components
ASU	- Equity - Turnaround Leadership - Data-Informed Processes and Use - Reflective Leadership - Alignment to Regulatory Context
FAU Five	- Leader of Leaders and Learning - Reflective Practitioners - Transformative Decisionmakers - Relationship Builders - Visionaries with High Expectations
NC State Heart of Great Leaders	- Equity-Focused Leadership and Building Relationships - Leads with Vision and Sets Culture - Leads Quality Teaching and Learning - Leads Innovative Systems - Leads by Empowering Others
SDSU Five Types of Equity-Driven Leadership	- Equity-Driven Systems Thinking - Equity-Driven Data and Design Thinking - Equity-Driven Culture and Climate Thinking - Equity-Driven Learnership Thinking - Equity-Driven Operational Thinking
UCONN	- Instructional Leadership - Organizational Leadership - Talent Management
VSU	- Core Values - Self-Exploration and Knowledge of Self - Cultural Responsiveness - Trauma-Informed Care - Equity, Diversity and Inclusion - Core Competencies - Instructional Leadership - Organizational Leadership - Transformational Leadership
WKU	- Equity - School Improvement - Instructional Leadership - Communication

Box 2.2. UCONN Used Its Framework to Structure Its Core Assessments

At UCONN, three main competencies inform program features: instructional leadership, talent management, and organizational systems. Courses within the curriculum are organized around these three competencies, with tasks and assessments designed to build each competency. For example, the courses on instruction and intervention as well as curriculum and assessment are contained within instructional leadership, while talent management includes supervision and performance evaluation, and organizational leadership includes culture and parent and community engagement. The tasks and deliverables associated with the core assessments, described below, are also keyed to these three competencies.

Instructional Leadership	Talent Management	Organizational Leadership
Tasks 1. Lead professional learning on Tier I instruction 2. Coach teacher(s) on Tier II/III instruction	Tasks 1. Conduct instructional supervision cycle 2. Lead School Improvement Plan/District Improvement Plan–aligned professional learning	Tasks 1. Assess family-school-community (FSC) engagement 2. Diagnose improvement priorities 3. Report on school improvement initiative
Deliverables (Artifacts) 1. Professional learning planning memo 2. Professional learning report 3. Coaching planning memo 4. Coaching report	Deliverables (Artifacts) 1. Observation calendar and pre-conference materials 2. Observation report 3. Professional development planning memo 4. Professional learning report	Deliverables (Artifacts) 1. Communication tool for key FSC assessment findings 2. Presentation of process and FSC recommendations 3. School improvement priorities memo 4. Infographic 5. School improvement report

SOURCE: University of Connecticut Administrator Preparation Program, *Student Handbook 2019–2020*, 2019.

Notably, the redesign seemed not to have changed the topics emphasized in the curriculum. As reported by the UL in the INSPIRE surveys, both prior to and after the redesign process, all UPPI sites emphasized topics such as school improvement, instructional leadership, organizational culture, family and community relations, management, ethics, and professional norms (see Table 2.3). Our analysis of course syllabi confirmed the programs did not make substantial changes to their content emphases over the course of the redesign. The major shift, then, appears to be in how UPPI programs organized or structured concepts and topics to engender greater program coherence. The next few themes illustrate this point.

Table 2.3. Emphasis of Content Areas in UPPI and Comparison Programs, According to ULs

Content areas: How much emphasis is given to the content areas below in this program's curriculum?	Pre		Post	
	UPPI Programs	Comparison Programs	UPPI Programs	Comparison Programs
Ethics and Professional Norms	NA	NA	4.43	4.43
Family and Community Relations	4.5	4.17	4.29	3.86
Instructional Leadership	4.67	4.57	4.71	4.43
Management	4.5	4.6	4	3.86
Organizational Culture	4.5	4.71	4.57	4.57
School Improvement	4.5	4.83	4.71	4.14
Supportive and Equitable Learning Environment	NA	NA	4.86	4.57

SOURCE: INSPIRE Preparation Program Features Survey; higher score means greater emphasis.

Programs used equity as a reoccurring theme to connect content across courses

As noted above, most UPPI programs included equity as a program framework component. Programs integrated equity throughout the redesigned curricula to connect the courses. ULs and program leaders from all UPPI sites described how equity manifests in numerous aspects of the program. Sites wove equity throughout the courses and syllabi, as well as in assignments, assessments, reflections, discussions, field experiences, and even assessments of candidates' dispositions. Two sites used self-assessments to help students understand where they could grow in their equity mindsets. One site developed an equity index, where candidates could rate whether they were unskilled, developing, or proficient on a set of equity-oriented dispositions and responsibilities. One faculty member explained the centrality of students' dispositions toward equity, saying,

> I think more important than anything is just sort of, and this is a dispositional thing that you can't really measure, but my aspiration is that our graduates come away with a sense of passion about school improvement. That they are on fire to challenge the system as we know it to do better by students. And that's something that transcends any one sort of sliver of the equity puzzle.

In addition to weaving equity throughout the program, some sites also created a specific course or seminar to address equity. Describing how equity is present throughout the program, one program leader stated, "It doesn't matter if it's in law, it doesn't matter if it's in the data dive, it doesn't matter if it's in crucial conversations. Equity, when that comes up and we're talking about things through the lens of equity, [we] infuse that into every class." Box 2.3 provides examples of how equity was integral to candidates' coursework.

All redesigned programs used a set course sequence to better support principal candidates' learning

Beyond revising the program framework and content focus, programs also attended to course sequencing. Prior to UPPI, interviewees at [most] sites reported that there was no set sequence to their courses at all. Instead, principal candidates could take the courses in any order, and course offerings might be driven by the needs and schedules of the faculty. In sites that lacked a cohort structure, a candidate's course sequence might be driven by when the candidate enrolled. Post-redesign, all sites had a curriculum with a deliberate sequence. Data from the INSPIRE survey confirmed this observation. ULs and program leaders felt that this shift made programs more responsive to supporting candidates' learning. A curriculum with a set course sequence allowed programs to scaffold the content, which, in the words of one program, rendered the program "both additive and iterative." Through a set sequence, courses built on each other by requiring principal candidates to naturally progress in their understanding of concepts (e.g., introduction, development, mastery) or having candidates use the knowledge and skills they have acquired in other courses or tasks throughout the program. For example, one UL stated that "making sure that coursework and knowledge and practice that was gained is used throughout the curriculum was an important piece." The UL explained that, when designing and running their PLCs for the competency assessment within one of their courses, candidates must use knowledge from their adult learning course, social justice course, and courses in instructional leadership as well as integrate the skills learned in their statistics and research methodology courses. As the interviewee summed it up, "It really allows everything to be interlocking and interwoven."

Universities aligned their programs to national standards and state requirements

Most (six out of seven) redesigned UPPI programs were aligned to national leader standards, as reported by ULs in the 2021 INSPIRE survey. This finding aligns with our analysis of the evolution of state's leadership standards, as over the course of UPPI many UPPI states adopted

or adapted the national leadership standards updated in 2015, the PSEL. (Programs had previously been aligned to an older set of leader standards.) One UPPI program instead aligned to its state's standards, as the state's standards governed the state's accreditation process, and the state had not adopted the national standards.

UPPI teams described how the redesigned curriculum reflected PSEL, state standards, and their program and district-specific standards. UL, candidates, and faculty described a more explicit focus on the standards. Not only were programs as a whole aligned to PSEL or state standards, but programs also ensured alignment to standards down to the level of course syllabi, course modules, and assignments and assessments within courses. Both faculty and candidates reported this emphasis. One faculty member explained, "The course that I'm teaching is Leading Through Organization and Management right now, so the course is fully aligned to PSEL Standard #9. So when designing that course, I was sure to go through each element of that broad standard to make sure that within that syllabus and all of the assignments that all of those elements would be addressed." Similarly, one candidate expressed that "everything that we do is tied back to those standards."

As suggested above, the standards promoted consistent foci in the courses. One UL also shared that PSEL and National Educational Leadership Preparation (NELP) shifted the focus toward a greater focus on learning systems, rather than teaching about curriculum, instruction, and assessment separately.

Programs also redesigned their programs to better align with state requirements. For example, San Diego State University (SDSU) redesigned its program to align courses to the state licensure assessment, with courses keyed to cycles within the state assessment process. Similarly, at FAU, course objectives, modules, and assessments are not only aligned to the national and state educational leadership standards but also the competencies and skills assessed by the state's licensure assessment.

Sites used a more active, collaborative, and experiential approach to pedagogy[5]

Program leaders at most sites cited the use of experiential pedagogical strategies including role-plays, simulations,[6] case studies, or fishbowls,[7] to make learning more performance-based or task-oriented and therefore more rigorous and meaningful, as opposed to more "traditional activities," such as "sit and get lectures" or a "presentation on a reading" (see Box 2.4). One UL described this shift as moving away from regurgitation of information to deeper analysis. The

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[5] *Andragogy* is the correct term for strategies to instruct adults, as noted by one of the ULs. Here and throughout, we use *pedagogy* (strategies to instruct children) because that term is commonly used in this context and will be familiar to readers.

[6] Simulations are an instructional tool that exposes principal candidates to synthetic leadership scenarios in a "choose your own adventure" format. They allow candidates to practice leadership skills in a risk-free environment.

[7] A fishbowl is a strategy for engaging students in discussion by separating students in an inner and outer circle. Students in the inner circle participate in a discussion, while students in the outer circle observe and listen to the discussion. Typically, students will take turns engaging in both roles.

UL emphasized the importance of professional learning for instructors to support the use of new instructional methods. This finding is confirmed by the results of the INSPIRE surveys, which show that UPPI programs appear to emphasize these types of learning more in 2021 than in 2019, with increases in action research and problem-based learning particularly notable. Over the same period, UPPI programs appeared to decrease their emphasis on lectures, unlike comparison programs (see Table 2.4). While many of these changes were small, and comparison program also appeared to move in the same direction for some types of instructional strategies, the consistency of the survey findings lends support to the interview findings.

> **Box 2.4. NC State's Developmental Projects Provide an Example of Collaborative, Project-Based Action Research**
>
> Working together in groups, NC State's principal residents must complete a set of developmental projects, requiring students to learn more about the developmentally appropriate practices necessary to lead schools at various levels, including the early childhood, elementary, middle school, and high school contexts. Principal residents investigate numerous aspects of their district's programming for each developmental age group, including the supports available for parents, the involvement of community agencies, the curricular scope and sequence, and academic programs used for the age group. After developing more knowledge on the physical, cognitive, and social emotional development of the target age group, in an example of action research, principal residents then conduct visits to schools, which involves classroom observations and interviews with a range of stakeholders, including teachers, students, leaders, and community stakeholders. Finally, using all of the information gathered, principal candidates reflect on the implications for their leadership practice.

Table 2.4. Use of Instructional Strategies in UPPI and Comparison Programs, According to ULs

Instructional strategies: To what extent are the following learning practices/instructional strategies part of program course work?	2019		2021	
	UPPI	Comparison	UPPI	Comparison
Action research or inquiry projects	3.14	3.86	4.43	4.43
Case studies	3.57	3.71	3.86	4.43
Collaborative activities or assignments	0	0	4.14	4.43
Field-based projects that are course-related	4.29	4.57	4.86	4.57
In-class/online discussions	4	4.71	4.67	3.43
Lectures	3.71	3.14	3	3.29
Online discussions	0	0	3	3.71
Problem-based learning	3.57	4.14	4.43	4.43
Simulations	0	0	3.57	3
Small-group activities (during class or outside class)	4	4.29	4.57	4.29

SOURCE: INSPIRE Preparation Program Features Survey.

UPPI programs shifted toward more experience-based assessments, formative assessments, and cumulative assessments over a set of courses

Interview data suggest a shift toward experienced-based assessments and cumulative assessments. This shift resulted in an assessment process that program leaders described as more

authentic, rigorous, and integrated because the assessments connected more deeply to principal candidates' courses and required the application of knowledge accumulated across courses.

Echoing findings regarding the shifts in pedagogical approach, assessments in the UPPI redesigned programs were more experience-based and authentic in that they were more connected to principals' practice and task-oriented. As one faculty member stated, although programs "use theory to drive practice," they ultimately "assess practice, not theory." Programs achieved this focus on experience-based assessments by assessing candidates on authentic activities completed within candidates' individual school context during the school year. For example, at Western Kentucky University (WKU), in the law and policy class, principal candidates examine the laws, cases, and policies through scenarios that might occur within their schools.

In addition to designing assessments such that they were more connected to practice, most UPPI programs also leveraged the use of assessments that were cumulative in that they spanned multiple courses, requiring candidates to demonstrate knowledge and skills developed across courses. One program leader said, "[Candidates] realize if I've been in an [instructional leadership] course, a [talent management] course, an [organizational leadership] course, all of that is building to the first core assessment. Everything you've learned is building to the second. . . . It's pretty powerful." Echoing earlier themes, these assessments were all project-based or experiential in that they required candidates to perform tasks to demonstrate their learning. In this way, these cumulative assessments sometimes helped to "bridge" coursework and clinical experiences because they were more focused on principal practice and the development of artifacts than simply writing a paper or taking a test. For example, for SDSU's cumulative exit exam, candidates were given a set of data and had to devise an entry plan wherein they had to outline their goals and action plan for a school based on the data presented. They then had to present their plan in a fishbowl setting, where faculty would observe the fishbowl discussion. One program leader expressed that the exam task was "much more telling of who they were" and that it was "a real authentic, important, challenging, rigorous thing for them to do."

Through the redesign process, sites also developed assessments that were formative in nature, providing feedback to candidates to help them grow. At FAU, the formative assessments are aligned to the content and objectives of their courses, and candidates now receive immediate feedback to help them prepare for their next formative assessment (see Box 2.5). Similarly, at North Carolina State University (NC State), the assessments were also more formative in that they intentionally aligned to the topics addressed in class and reflected candidates' needs and areas where they needed greater improvement. For example, students engage in role-plays for their formative assessments, and cohort directors select role-play scenarios based on the cohort's performance and students' areas of growth.

Note that INSPIRE survey data do not show a clear trend in the nature of assessments. UPPI programs increased their use of some experiential assessments (e.g., greater use of action research projects as formative assessments and less use of exams in 2021 compared with 2019),

but in others there was not substantial change (e.g., no change in the use of portfolios as summative assessments).

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Box 2.5. FAU's System of Formative Assessments Allowed Students to Obtain Individualized Feedback from FAU Leaders and District Representatives Throughout the Program

FAU's redesigned program features three formative assessments. Students take the first after completing their first semester, the second after their second semester, and the third during their fourth semester. The formative assessments are meant to provide students with an opportunity to demonstrate the knowledge and leadership competencies developed across their coursework and to receive feedback from program leaders, their district-based adjuncts, and district leadership development representatives. The formative assessment process is also designed to give program coordinators more information about the supports students need. For each formative assessment, students engage in an individual discussion with FAU leaders and district representatives. Questions revolve around activities and assignments from their courses, such as the development of their PLC plans or school improvement plans. Facilitators are provided with a set of guiding questions, keyed to FAU's framework, to lead the discussion and a rubric to document the evidence presented by students and the depth of students' learning and identify students' strengths and areas of growth. The rubric includes phrases, concepts, and language that facilitators should listen for in students' responses to the guiding questions. For example, one domain on the rubric includes the consideration of equity and social justice, and the key concepts listed on the rubric include bias and the disaggregation of data. These formative feedback assessments are also a data component used in FAU's continuous improvement program, which is a program review that takes place on a semesterly basis.

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UPPI programs placed a greater emphasis on the role of instructors to deliver rather than design courses and increased alignment across instructors

Prior to UPPI, ULs at some programs reported that instructors had substantial autonomy and tended to make decisions about their courses in isolation. Instructors were given syllabi or objectives for their courses but then had the freedom to "make the experience." This approach to course development often resulted in inconsistency across instructors. Additionally, there was little supervision of instruction, which often resulted in low fidelity of implementation, meaning instructors did not always teach the class as intended or as outlined by the course syllabus. As one UL said, "People were really just left essentially alone to do what they thought was best. We really didn't look at each other's courses."

In their redesigned programs, ULs at most sites reported a greater focus on ensuring that faculty implement courses as crafted through the redesign process; thus, the role of faculty shifted toward delivering or facilitating rather than designing courses. This was seen as especially important because the redesigned syllabi included specific assignments and readings agreed upon by the university's partners. As one program leader explained,

> Our syllabi have been vetted to make sure that they include all of the components
> that we have been discussing in terms of this redesign over the last three or four
> years and so, in terms of quality control, we have some ongoing conversations
> with our adjuncts. . . . We are developing communications and orientations with
> our adjuncts to make sure that the integrity and the bar that we set for this
> program stays at a high level.

Because of this expectation to implement the courses as redesigned, there was also a need to develop processes and mechanisms to provide more support for faculty and engender greater alignment across the teaching faculty. Most sites established a system to orient instructors to the program to allow instructors to meet and collaborate regularly. According to ULs, program leaders, and faculty, these mechanisms allowed faculty to consult each other and share best practices. Because they had greater knowledge of what was happening in the courses outside of their own, they were also able to better ensure that principal candidates were receiving a coherent learning experience across courses by building upon concepts addressed in classes.

Box 2.6. FAU Developed a Professional Development System for its Adjunct Professors to Ensure Alignment Across Instructors Within and Across District-Based Cohorts

FAU operates multiple concurrent district-based programs, with district-based sitting administrators serving as adjunct instructors and FAU-based program coordinators overseeing each program. FAU created a robust, centralized system for the professional development of its adjunct professors. FAU's adjunct professional development system comprises five components. First, FAU provides a six-hour professional development session which focuses on adult learning theory, development of adjuncts' understanding of FAU's cross-cutting themes of social justice, social emotional learning, reflective practice, change leadership, and systems thinking, and the FAU Five, or FAU's vision of what candidates should look like when they finish the program. The next component of professional development is a pre-teaching session, where program coordinators review the curriculum model and scope and sequence, syllabi, assessments, and rubrics and calibrate on grading expectations with instructors teaching the same course across different cohorts. The third and fourth component are sessions held during the semester, where instructors teaching the same course across district-based cohorts can share best practices, veteran instructors can provide mentorship to new instructors, and adjunct instructors within district-based cohorts can collaborate to address concerns regarding specific students. Finally, the last component of the professional development system convenes adjunct instructors teaching the same course across cohorts to debrief on the course and reflect on how the course can be improved for future cohorts.

UPPI programs integrated elements of virtual learning into their programs

According to INSPIRE data, both UPPI and comparison programs tended to use face-to-face instruction in 2019. During the pandemic, UPPI programs had shifted to hybrid instruction with synchronous classes, and comparison programs shifted toward online-only and relied more on asynchronous classes. According to data from the INSPIRE survey, in spring 2021 roughly one-third of UPPI courses were delivered through a hybrid format, roughly one-third were delivered face-to-face, and almost one-third were delivered only online using digital technologies. While comparison programs had a comparable focus on face-to-face delivery (38 percent of classes in comparison programs compared to 36 percent in UPPI programs), only 14 percent of courses in comparison programs were delivered through a hybrid format, and almost half of the courses in comparison programs were delivered online only. In addition to greater use of online-only delivery, comparison programs tended to use asynchronous instruction more than UPPI programs: 87 percent of online courses in comparison programs used asynchronous instruction compared to 66 percent in UPPI programs (see Table 2.5). As one UL noted,

> I think a lot of times when we say "online," most people tend to think
> asynchronous, and so that was not really the case. Our courses, our classes, and I

made it very clear to the candidates before we came in, before we started courses
and an orientation, that our classes would be a hybrid/synchronous format, which
is, so, in other words, rather than us meeting face-to-face because it was designed
to be a brick-and-mortar program, we met face-to-face through Zoom.

Table 2.5. Average Percentage of Program Courses Using In-Person and Remote Delivery in Spring 2021

Course Delivery	UPPI	Comparison
Hybrid	36%	14%
Only face-to-face	36%	38%
Only online using digital technologies	28%	48%
Other	0%	0%
Percentage of online courses that are[a]		
Synchronous	37%	13%
Asynchronous	63%	87%

SOURCE: INSPIRE Preparation Program Features Survey.

[a] The survey asked separately about delivery mechanisms (face-to-face, online only, hybrid, or other) and online synchronicity. It appears that respondents including both online and hybrid courses in responding to the question about synchronicity.

While the pandemic necessitated a shift toward more hybrid and remote formats, even before
the pandemic, most sites were already integrating online elements into their programs at varying
degrees, ranging from transitioning to a fully online format, providing an online option, or
embedding hybrid elements which blend online and in-person learning. For example, ASU
moved its courses to a fully online, asynchronous format, with the option to meet with candidates
virtually. SDSU created a separate online version of its program, with the intention that this
online program could help SDSU better serve remote communities in its catchment area (see Box
2.7). Virginia State University (VSU) and WKU both noted online or "blended" components to
their curriculum, such as the use of online platforms like Google Docs, which allow candidates
to interact online.

Box 2.7. SDSU Used the Virtual Learning Experiences Developed for the Online Version of Its Program in Its In-Person Cohorts

SDSU launched an online version of its program prior to the pandemic, in January 2020. The online program
supported the transition to remote learning for the traditional in-person cohorts. During the pandemic, the in-person
program adopted the virtual learning experiences originally developed for the online program. These included
recorded lectures, online simulations, and cognitive apprenticeships, where practicing leaders share their thinking
process about a process or topic. ULs expressed an intent to continue leveraging these virtual learning
experiences even after the return to in-person instruction, especially because these virtual "assets" allow faculty to
step into courses that have already been fully developed and focus their attention on facilitating discussion among
students. While the UL expressed that faculty could decide how to use these online assets, many faculty members
have opted to use them to "flip" the classroom by having students watch lectures before class, thus reserving class
time for discussions. Instead of having to design the courses, faculty are able to act as content experts and
facilitators or guides for students.

According to some ULs, the shift to online and hybrid learning as the result of the pandemic is likely to prompt enduring changes within sites' redesigned programs, such as greater use of online, synchronous classes, and online elements within in-person classes. ULs recognized that it would be advantageous to retain some elements of online learning even past the pandemic, especially because online learning afforded greater flexibility to candidates and instructors. As one UL stated, "We noticed that there were some strategies that we were using that a light bulb came on. I think this is something we want to continue doing and add this to our repertoire of strategies, innovative strategies, that we want to implement anyway." For example, at one site, virtual learning facilitated district partners' participation in classes, which facilitated interactions between candidates and district leadership. At another site, the UL was initially insistent on maintaining the face-to-face structure of the program, but, when the pandemic necessitated a shift toward virtual learning, candidates expressed that they found the synchronous online delivery of courses much more convenient. As a result, the UL expressed that the program will be considering a combination of synchronous online and face-to-face classes within a course.

UPPI programs increased use of clinical instructors, particularly practitioners

As demonstrated in Tables 2.6 and 2.7, UPPI sites as a whole moved toward greater involvement of practitioners in various domains of the program, including curriculum development and assessment of applicants for program admission. In addition, UPPI programs also moved toward a greater use of adjunct faculty, clinical faculty, and other practitioners as course instructors and moved away from the use of tenured or tenure-track faculty as instructors. Comparison programs also moved in that direction, but they did not do so as dramatically as the UPPI programs.[8] According to the reports of ULs through the INSPIRE survey, three of the UPPI sites reduced their use of tenure-tracked faculty, while four programs increased their use of adjunct, part-time faculty, and three programs increased their use of full-time clinical faculty. Meanwhile, none of the UPPI sites increased their use of tenure-track faculty.

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[8] This interpretation of the survey results assumes that clinical instructors have recent practitioner experience, and that tenure-track faculty are less likely to have recent practitioner experience, given the typical responsibilities and time commitments of tenure-track personnel.

Table 2.6. The Involvement of Practitioners in UPPI and Comparison Programs

Practitioners: To what extent do practitioners serve in this program?	Pre		Post	
	UPPI	Comparison	UPPI	Comparison
Advisory board	3	3.43	4	3.71
Assess students for program admissions	3	2.71	4.29	2.71
Assess students for program completion/graduation	2.43	2.86	3.86	2.29
Co-teach with a faculty member for one or more courses	3.43	2.29	3.43	2.29
Curriculum development	2.71	3.14	4.71	3.29
Other	0	1	1	0
Sole instructor for one or more courses	3.86	3.57	4.43	3.57
Supervise field work	3.71	3.86	4.29	4

Table 2.7. Composition of Instructors Within UPPI and Comparison Programs

Personnel: What proportion of the program courses are taught by the following personnel?	Pre		Post	
	UPPI	Comparison	UPPI	Comparison
Adjunct, part-time faculty/instructors	34%	24%	51%	31%
Full-time clinical faculty/instructors	18%	41%	36%	21%
Other practitioners	5%	11%	10%	22%
Tenured/tenure-track faculty	59%	67%	44%	56%

NOTE: Because some courses may be taught by teams, percentages may total more than 100%.

According to interviews with ULs at most UPPI sites, the shift in the composition of the faculty teaching the redesign program allowed candidates to draw on the on-the-ground experiences of practitioners, especially in the form of district-based adjunct faculty who tended to be sitting administrators (i.e., principals and district leaders, such as superintendents) in their districts. Sites ranged in how substantive these shifts were. One UL expressed that their redesigned program was almost entirely using such sitting administrators as instructors, which was a "100 percent reversal" from what the program did in the past. Other programs had already been using sitting administrators as instructors prior to the redesign, but the use of sitting administrators in the program shifted as the result of changes in the program. For example, at SDSU, the program's growth through the development of multiple district-based cohorts necessitated the involvement of additional district-based adjunct faculty, although district-based adjust faculty taught in the baseline program as well.

In cases where university-based faculty also acted as instructors, most UPPI sites developed staffing models to provide sufficient support to adjunct district faculty, sometimes by shifting the role of university-based faculty. At one site, university-based faculty provided supervision for district-based adjunct faculty. Other sites tasked university-based faculty with developing the "shell" for courses or acting as the professor of record while providing support for or facilitating

the involvement of sitting administrators. At FAU, this shift in staffing required the development of a new type of non-tenure-track instructor role, that of the program coordinator, whose job was to collaborate with, co-teach, and oversee the district-based adjunct faculty. At SDSU, even while the university brought on more district-based adjunct faculty to support the program's growth, university-based faculty retained the responsibility of teaching the classes most closely associated with the state's performance assessment. Because SDSU onboarded new district-based adjunct faculty to teach in its new district-based cohorts, program leaders further emphasized the importance of ensuring that university-based faculty are paired with these new adjunct faculty to ensure that "the content is being delivered and the pedagogy is being used in ways that would be equivalent if they were on campus at San Diego."

Candidates and ULs both appreciated the use of sitting administrators as instructors, as this allowed candidates' learning to become even more relevant and grounded in practice. One candidate said,

> Those have been some of the best parts when we have in-person meetings and we're hearing from assistant superintendents and principals and directors-of-instruction talking about, "Okay, so this is great in theory. And what does it look like in person? What are some things we need to be really careful of? What are things that we want to do more of? Here's my experience." And that feels very authentic.

The use of district-based adjunct faculty was especially important in programs that had district-based cohorts, as this staffing model allowed principals to gain more training in the nuances of their own districts and gain exposure to their own district leaders.

Notably, not all sites moved toward greater use of sitting administrators as instructors. Even after the redesign, university-based faculty taught the bulk of NC State's program, and instead, the program used district-based adjunct faculty as needed. Although program leaders said that they saw the value of district-based adjuncts, they expressed that they did not have as many adjunct faculty because NC State's various grants instead allowed the university to hire non-tenure-track full-time staff.

Teams redesigned clinical experiences to be more authentic, intentional, and personalized

In this section, we present thematic findings related to how the clinical component changed from baseline in 2017 to the end of our data collection in spring 2021. In Table 2.8, we provide an overview of the structure of the clinical component of UPPI programs post-redesign.

Most UPPI programs began the redesign with a clinical component in place. During the redesign, all programs increased the rigor, consistency, and practice-focus of the clinical component. These shifts reflected the programs and partner districts' realization that programs must produce graduates that are prepared to "hit the ground running on day one." Programs

achieved their redesign goals by prioritizing authentic, intentional, and personalized experiences and supports.

Note that although we present findings on the clinical component separate from the findings on coursework (i.e., the curriculum, assessments, and instruction section above), these two components, particularly for the redesigned programs, are intertwined. As discussed below, the clinical experiences build on coursework experiences, and in most programs candidates earn credits for a clinical course for completing clinical experiences. We also note that universities may use different terms to designate the clinical component, including *field experience*, *practical experience*, *internship*, or *residency*, and that there are nuances among these terms. For the purpose of this report, we use *clinical experience* broadly to refer to the program component requiring principal candidates to engage in activities in an actual school setting under the guidance of a site-based supervisor or mentor.

Table 2.8. Structure of Clinical Component of UPPI Programs Post-Redesign

	Description of Clinical Component						
	Program Duration/ Credits	**Name for Clinical Component (in program description)**	**When Clinical Component Begins and Ends in Program**	**Credits/ Required Hours**[a]	**Paid/Not**	**Concurrent with Current Position?**	**Concurrent with Program Coursework?**
ASU	1-year (summer-fall-spring) 30 credits	Clinical Experience or Clinical Practice	1st semester until end of program	11 credits 750 hours	Not paid	Candidate continues to work full-time in current position	Yes, every semester candidates take other courses as well as a clinical course
FAU	2 years (begins spring) 42 credits	Internship	3rd semester through 5th semester	9 credits	Not paid	Candidate continues to work full-time in current position	Yes, every semester candidates take other courses as well as a clinical course
NC State	2 years (begins summer) 42 credits	Residency	Begins 2nd year; year-long	18 credits of residency	Paid residency in 2nd year	Candidate is released from teaching position for residency	Yes, candidates are enrolled in a few courses on human resources and budgeting during their residencies
SDSU	1.5-year (summer-fall-spring) 35 credits (credential only; 44 for master's plus credential)	Clinical or Fieldwork Experience	Fall (2nd semester until end of program	12 credits	Not paid	Candidate continues to work full-time in current position	Yes, every semester except the first summer semester candidates take other courses as well as a clinical course

| | Description of Clinical Component | | | | | | |
	Program Duration/ Credits	Name for Clinical Component (in program description)	When Clinical Component Begins and Ends in Program	Credits/ Required Hours[a]	Paid/Not	Concurrent with Current Position?	Concurrent with Program Coursework?
UCONN	2 years (begins summer) 30 credits	Practicum: Administrative Field Experience	Fall (2nd semester until end of program	5 credits 540 hours over course of program	Not paid	Candidate continues to work full-time in current position	Yes, every semester except the first summer semester candidates take other courses as well as a clinical course
VSU	2 years (begins fall) 36 credits	Residency	Summer (semesters 5 and 6)	400 hours over course of program	Not paid	Candidate continues to work full-time in current position	400 hours total of "internships," of which 140 are embedded in coursework; remaining 260 completed during internship course
WKU	1.5 years (fall-spring-summer-fall) 30 credits	Clinical experiences	2nd semester until end of program	6 credits	Not paid	Candidate continues to work full-time in current position	Clinical experiences embedded in all courses, except first semester; candidates also earn credit for clinical course

[a] According to the Education Commission of the States (2018) and as verified by our interviewees, California, Connecticut, Florida, Kentucky, and North Carolina require that administrator preparation programs provide a clinical component; however, no hour requirement is indicated. In Georgia, Tier II programs must provide 750 hours of clinical experiences. In Virginia, 320 hours are required.

The clinical experiences and assignments became more authentic

According to INSPIRE survey results, between baseline (2019) and endline (2021), both UPPI and comparison programs increased their focus on in-depth clinical work, but only UPPI programs increased their focus on authentic work, such as problem-based, hands-on assignments using actual school data and a presentation component to culminating projects. In interviews, multiple stakeholders from most programs—including program directors, faculty, and principal candidates enrolled in UPPI programs prior to implementation of the redesigned program— described pre-redesign clinical experiences and demonstrations of learning as largely passive. For example, candidates typically spent substantial portions of their required clinical hours observing or shadowing mentor principals or attending, but not participating in, site council or school board meetings. The clinical component may have culminated in a reflection paper, but rarely in authentic artifacts of the experience. One UL characterized this as "busy work."

In contrast, while post-redesign clinical experiences still included observations, stakeholders described the experiences on the whole as more "active," "immersive," "practical," "real-world," and "performance-based." For example, instead of merely sitting in meetings, candidates had opportunities to participate on school or district committees, including being involved in teacher hiring and interviewing processes or instructional coaching. Beyond discrete tasks, most programs also required that candidates undertake a longer-term project meant to address a genuine need in the school. This typically began with collecting or accessing and analyzing existing data to conduct a needs assessment—a practice that sitting principals engage in. Working with their mentor principals, candidates then had to develop a plan for improvement. Examples of topics include considering how the school community addresses students' social and emotional learning and mental health needs, establishing student progress monitoring systems, and analyzing the equity gap. Pre-redesign, the clinical task may have ended there. Post-redesign, candidates needed to have opportunities to lead others and execute their vision. Instead of carrying out the school improvement initiative on their own, as reflective of the true work of principals, candidates were to engage a team of school staff or facilitate PD communities (PLCs) to implement their plan. In this respect, supporting teacher learning and growth was a focus of redesigned experiences. On the whole, the redesigned clinical component aimed to develop principal candidates' perspectives on school improvement and their skills in making decisions and leading others.

The clinical experiences and evaluation of candidates' performance became more intentional and consistent

In addition to becoming more authentic—meaning grounded in the real work and responsibilities of school principals—the clinical component also became more intentional and consistent in a number of ways. By intentional, we mean that programs made decisions to strengthen candidates' program experience around specific goals rather than allow the clinical work to emerge organically. With respect to placement, some programs were able to deliberately place candidates in a school that they did not currently serve in rather than allow candidates to complete the clinical component in their home school. This arrangement would provide candidates with exposure to a different context and leadership styles, which affords greater opportunities to learn and better prepares graduates for a future position in a range of settings. Also, as part of the redesign, some programs reconsidered their approach of accepting any interested sitting principal (or district leader) as a mentor. Instead, some programs worked with districts to nominate, vet, and select mentor principals who have proven to be effective leaders. Some programs have intentions to institute processes for this in the near future, acknowledging that this would entail moving the teacher to a different school.

The clinical component also became more consistent in that candidates are ensured opportunities to practice certain leadership experiences. Pre-UPPI, it was typical for candidates to receive a long list of possible experiences and be asked to complete a certain number of them

in coordination with their mentor principal. This resulted in great variation in experiences among candidates and little structure because the experiences were largely contingent on the placement context and what mentor principals were able or willing to offer. Post-redesign, programs typically required a common set of experiences, thus ensuring that all candidates had access to critical learning and leadership development opportunities. Programs deliberately selected these experiences because they aligned with state leadership standards, state assessments for principal licensure, and the program's conceptual framework or priorities. For example, candidates conducted equity audits or school climate audits as the courses addressed the topic. Candidates engaged in teacher observations when the curriculum featured theories of instructional leadership and as the teacher evaluation cycle began. This consideration of the state policy context, district needs, and program priorities reflects the interconnectedness of different stakeholder entities within the principal preparation system (as depicted in Figure 1.1).

The shift toward greater authenticity of clinical experiences also led to more intentionality and consistency in evaluating candidates' performance in these tasks. As reported by ULs and evidenced in candidate handbooks and clinical course syllabi, prior to UPPI, some programs did not formally evaluate the performance in clinical activities. Or, it was based on logging hours, checking off completion of required experiences, or submitting reflection journals. One program leader characterized clinical experiences in their pre-UPPI program as follows: "In the old program, field experiences were very much about accumulating hours. And they were very easy to grade because you look and say, 'They have their hours. Their [mentor principal] has signed off. Here are their artifacts . . . [or] half-page reflection, 100 percent.'" Post-redesign, although the clinical course or component may still be graded as pass or fail, candidates' performance itself and/or the task products or artifacts of the experiences (e.g., portfolio) are evaluated. The grading criteria and process became more rigorous and consistent. For example, clinical experience artifacts and demonstrations needed to exhibit proficiency on state standards for (novice) school leaders. Programs began or increased the use of rubrics to support this. At some sites, evaluators have opportunities to calibrate the grading of principal candidates' work products to help ensure consistency and uphold program expectations. Notably, post-UPPI, most programs delineated candidate evaluation from candidate support and mentoring. This meant that school or district-based mentor principals supported candidates' learning and signed off on completion of activities. Clinical coaches provided feedback and guidance along the way. Meanwhile, a university-based supervisor or instructor associated with the clinical component course officially evaluated performance.

Overall, the clinical component became more purposeful and intensive, and this was achieved in different ways. Depending on their starting point pre-redesign, some programs extended their clinical experience requirements or credit hours. Two programs began the clinical requirement earlier in the program (i.e., in the first semester, to be concurrent with the first set of courses, rather than following them). Other programs were able to, or elected to, achieve intentionality and rigor through carefully curating experiences and tasks, as described above,

rather than changing the structure of the program. Sometimes strengthening the program meant subtracting from it. To ensure that candidates engaged in high-leverage experiences and to emphasize the depth of experiences and engagement over quantity, some programs purposely reduced the number of clinical tasks they required or that candidates could select from. This reduction of clinical tasks reflected a recognition that just as seat time for courses does not necessarily equate with learning, simply fulfilling required clinical hours or participating in a set of disconnected experiences may not lead to a field-ready program graduate. Finally, it is important to recognize that UPPI programs collaborated with districts in designing a more intentional and consistent clinical component and garnered district support in executing it. Most programs require a formal memorandum of understanding with districts sending and supporting principal candidates. This helps to guarantee that conditions for a successful clinical component will be met. The agreement includes, for example, that district leaders will help identify qualified mentor principals, ensure mentors provide opportunities for candidates to lead and learn, provide candidates access to data required to carry out projects, and grant candidates release time from their current duties to fulfill clinical requirements.

The clinical experiences became more personalized

While UPPI programs worked toward standardization and consistency in certain aspects of the clinical component, they also worked to make sure that the experiences and supports would be personalized to candidates' needs. One way in which this personalization manifests is in the experiences candidates undertake. As mentioned above, post-redesign, some programs require a certain set of clinical experiences, but beyond these, candidates also engage in personalized field experiences. Drawing on data collected during the candidate application and selection process, candidates' personalized professional growth plans, and conversations with candidates, clinical instructors, supervisors, coaches, and other supporters proposed experiences to support candidates' leadership development and address possible "blind spots." One principal candidate reflected on this feature of the program as follows:

> I've appreciated the opportunity for those fieldwork assignments where we can tailor it. . . . That way you could choose something that maybe you felt less confident in to go apply yourself to, with the support of your [mentor] principal. . . . It would be very pointless to say [to me], "You need to go attend IEP meetings." That's something I do three times a week. That's not something that I really want to spend my time in this program practicing, whereas someone who has never been in special ed might want to go to an IEP meeting because they haven't ever had that experience. So, I think offering that individualism through the fieldwork experiences was beneficial.

A candidate at a different university had a similar perspective, saying:

> Instructionally, I am a . . . strong candidate. Behaviorally, social-emotionally, management of people is where I need more growth. And so [for] personalized field experiences, I have gravitated towards experiences [around] building relationships, interacting with teachers, partnering with the community, those

types of things because I need more experience in them. . . . We are assigned an in-school mentor that we can confer with and brainstorm possible options. And then within a couple weeks of the semester, we turn in ideas and ask questions. Our professors give us feedback on things they think . . . we might need more experience with.

Supports for clinical experiences increased, with particular emphasis on coaching

Another way in which programs achieved personalization was through restructuring, strengthening, and expanding the candidate support system. Prior to redesign, in most programs, candidates had access to university faculty (e.g., professors in the program) and a school- or district-based mentor. Post-redesign, two programs added a formal clinical supervisor or director/coordinator position and two programs added a district-based cohort coordinator. Furthermore, all but one program had a university- or district-based clinical coach, who served in a guidance and not evaluative role. One of these programs also had an executive coach unaffiliated with the university or district that provides impartial guidance (see Table 2.9).

Table 2.9. Candidate Supports Pre- and Post-Redesign

University	University-Based Clinical Supervisor/ Director		University Faculty (i.e., clinical course instructor)		Clinical Coaches		District-Based Program/Clinical Coordinator (i.e., for closed cohorts)		District-Based Mentor Principal	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
ASU	–	✓	✓	✓	–	✓	–	–	✓	✓
FAU	–	✓	✓	–	–	✓	–	✓	✓	✓
NC State	✓	✓	✓	✓	✓	✓	–	✓	✓	✓
SDSU	✓	✓	–	–	✓	✓	--	--	✓	✓
UCONN	✓	✓	✓	✓	✓	✓	–	–	✓	✓
VSU	✓	✓	✓	✓	–	✓	–	–	✓	✓
WKU	–	–	✓	✓	–	–	–	–	✓	✓

NOTE: – indicates feature not present; ✓ indicates feature is present

The increased prominence of the clinical coach role reflected a shift from a compliance or monitoring-centered approach to supervising clinical experiences to one focused on supporting candidates' individual development (see Box 2.8). ULs and program leaders at some of the sites reported that, as part of the redesign, they carefully negotiated and established a low ratio of candidates to clinical coaches, around one coach for two to six candidates, to ensure frequent touch points, enable relationship-building, and facilitate substantive coaching conversations. In focus groups, some clinical coaches characterized their role as "critical friend and thought partner." This involved listening, formulating questions to deepen candidates' thinking, and challenging their perspectives and their capacity. But beyond coaching to support candidates'

skills development, clinical coaches expressed being vested in the candidates as a whole person. They talked about being accessible (e.g., via phone or text) anytime throughout the day to counsel candidates. They developed professional caring and trusting relationships with the candidates because, as one clinical coach put it, "being a principal is a lonely job." Candidates from different programs acknowledged the multiple important roles of coaches in their leadership development journey. In a focus group, one candidate said:

> I view the coaches both a mentor and an advocate in this program: Mentor because they are highly skilled professionals or past professionals who have a wealth of knowledge to share. [Also,] they are very knowledgeable of [the program] itself. It's not that they're a . . . supervisor who's disconnected [from] the university but knows teaching. They know leadership, but they also very much know [the program], which is helpful. And then, an advocate in the sense that they will advocate for you if you're having difficulty in the program and connect you with the right people that you need to speak to.

Box 2.8. ASU's Redesigned Clinical Component is Characterized by Increased Candidate Support

Prior to redesign, ASU candidates fulfilling clinical requirements were largely supervised by a university-based research faculty member, who also evaluated candidates' performance, and an on-site mentor principal. Each faculty member supervised up to ten candidates, visiting each on-site about three times a year to observe, provide feedback, and touch base with the mentor principal.

Post-redesign, each ASU candidate has the support of a full Leadership Candidate Support Team, which is composed of the on-site mentor, ASU leadership coach, and ASU clinical director. According to the Leadership Candidate Support Team Guide, this team fulfills the following responsibilities:

- meet at least two times during each semester
- create the performance tasks to ensure that the clinical work is aligned with the Georgia Educational Leadership Standards
- examine the work of the candidate collected in a portfolio to provide feedback to support growth
- evaluate progress of the candidate and establish areas that need to be addressed
- determine whether the candidate has completed the requirements for the clinical satisfactorily and make recommendations for additional work, if necessary.

The leadership coach and clinical director roles are new. In its inaugural job posting, ASU described the Clinical Director as "the direct supervisor of leadership coaches." In addition, "the Director coordinates with faculty, leader coaches, partner school districts and candidate mentors to assure all components of clinical practice are planned, coordinated, implemented, evaluated, and revised as needed to provide the highest quality clinical experiences for candidates." Meanwhile, leadership coaches "receive training on the use of performance assessment data (qualitative and quantitative) and provide specific feedback that will assist candidates in meeting performance criteria. Leadership coaches aid in the application of theory to practice through leadership work that closely aligns to [state educational leadership standards]." Leadership coaches and on-site mentors directly support candidates' individual growth by developing learning experiences that address their areas of growth as identified by a leadership skills survey.

The touchpoints and expectations of relationship-building are not only between the clinical coaches and candidates. Rather, coaches are expected to communicate with mentor principals, liaise with course instructors, and interact with the program coordinator. In short, a key part of the role involves supporting candidates to link university coursework and theory to school-based clinical experiences and to help ensure that candidates have the resources required (e.g., access

to data) to undertake rich clinical tasks that will help them acquire professional competencies. Candidates recognized this function of coaches and coaching. One candidate said:

> I think the coaching is . . . that bridge between the coursework and the internship. I think without the coaches, I wouldn't feel like the internship was as relevant to the coursework. And being forced to reflect, and getting feedback on those reflections, and having monthly meetings have really focused my attention on certain things that the program is hoping that I would get out of this. If I didn't have that guidance, I don't think I would find that connection there.

To support the connection between courses and clinical component, between coaches and instructors, coaches in some UPPI programs drop into classes. They reported that this helped them gain a clearer sense of what topics are addressed and how in the coursework. Coaches in another program found it helpful to have course schedules and syllabi and to participate in meetings with course instructors. For example, at the start of each semester, instructors provide coaches with an orientation of the course, including tasks candidates must complete. This helps coaches anticipate the supports their coaches may require. In terms of interfacing with district- or school-based mentors, coaches participate actively in triad meetings to track candidate opportunities to learn and their progress.

Just as the role of coaches post-redesign grew in importance and intentionality, so did the role of district- or school-based mentors, according to interview data. Specifically, expectations and support for mentor principals became more intensive at most sites. Programs more explicitly articulated the requirements for being a mentor. For example, mentors must offer essential leadership opportunities and supports to principal candidates, such as allowing candidates time off to engage in clinical experiences and providing access to school data and staff for candidates to perform authentic leadership activities. Mentors must also participate actively in regular meetings with the university-based supervisor and the candidate.

To ensure that coaches and mentors are high-quality, well-prepared, and aligned with the redesigned program vision, UPPI programs made attendant changes. One program dissolved the partnership with its previous service provider, which the program regarded as lacking capacity to shift from a supervisory to coaching model and lacking rigor in selecting mentors. The program moved the responsibilities in-house, drawing on its vast network of alumni and growing district partners to recruit suitable coaches and mentors. Some programs formally trained their coaches and mentor principals to ensure alignment on coaching or mentoring approach and protocols. Most programs also provided documentation and resources to guide their work, such as handbooks and rubrics. In all, during redesign, programs strengthened their candidate support system for the clinical component.

UPPI programs strengthened the use of cohorts

On the whole, UPPI programs had experience with the cohort model prior to the redesign. As part of the work, however, programs embraced the model more fully. Multiple stakeholders in

the program, including instructors and principal candidates, recognized the benefits of progressing through the program as part of a peer group.

Although most of the programs operated a cohort model prior to UPPI, the redesign enabled all programs to broaden or deepen the cohort model

Prior to UPPI, five programs operated at least one full and closed cohort,[9] meaning that they admitted a group of principal candidates from one or more coordinating districts, and these candidates progressed through the entire program together. At baseline, some programs also ran de facto cohorts, wherein individual applicants (rather than a coordinated group of applicants) from multiple districts enter the program at the same time and progress through the program together, taking the majority of the same courses and in the same sequence. Some programs had a non-cohort option, admitting individual principal candidates at any point in the program cycle. These candidates do not typically travel through a program sequence and not with a set group of peers. Instead, they select courses from a menu of options and progress at their own pace.

During the redesign, UPPI programs shifted toward and/or expanded the use of cohorts. Post-redesign, all UPPI programs indicated on the INSPIRE survey that they used a full cohort model. Over the same time period, there was no net difference in the number of comparison sites that used the full cohort model; four sites used the full cohort model in both 2019 and 2021. As Table 2.10 shows, two programs that had not used a full, closed cohort model added such a cohort. Meanwhile, four UPPI programs that had already operated a full and closed cohort expanded the model such that additional districts or regions could be served in this way. In addition, while four UPPI programs had allowed non-cohort enrollment, none permitted this post-redesign.

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[9] Our definitions of *full cohort*, *de facto cohort,* and *non-cohort* draw on the definitions used on the INSPIRE survey. INSPIRE also delineates *partial-time cohort*, wherein students are in a defined group of individuals for some, but not all, of their courses.

Table 2.10. UPPI Programs' Use of Cohort Model Before and After Redesign

University	Pre-UPPI Full, Closed Cohort	De Facto Cohort	Non-Cohort	Post-UPPI Full, Closed Cohort	De Facto Cohort	Non-Cohort
ASU	–	–	✓	✓	✓	–
FAU	✓ (1 district-based cohort)	–	✓	✓ (3 district-based cohorts)	✓ (1)	–
NC State	✓ (1 regional cohort)	✓ (Master of School Administration)	–	✓ (4 district/regional cohorts)	✓	–
SDSU	✓ (1 district-based cohort)	✓	–	✓ (3 district-based cohorts)	✓	–
UCONN	✓ (2 district-based cohort)	✓	–	✓	✓	–
VSU	–	–	✓	✓	✓	–
WKU	✓ (1 district-based cohort)	✓	–	✓	✓	–

NOTE: – indicates feature not present; ✓ indicates feature is present

The cohort structure provides several benefits, which are recognized by program instructors, support personnel, and principal candidates

In shifting to or strengthening the cohort model, the program redesign teams intended to be more responsive to district or regional needs, strengthen program coherence, provide more systematic support for principal candidates, and facilitate camaraderie and the development of a peer support network. Our informants, including program instructors, clinical coaches, mentor principals, and principal candidates that participated in focus groups, recognized these benefits.

With a closed cohort, programs have the opportunity to work with districts to shape the program to meet specific district needs—for example, issues persistent in urban contexts or related to serving particular subgroups of students. Some UPPI programs did so. ULs and district leaders involved in these programs regarded this tailoring as useful, as it would allow principal candidates to learn information specific to their district and develop relationships with leaders from their own district. One UL said,

> Because it's a partnership program, we use district-specific professors, so they're either principals in the school district or district personnel. So [District 1] has [District 1] principals, [District 2] has [District 2] professors. Some of the nuances of those courses are very district-specific and the feedback that I've gotten from the [candidates] is that it's been wonderful because they have that connection with what they need to know in their school district and in their schools.

Similarly, program leaders described the curricula for their district-based cohorts as "100 percent . . . individualized to them." While the courses remain the same, within the courses, district leaders provide feedback on aspects of curriculum and instruction such as the readings or mode of instruction (e.g., hybrid versus fully in-person). The UL at another site identified the partnership with districts and the formation of the cohorts as "maybe the greatest accomplishment." The UL elaborated, "We now had these cohorts where we are able to collaborate on what is being taught within the university program and how it relates to the practical application within a school setting. . . . We have now a much stronger correlation."

Open or closed, the cohort structure, in general, supports the coherence of the program and, in turn, helps candidates be successful on milestone and anchor assessments and their future roles. Instructors noted that because of the cohort structure and principal candidates progressing predictably through a given sequence of courses, they could be more intentional in their instruction. Specifically, they can draw and build on background knowledge (i.e., what had been taught in preceding courses), make connections to pressing topics (i.e., what is addressed in concurrent courses), and set up future lines of inquiry (i.e., what is to come in later courses). One instructor said that the cohort structure could improve the depth of class discussions. Instructors could press the candidates in a cohort to reflect on the experiences they all ought to have had thus far in the program and build on those shared experiences. An instructor said, "Because it's a cohort model, these people have all done this together in a certain particular order. So, you expect them to continue to build their learning on top of each other and not each time is like in a vacuum."

The cohort structure also allows programs to provide more systematic support, starting with an orientation to the program. Had candidates been enrolled individually, they could conceivably start the program without a formal welcoming session. Going through the clinical component with a cohort also helps ensure the availability of supports. In terms of program finances and efficiency, programs typically bring on clinical coordinators, supervisors, and coaches to support a group of principal candidates engaged in the same phase of the program. A leader of another university program contrasted the closed- and open-cohort models, saying that there is more opportunity to actualize intended learning experiences in a cohort model because of the commitment of all involved (e.g., district central office, adjunct instructors from the district, district-based clinical coordinators).

The cohort model also helps principal candidates develop a peer support network that is likely to sustain beyond the length of the program. In the words of one candidate, the cohort model "created a leadership community from which I draw frequently." Cohort members tended to work with each other, have study groups, and help each other troubleshoot problems they encounter in their current (teaching) roles or on their clinical placement. They played the role of critical friend and morale booster for each other. One clinical faculty perceived "a sense of family" in cohorts: "They're a group of one. They take care of each other, and they are committed to everyone's success." Candidates also acknowledged that having the opportunity to

get to know others well over time and learn from others in similar and different contexts (e.g., elementary versus high school, urban versus rural) helped provide a more comprehensive picture of what school leadership entails.

Challenges and mitigating strategies

UPPI teams navigated some challenges that affected or could have affected the program redesign. Below, we highlight four challenges pertaining to recruitment, curriculum and instruction, the clinical component, and the redesign writ large. These challenges surfaced and were addressed at different points in the five-year-long initiative and reflected program- and university-level barriers, as well as the greater context in which the programs operate.

Programs were keenly aware that they were competing for high-quality candidates with other, less rigorous programs

One context-related challenge was that all programs were aware they were in competition with other PPPs serving the region. ULs perceived that the majority of the other programs were less demanding and some were less expensive, which could appeal to prospective applicants—most of whom would be completing the program while working full-time. In the case of NC State, the university further competes for state grant dollars directly against other PPPs. UPPI programs were aware they had to demonstrate the program's value. Their messaging and overall recruitment strategy had to take the context and competition into consideration.[10]

In response, UPPI programs leaned into features of the redesign—that their program was evidence-driven, involved district partners, and will provide more than a degree or certification; it will truly prepare graduates for the role of principalship. Candidates participating in our focus groups reflected that these features drew them to the program despite the intensive commitment. Specifically, candidates regarded district collaboration in the redesign as at least a tacit endorsement of it. Some candidates felt that some districts gave hiring priority to UPPI program graduates, and this would be a significant advantage. Related, candidates felt that having adjunct professors who are district and school leaders in the region provided them opportunities to network and essentially participate in year(s)-long interview processes. Other candidates were drawn to opportunities to network with alumni from the program. Finally, some programs presented data and/or anecdotal evidence on their past program graduates' success (e.g., passing rate on licensure assessments, current leadership positions held). Such information seemed to have persuaded some prospective enrollees of the value of the program. Candidates had the sense that they were making a wise investment by attending a more rigorous program.

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[10] The Wallace Foundation provided learning sessions on branding the programs. Although ULs noted the utility of these sessions, they did not connect the branding strategies to their concerns about competition in our interviews.

Programs did need to be realistic about the number of likely applicants and enrollees given the regional context. In Georgia, for example, there was temporarily a limited need for the Tier 2 educational leadership certification because the two-tiered certification system was only recently instituted in 2016; those holding prior certifications were grandfathered in and had no need for Tier 2; those aspiring to be school leaders needed to first complete Tier 1. Or, there may simply not be enough potential or qualified applicants from partner districts each year. Consequently, ASU made concerted efforts to increase the possible candidate pool by reaching outside of its geographic area. ASU also expanded its Tier 2 program to multiple states outside of Georgia and encouraged candidates from these other states to align assignments and clinical work with the context in their respective states. Also partly for this reason, NC State considered running a closed cohort every second year for select district programs.

Some faculty were reluctant to share ownership of their courses or shift courses from a theoretical to a more practical orientation

Most programs reported that some faculty members (tenure-track or adjuncts) were reluctant to share ownership of program courses. The status quo for these programs had been that each professor was in charge of developing one (or more) course(s), typically ones in their area of specialization (e.g., instructional leadership, organizational theory), and they could generally teach the course how they wanted. There was a proprietary and insular nature to the courses. In the paradigm of the redesigned program, however, multiple instructors collaboratively designed a course in line with program vision and candidates' needs. In any given semester, different instructors could teach a given course. In these ways, program content and implementation were shared and more systematic, allowing instructors to gain a better sense of what principal candidates learned throughout the program. Some faculty, however, regarded this as slighting their academic freedom and expertise in certain leadership-related topics that they prefer to teach. Related, some faculty members were hesitant to de-emphasize theory in favor of a more practice-focused approach in the courses that became a key feature of redesigned programs. These professors believed that, in principle, an advanced degree or certificate program in a higher education institution should underscore theory.

For both challenges, the programs overcame the reluctance with a range of strategies. A prominent one is making strategic staffing decisions. In some cases, programs shifted instruction responsibilities from tenure-track, research-focused faculty to adjuncts (typically sitting administrators), who were less attached to specific courses or course content, and who brought a practitioner lens to the concepts and issues at hand. (These tenure-track faculty were reassigned to teach in other master's degree or Ph.D. programs.) One program took the opportunity to release some adjuncts (i.e., not renew their contracts) who did not share in or had difficulty adjusting to the vision of the program. Another common strategy involved engaging faculty in professional learning and continuous program development work to help them evolve their thinking and instruction toward program goals.

The shift toward use of district-based adjunct faculty entailed orientation and supports for these instructors

The shift toward greater use of district-based adjunct faculty raised challenges for some programs. In order to effectively onboard these individuals, university leaders had to develop systems to orient them to big picture elements, such as the context and purpose of the program and the redesign process, as well as specific elements of the program, including the design of the syllabi and pedagogical approaches. Programs also had to build in opportunities for district-based adjunct faculty to collaborate and meet with university-based program faculty. As one faculty member said, "Some of those courses are being taught, of course, by adjunct faculty that are right there in [the candidates'] school districts, which is a real strength, but also, there's the potential for drift that can happen." Box 2.6, presented earlier, describes some systems for orienting and training instructors who are sitting administrators. Programs in which university-based faculty largely taught courses did not encounter this challenge to the same extent. Regarding training for faculty, one UL remarked, "We really haven't done a lot of that because it's the experience of all of our core faculty; they know what we expect as far as teaching and approach."

Some programs struggled to find qualified clinical coaches and mentor principals for clinical experiences

While all programs strengthened their clinical component, some programs encountered difficulty actualizing their vision because qualified clinical coaches and strong district- or school-based mentor principals were hard to find. Programs mitigated this by training existing coaches in a specific coaching model that aligned with program expectations or recruiting retired district or school administrators and providing them such training. Some programs retained the services of a specialist coaching provider, such as The Leadership Academy (formerly New York City Leadership Academy, or NYCLA) for this work. Programs also worked to develop orientation, training, and intentional touchpoints throughout the program for mentor principals. These opportunities allow programs to share and reinforce their program values, goals for candidates, and expectations of mentors. In addition, some programs considered an application and selection process for mentor principals. Programs did voice that having robust district partnerships were critical to the recruitment of qualified mentor principals. When districts felt joint ownership of the program and were invested in candidates having quality clinical experiences, they were inclined to identify or tap strong leaders to serve as mentors. Districts were incentivized to expose candidates to the best models of effective leadership because these candidates were likely to seek principal positions in their districts one day.

Relatedly, in some other contexts, the school-based mentor is by default the building principal where the teacher is working; there is no other option. In these circumstances, the university set up systems to ensure that university-based clinical supervisors could step in and

offer additional supports when school-based mentors were ineffective mentors or to ensure support for a candidate not in a building-level position (i.e., they work at the district central office).

Programs learned to navigate university processes to achieve desired program features

UPPI program redesigns happened in the bureaucratic context of a university. Multiple participants reported that their universities were not nimble; they thought this potentially hindered innovation and caused delays during the redesign. As examples, interviewees pointed to needing to rationalize their use of one-credit modules instead of the traditional three-credit-hour courses, or justify the need for additional positions or staff to support the clinical component (e.g., clinical supervisor, coaches). Some universities were hesitant to add such positions because they were unsure how to classify such staff; they were not used to "instructors" not having a formal teaching load and not being attached to a course. Programs also had to navigate a lengthy, complex, multi-tiered university program (or course) approval process.

In the end, program teams successfully navigated these and other perceived challenges related to university processes. The program teams enacted a range of mitigating strategies, many previously documented in the first report on UPPI (Wang et al., 2018). A preemptive one was to involve university administrators (e.g., deans, provosts) early in the redesign and keep them apprised along the way so they could help interpret policies and guidelines, remove barriers, or expedite processes as needed. In most cases, these university administrators bought into the redesign intention and became advocates for the programs, paving the way for smooth program approval and assurance of resources to support the redesigned program. Some program teams also enacted creative solutions to the problem of the complex approval process. One program reused the same course numbers and/or names since only courses with name and/or number changes were required to go through the university course approval process. In all, program teams recognized that understanding and being prepared for university processes are essential for a timely and successful redesign effort.

Chapter summary and use of best practices

Under UPPI, each team developed a clear and ambitious vision for its program. Overall, the changes the teams enacted ensured the programs were more rigorous, coherent, and authentically connected to the work of on-the-ground school leaders. One way rigor manifested was in the candidate selection process, wherein programs incorporated more activities and assessments and established explicit criteria to assess applicants' skills and dispositions. Coherence was achieved with increased connections across courses and between the coursework and clinical component. Clinical experiences themselves became a more robust bridge between the program and principalship because candidates were afforded opportunities to engage in work that would be in the purview of a practicing school leader. Moreover, candidates were supported by clinical

supervisors, coaches, and mentor principals in ways that advanced their individual professional growth. Instruction and the instructors shifted too to reflect an emphasis on practice and continuity. This included employing more district leaders as adjunct faculty and using more problem-based pedagogy. Programs also expanded or deepened their use of the cohort model. Table 2.11 summarizes the key changes across the seven programs by component.

The changes in the programs were consistent with many best practices. As recommended in the literature, UPPI programs treated the recruitment and selection processes as "essential qualities of program design, not incidental activities" (Darling-Hammond et al., 2007). Altogether, programs shifted toward more active recruitment. Their redesign calls for them to proactively seek out high-quality candidates with backgrounds that suggest they would become strong leaders, engaging districts in the process (Anderson and Reynolds, 2015; Darling-Hammond et al., 2007; Fuller and Hollingworth, 2014; King, 2018; Levine, 2005; Orr, King, and LaPointe, 2010). Moreover, the screening process increased in rigor. In line with research, applicants go through meaningful performance-based assessments, such as simulations and role-plays, that assess not only cognitive ability but also dispositions (Anderson and Reynolds, 2015; King, 2018). Criteria and priorities for selection are established beforehand, and multi-rater instruments are now utilized (Anderson and Reynolds, 2015). One aspect of best practice in recruitment that almost none of the programs could incorporate in the redesign was providing financial support to incentivize the most qualified applicants to enroll in the program. Some programs sought ways to lower costs of the program for all candidates, which could make it more viable for lower-income candidates. For example, one program negotiated with the university for candidates to pay tuition only and not pay fees (since the students were professionals who did not tend to use campus facilities). Another reorganized the enrollment fee structure. Several more reduced the credit hours to reduce program costs.

Table 2.11. Summary of Major Program Redesign Changes

	Before	After
Recruitment and selection	• University-driven • General recruitment of applicants meeting pre-requisites • Less-involved selection process	• Active district engagement • Targeted recruitment • More rigorous and evidence-based selection process, involving performance-based tasks
Curriculum and instruction	Standalone courses • Aligned to former standards • Courses delivered in any sequence • Standalone, based on distinct topics, with some redundancies Greater focus on theory in instruction • Little to no input from districts • Lectures and discussions • Instructors assigned to or assumed sole ownership of particular courses • Courses tended to be taught by university faculty, some without school or district administration experience	More coherent curriculum • Aligned to current national or state standards • Intentionally sequenced courses that scaffold and build upon each other • Courses connected by topics and themes and sometimes key assessments spanning courses Greater focus on practice in instruction • Oriented toward practical application of concepts • Informed by district input and needs to ensure relevance • Used more interactive, experiential learning strategies (e.g., role-play, simulations) and application of adult learning principles • Instructors collaborated on course development and course delivery • Greater use of adjuncts—retired or practicing school or district administrators
Clinical experience	• "Checklist approach" to completing required experiences • Passive, often "one-shot" experiences (e.g., shadowing, observing) • Disconnected from coursework • Supervision model • Limited supports	• Deliberate experiences to support growth in leadership competencies; personalized to meet candidate needs • Authentic experiences reflecting real work of principals on the ground • Aligned with course learning; applying theories and concepts in context • Leadership coaching model, with greater opportunities for feedback and reflection • Additional supports (e.g., university-based clinical director, district-based coordinator)
Cohort	• Some full, closed cohort, some non-cohort enrollment	• All programs had at least one full, closed cohort; no non-cohort
Data use	• Lack of robust data on inputs and principal candidate outcomes	• Intention to systematically collect and use data to assess candidate progress and program quality

The redesigns of the curriculum and instruction aligned to many key features identified as essential to exemplary PPPs. Notably, all programs assembled a coherent course of study aligned to national and/or state professional standards, as well as district needs, that integrates theory and practice through active learning and input from faculty with experience in school administration (see Darling-Hammond et al., 2007; González, Glasman, and Glasman, 2002; King, 2018; Murphy and Vriesenga, 2004; Orr, 2003). Research champions "strong, tightly related coursework and clinical experiences" (Darling-Hammond et al., 2007, p. 149), and all UPPI programs indeed more tightly coupled courses to each other and to the clinical component via

content and a continuum of supports (e.g., instructors, clinical coaches, and clinical supervisors). By virtue of being co-designed with districts and by including more adjuncts as instructors, programs are responsive to district needs and tip the balance toward a practical orientation. Active learning manifests in the use of a range of strategies, including problem-based learning, small group discussions, and simulations, as well as assessments anchored in the real-world tasks of principals (Darling-Hammond et al., 2007; King, 2018). Literature also suggests that PPPs focus on instruction and school improvement. All UPPI programs post-redesign had a course on school improvement, but this is not a noticeable shift from pre-UPPI. In terms of curriculum content, the one shift pre- and post-UPPI was a more explicit focus on social justice or equity.

The clinical component of the redesigned programs aligns with evidence-based features of successful PPPs in that they aim to provide opportunities for participants to engage in authentic leadership activities that connect with course content and to obtain constructive feedback from effective principals (see Darling-Hammond et al., 2007; Anderson and Reynolds, 2015; Davis et al., 2005; Fry, Bottoms, and O'Neill, 2005; Kolb and Boyatzis, 2001; Orr, 2006). The deliberately structured curated clinical experiences that emphasize doing instead of shadowing indeed "allow prospective leaders to learn the many facets of their complex jobs" (Darling-Hammond et al., 2007, p. 5) and to apply course learning and theoretical insights in a practical context that reflects the day-to-day demands of being a principal. Moreover, the multi-pronged support system—comprising clinical supervisors or coordinators, clinical coaches, and mentor principals—helps ensure that candidates have opportunities to work in close collaboration with "highly skilled veteran leaders" (Darling-Hammond et al., 2007, p. 5; Anderson and Reynolds, 2015; King, 2018). While all redesigned programs had an intense and extended clinical component (i.e., at least 300 hours), not all programs required or provided principal candidates opportunities to undertake clinical experience at schools or districts beyond their own. To this end, candidates in these programs are not assured of exposure to a wide range of contexts (e.g., grade levels, student populations).

A final evidence-based program feature that UPPI program redesigns reflected was the deliberate use of the cohort structure. Research suggests that the use of cohorts facilitates the provision of mentorship and formal support for candidates, as well as social support in the form of a peer network (see Darling-Hammond et al., 2007; Barnett et al., 2000; Browne-Ferrigno and Muth, 2001). Moreover, strong programs use cohorts as "a pedagogical tool to teach teamwork and model distributed leadership" (Darling-Hammond et al., 2007, p. 97) and help promote learning and attitude shifts (Kaagan, 1998). Based on our examination, UPPI programs enacted the cohort structure with one or more of these intentions; various stakeholders—instructors, mentor principals, and principal candidates—have perceived the benefits of the cohort structure.

3. Collaboration Across Stakeholders Around Redesign

This chapter describes the process of redesigning the PPPs. It is almost impossible to disengage the redesign process from the development of partnerships—the work was designed and carried out by the UPPI teams, and the teams were formed and operated for the purpose of carrying out the redesign. So, although we discuss the redesign process and partnerships in turn, we also call out the synergy throughout. The collaboration between the school districts and university, the conceptual and technical support of mentor programs and peers, and the commitment of state leaders to a supportive context are all part of the process of program redesign (see Figure 3.1).

Figure 3.1. The Principal Preparation System and the Process of Change
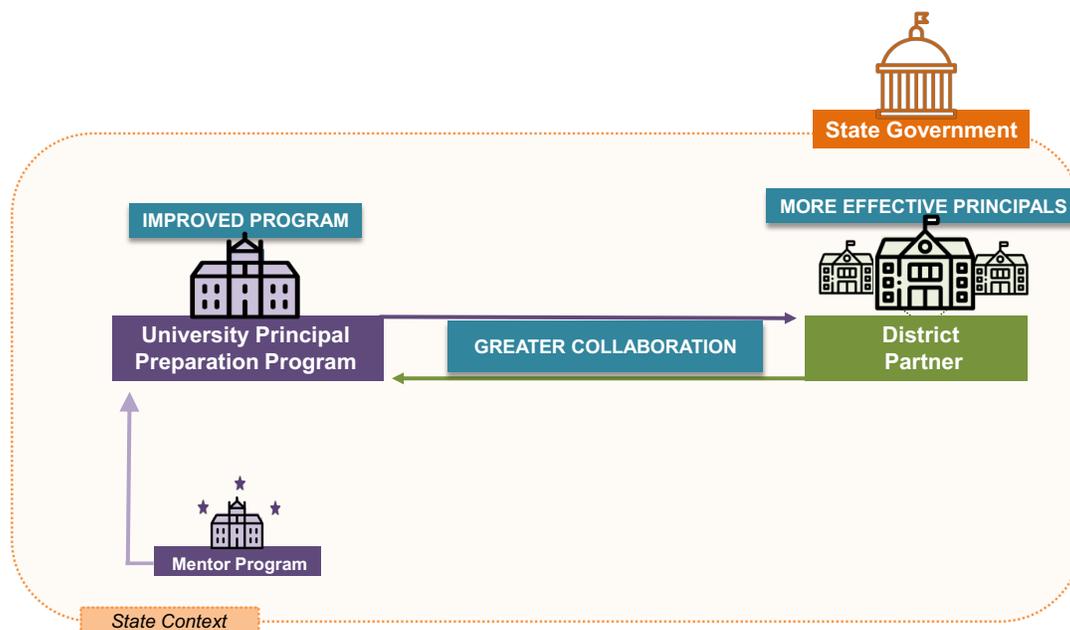
We have organized this chapter by stages in the redesign process: envisioning the change, developing the program elements, implementing the redesigned program, integrating continuous improvement, and institutionalizing the redesigned program, process, and partnerships at the university program and district levels. Although these stages may be distinct by design, in practice, they tended to overlap. Figure 3.2 shows the periods during which at least one UPPI team was working on each stage of the process. While visualizing clearly came first and institutionalizing came last, each team tended to cycle through redesigning, implementing, and improving over most of the project period.

Figure 3.2. Stages in the Redesign Process

	2016	2017	2018	2019	2020	2021
Visualizing						
Redesigning						
Implementing						
Improving						
Institutionalizing						
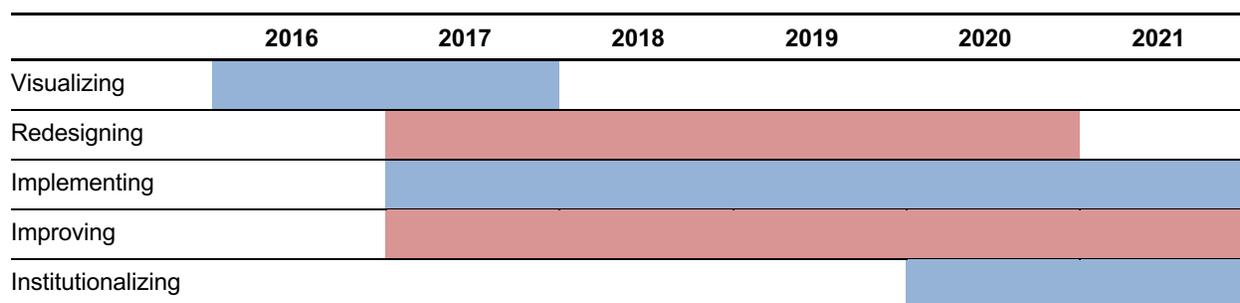
NOTE: This timeline represents the most common trajectory across grantees. Timelines for individual grantees varied somewhat.

Early envisioning activities shaped the redesign plans

Re-envisioning the program in the first year laid the foundation for the redesign. During that year, teams developed expectations for leaders who would graduate from the program, assessed the strengths and needs of the existing program using QM, developed a logic model to guide the redesign, and cross-walked the program against national or state leadership standards. *Launching a Redesign of University Principal Preparation Programs* (Wang et al., 2018) reports on those first-year activities. Some, but not all, of these activities continued to be relevant to the teams throughout the redesign process. In this report, we examine the durability of these first-year activities through the process of redesigning the programs and the evolution of the change process over time.

Teams used similar approaches to organize the redesign effort, but followed unique paths as they engaged in the work

Programs played similar roles in the initiative, but the role districts and mentor programs varied across sites

As reported in Wang et al. (2018), the visioning process helped the teams work better together toward the redesign. Districts were inclined to engage in the effort when they saw that programs were open to criticism during the QM process. In turn, programs learned about district needs and priorities when working with districts to develop program standards for candidates.

Table 3.1 summarizes the primary roles each type of organization played. These roles are similar to those described in Wang et al. (2018). Across sites, the university (led by the UL, typically the program director) led the overall initiative, establishing project plans and timelines, and organizing and leading the various committees. The university also played the primary role in keeping partners engaged and fostering communication across partners.

Table 3.1. UPPI Partner Organization Roles During Program Redesign

University Roles	District Roles	State Roles	Mentor Program Roles
• Responsible for keeping overall redesign on track (all universities) • Led steering groups (all) • Led working groups, with the exception of LTS (all)	• Served on steering groups (all teams) • Served on working groups as an equal contributor (most) • Led LTS development (most) • Served on multiple working groups (curriculum, internship, LTS) (most) • Only served on LTS working group (some) • Served on working groups primarily to provide input and district perspective on the university's work on redesign (some)	• Served on steering groups (all teams) • Convened programs (all) • Served on working groups (some) • Provided state expertise (some)	• Served in both strategic and operational roles (most teams) • Served as consultants/technical assistance providers (most) • Served on working groups as a member of the redesign team (most) • Shared tools and strategies on the redesign process (most) • Communicated/collaborated with districts directly (most) • Served on steering/working groups as facilitators (some) • Served on steering/working groups as thought partners (some) • Interacted primarily through the university partner (few)

District partner roles varied more than university partners' roles. LTS development was the responsibility of the districts according to the initial work scope, and in most teams, the district partners did lead the LTS development. District partners did not typically lead other redesign tasks, but most district partners did play an active role in developing curriculum and instruction, clinical experiences, and recruitment and selection processes. District partners (typically assistant superintendents or department leaders) served on steering and working groups. Some district partners were responsible for developing materials that shaped the program. For example, districts on most teams developed district-specific logic models to guide the work. Some but not all districts developed district leader standards for guidance on alignment of the redesigned university program. For some teams, tasks, and phases in the work, district partners had a more responsive or receptive role, such as providing feedback on the curricula drafted by the university or attending meetings for the purposes of staying updated with the work the university has done.

State partners frequently acted as a member of the team, serving on the steering and working groups. They also acted as a resource for strategizing about program approval processes and

similar questions. Finally, they were responsible for convening programs and sometimes districts to build on the UPPI experiences.

Mentor programs served in one or more of the following six roles (see Box 3.1):

- **Member of the redesign team:** Participate in alignment activities (e.g., curriculum with standards or other key documents) and provide feedback on documents, as was required of all partners. At one site, the mentor program felt that it was "definitely a part of the core team. . . . I'm brought into all of the decisions."
- **Facilitator:** Provide general support to the project director in managing operational aspects of the redesign process, such as facilitating work sessions, supporting planning and development of timelines, and documenting the work of the redesign team.
- **Consultant/technical assistance provider:** Primarily provide requested information or content or perform discrete tasks to support the redesign work.
- **Thought partner:** Help the university program redesign team and faculty to inquire and reflect deeply to arrive at decisions.
- **Network broker:** Help connect the university to other entities that could offer the information or support the university program needed.
- **Supporter of faculty research:** Help the UPPI programs develop articles and reports to disseminate their UPPI learnings. This could benefit both faculty (who needed to accrue publications) and the field (with new knowledge on the redesign process).

Some mentor programs were unclear about their role at the start of the initiative and reported that the lack of clarity hindered their ability to support the university as a substantive partner. For example, one mentor program was unsure how to delineate its role and responsibilities from those of others supporting the program. One mentor program that reported role clarity from the outset attributed that clarity to the communication structures the university program had established, which kept the mentor program up-to-date on the progress of the initiative via frequent formal and informal meetings.

Mentor programs' work shifted over time. Two main types of shifts occurred: a shift in the *focus* of work and a shift in the *scope* of the work. For example, a mentor program that had served largely as a thought partner during the redesign for one site took on the consultant/trainer role in summer 2018 as the program prepared for implementation, leading PD for the instructors. Another natural juncture was after the launch of the redesigned program. At one site, by spring 2020, one mentor program transitioned from supporting program implementation to helping the university support other programs in the state to engage in redesign. At some sites, mentor programs' work decreased over time; some mentor programs became more peripheral to the change process as a result.

Box 3.1. Mentor Programs Served as Both Technical Assistance Providers and Thought Partners

As technical assistance providers, UPPI mentor programs for most sites gathered feedback on the existing program (e.g., needs assessment surveys, interviews and focus groups of district personnel or program graduates). Mentor programs for some sites helped develop work products such as the crosswalk between standards and the program curriculum or a continuous improvement plan. Mentor programs also shared resources (e.g., UCEA guidelines on clinical practice) and models (e.g., LTSs) with the UPPI team.

A very different role for UPPI mentor programs was to act as thought partner. The thought partner offers a critical perspective, gets the program team to pause and consider potential pitfalls, the "what ifs." The thought partner may probe, guide, and shape the university program's thinking, but rarely provides answers or does the work for the program, as a consultant or technical assistance provider does.

One mentor program that served as a thought partner framed its work with the university around the concept of cycles of inquiry, which consists of identifying problems, developing a plan, enacting the plan, and diagnosing and making adjustments. The mentor program guided the university program through the cycles. For example, to identify weaknesses in its program, the mentor program coached the program faculty to design a data system that would allow the program to systematically collect information (e.g., from students, mentor principals, artifacts). Then upon redesigning course syllabi and implementing the courses, the mentor program helped the university to diagnose what went well and what was not working as intended. The mentor program aimed to develop the university's ability to engage in continuous improvement, so that their program would not become stagnant.

UPPI team members reported that having a committed team dedicated to the mission was a major driver of the work. A critical component of that was UL leadership. ULs used a combination of pushing and enabling to maximize partners' engagement in the redesign process. For example, the UL or another program leader pushed for active participation in regular meetings and held partners accountable for timelines and deliverables. However, ULs also acted as facilitators, creating opportunities for engagement (e.g., inviting faculty to PLCs), rallying the team around a common vision. To build commitment, leaders highlighted external recognition of the work and found opportunities such as hearing from renowned educators to pique enthusiasm.

Teams continued to use steering, work groups, and key leaders to organize the redesign tasks

All partnerships established formal steering groups and relied on task-oriented working groups to support collaboration on the redesign. The formal steering groups consisted of leaders from each partner organization (university, school district or consortium, state department of education, and mentor program). These groups typically met at regular intervals (e.g., about once a month) for progress updates, developed a larger vision, and worked on the strategy of redesign. These formal steering groups were essential throughout the entire change process. These groups comprised leaders from each partner organization (university, districts, state department of education, and mentor program). Districts were typically represented by the superintendent or assistant superintendent/chief of schools (for larger districts). These formal steering groups were essential throughout the entire change process. Smaller working groups also emerged during the redesign process. These teams typically met more often (e.g., as often as every week) and worked on specific redesign tasks. These working groups typically involved faculty and district leadership, with some site-specific differentiation. For example, the curriculum committee at

some sites comprised mainly university members, while at other sites, they included state and mentor program representatives. Unlike the formal steering groups, working groups are dissolved when tasks are complete and then reassembled as needed for new tasks. For example, FAU had a curriculum committee that oversaw the overall program curriculum plan with multiple subcommittees. A subcommittee of faculty from FAU and each district was formed to design each course. Depending on the team dynamics and the task, district partners sometimes had a more responsive role, such as providing feedback on the curricula drafted by the university or attending meetings to hear updates on the work the university was leading. Districts engaged relevant personnel as needed in the working groups, including the chief information officer, director of leadership development, human resources director, director of research and evaluation, supervisor of learning and instruction, among others. Aside from the regularly scheduled meetings, partners met informally and communicated via texts and emails when the need arose.

Certain leadership roles also contributed to redesign operations. Within the university, both senior leadership and faculty engaged in the redesign process. Typically, the UL led UPPI leadership groups and university faculty led the working groups, but universities sometimes relied on external facilitators, such as a mentor program leader or technical assistant provider, for working group sessions.

Box 3.2. FAU Promoted and Centered Process on Partner Engagement

Members of the FAU team consistently recognized the UL for their ability to engage partners, which was deliberate on the UL's part:

> [W]e set out from the very beginning—this is what we're going to do and this is how we're going to do it, and this is what we are expecting each organization to bring to the table. And I think that makes a huge difference because they were not either overwhelmed or surprised by things that they needed to do to be participatory in the redesign.

The FAU UL kept partners engaged from the beginning to the end of the initiative and continued to push partner to think about how to sustain the work under the framework of partnership engagement:

The UL drew on Bruce Barnett's research on university-district partnerships (e.g., Barnett, 1995). Of the three levels of partnership—cooperation, coordination, and collaboration—the FAU UL pushed their team to the collaboration level despite it being "much more time-consuming." For example, each district-specific program is governed by a program steering committee, giving district participants equal voice in their program: "They all sit on the Steering Committees that govern each of these programs, so there isn't a division here. These are true partnerships. So, they are totally engaged in the implementation because they make the decisions equally, with us."

Although the working and steering groups were the primary vehicle for managing the work, some sites utilized liaisons or coordinators to keep the work on track and engage other partner organizations. Generally, coordinators were based at the university, but some were based at the district.

Regular meetings and communication helped maintain partner engagement and continuity in the redesign process. Meetings to work on specific tasks (operational focus) occurred more often

than meetings on progress and big-picture redesign planning (strategic focus). Meetings occurred as often as every week to once per semester. Partners credit regular meetings as the drivers for partner engagement and a way to keep everyone on track in a formal and coordinated way. Aside from the regularly scheduled meetings, partners met informally and communicated via texts and emails when the need arose. Yet redesign teams, and particularly district partners, encountered challenges in ensuring regular communication. Prior to the pandemic, district partners sometimes reported that commuting to and from meetings was time-consuming, especially when meetings were from their district location. Online meetings were considered more helpful but better suited for check-ins than for more complex collaborative work such as redesigning the curriculum. Some teams specifically chose to meet in person, despite distance, to build rapport and focus on the work, while others prioritized convenience, recognizing district leaders are typically too busy to meet in person, particularly if the partner university was a distance away. Many combined in-person and virtual meetings. Turnovers in positions and inconsistency in the individuals attending the meetings can also hamper communication among partners, obliging partners to "[rewind] to catch people up."

Some tools initially used to envision the redesign continued to guide the substance of the redesign

Quality Measures pushed the thinking, although early rounds were not universally appreciated

The QM process helped programs identify gaps and track progress in addressing the gaps. Programs participated in as many as four iterations of QM: (1) as part of the initial application, (2) in 2016, to identify areas for development and establish a habit of using evidence to shape redesign, (3) in 2018, partly to pilot changes to the instrument, and (4) in 2021, to assess progress. Typically, programs involved their district and state partners, and sometimes their mentor programs in the process. Some deepened the engagement after the first one or two iterations. Programs struggled with the first iteration or two, in part because they did not typically have the data to document their program and in part because they felt the external facilitation used in the first two rounds undercut their ownership of the process and data. For example, one participant noted

> The biggest "aha" we had from the initial QM review had more to do with the lack of evidence and artifacts that we had to support what we were doing. We had a lot of anecdotal information that would point us to "We must be doing well because of this" or "I know we're doing that but we're just not collecting the right artifacts and data to support it," so the influence of QM early on was really about "What kinds of data do we need to collect in order for us to be able to demonstrate the quality of our program and the improvements that need to be made?"

Another participant found it particularly useful to look at charts showing graduate placement in high-need schools and changes in student outcomes associated with the graduates.

By the 2021 iteration, programs were universally enthusiastic about QM. Programs appreciated the push to document their assumptions about the program, the conceptualization of program design features, and the visible progress seen in the 2021 iteration compared to earlier rounds. Most sites called out the value of having a structure to expand and guide their thinking: "I think what I found valuable is having a rubric or an instrument that forces conversations in clearly identified domains that when you're thinking about continuous improvement you can see how far you've come, but where you can go. So, it kind of scaffolds those continuous improvement conversations." In addition, as described in Wang et al. (2018), programs found that going through the process with their partners deepened the partnership. One UL provided the following reflection on QM in spring 2021:

> [I] was not a fan of QM. . . . However, I did, by 2018, become a believer in the self-study process. . . . I see what the conversation against a framework does. And it does two things. It brings people together that either haven't been talking or wouldn't be talking about this stuff, and it raises awareness, shared knowledge and understanding, depending on the place, possibly shared vision of work going forward. It can align current initiatives or processes. . . . Even if it doesn't turn into a full shared vision. And then it just [creates] accountability in terms of ownership.

The logic model development process—as well as some overlapping tools—shaped team cohesion and guided the work

As noted in Chapter 2, all programs organized their redesigned programs around their unique program framework, developed as part of and to guide the UPPI effort. A series of overlapping activities and tools in the first few years of the effort helped each team build and revise their framework: theories of action, leader standards (what they want their graduates to know and be able to do), and logic models to guide the redesign process and/or to show how the programs would affect candidates and their schools. Wang et al. (2018) shares findings from the first year of the initiative:

- The process of developing the logic model helped build team cohesion. Partners had the opportunity to share their objectives for the program and to be heard, and they were able to develop a common vision of the program goals and redesign process (see Box 3.3).

- The logic models themselves were initially useful for most programs as a road map and driver for the work, by providing benchmarks for progress and a vision for success. Some programs did not find the logic models useful, because they needed more concrete tools to guide the daily work or because the team was already fluent in the ideas.

Box 3.3. Building Teamwork by Building Logic Models

The process of developing the logic model supported team-building by helping all partners understand the complete initiative, and how their pieces worked together. As one site noted,

> It was a very cathartic experience for the team, and I think everybody who was in the room said that. . . . So, everybody had pieces of it that they knew were happening and what Wallace was funding us to do, and a smaller group of us knew what we wrote in the original proposal to Wallace. But the majority of us had never seen the initiative . . . in its largest sense. So, people were specializing and focusing on elements of "Oh, we have to revise this course to this standard" or "We are re-conceptualizing the program in terms of how we cover things and what our angles are." . . . Multiple people said, "Oh, I finally get what we are doing.'"

According to another site, "It's helped us to refine our thinking, but also to give us a heuristic . . . this is how these are all interconnected and interrelate.

Further, in developing the logic model the partners had an opportunity to share their thinking and be heard, building both a commitment to engage in the work and a logic model that reflected the perspectives of the stakeholders. As one site noted, "We can't only do things internally. We need to make sure that our partners understand our thinking and then can contribute their thinking. And then collectively come to these agreements so that everybody is, really, not just agreeing on the final product, but part of the process." Another reported, "It just became really clear that it's not [the university] that's doing this work but it's [the university] with their partners with the state that's doing this work and I think that, I think people got really excited when they saw that."

Four years later, the UPPI teams reiterated the importance of having some tool—logic model, theory of action, or conceptual framework—to develop and communicate the main ideas of the redesigned program. However, most no longer used their formal logic model. Only one program reported regularly consulting their logic model to guide their redesign work. Two programs used it at times to communicate either the vision for the redesigned program or as a historical document to show how the thinking had evolved. The formal logic model was not revisited for a number of reasons—it was too soon to see outcomes of the program redesign on graduates, it did not reflect fundamental shifts in how the partners worked, and other tools communicated more clearly the vision and/or detailed redesign activities. Although all programs indicated that the formal logic model needed updating, none had actually done so.

UPPI teams tended to blur the lines between their leadership standards, logic models, conceptual frameworks, and other tools used to frame their redesigned program. They did, however, consistently make use of tools, by whatever name, that highlighted the themes or "ways of thinking" at the heart of their program. Typically, those tools were program frameworks or standards for their graduates rather than their logic models. As one team member noted, "If you're going to engage in this work, this transformative kind of work, you need to have that overarching framework to help drive what you do."

Teams continued to use leadership standards to guide the content of their programs

As noted in Chapter 2, the redesigned curricula reflected national and state standards, as well as the leadership standards the UPPI teams developed. All UPPI teams developed or adopted program-specific leader standards and examined the alignment of their curriculum to their standards and their standards to state and national standards as part of the formal redesign activities (Wang et al., 2018). Going through this process helped the teams identify gaps in their programs and build agreement on their priorities (Wang et al., 2018). Following this initial year of planning and implementation, state and national standards continued to drive the redesign process. For example, one state required programs to demonstrate that their program assessments aligned with the PSEL-based state standards. So the UPPI program team chose to use BloomBoard's microcredential assessments, which were consistent with PSEL and had valid and reliable rubrics.

UPPI teams capitalized on opportunities to learn from peers

As described above, mentor programs supported UPPI redesign in a number of ways, with the specific role shaped by the needs of the university and stage in the redesign process. Some mentor program activities were especially useful to the redesign teams. Universities appreciated when their mentor program freely shared documents from their own program redesign to model the type of thinking and documentation that would support the university program's work. In sharing these documents, the mentor program did not expect or encourage the university program to adopt its design or work, but rather to engage in activities and discussions that would lead to important redesign decisions. For example, one mentor program shared its foundational documents (e.g., identifying their values and expectations, competencies for leaders, program model), prompting the university program and its partners to develop their own foundational documents. Faculty members at one university praised their mentor program as follows:

> We really saw her as a knowledgeable expert partner who shared ideas and gave feedback, but I also didn't feel that she tried to hijack the process. And it was never about making it be the way that they do it at their school. It was, "Have you considered? Have you thought about? What would that look like?" It felt very . . . supportive.

Universities also greatly appreciated the mentor program's review of their program documents, including but not limited to course syllabi and core assessments. One project director said having that "extra set of eyes" was "meaningful and impactful" because multiple faculty members from the mentor program reviewed their syllabi, and their feedback "gave us that broader perspective and pushed us to think differently." The subsequent discussions were helpful too. The mentor program of another university reported that thoughtful questioning helped shift the university's thinking from a knowledge perspective for the courses to a competency perspective.

Project directors appreciated when their thought partner guided them to undertake cycles of inquiry. One said, "I'm pretty sure that [the mentor program's] influence on a continuous improvement inquiry process as the way to go will probably be the most significant thing that they contribute to our work." The project director elaborated that they now approach their program critically and are not satisfied with leaving the program as it is. They now require everyone involved in the program (e.g., new instructors, coaches) to engage in the process of examining the program and thinking about their own work differently, in light of the intent and goals of the program.

University programs valued the experience of visiting the site of their mentor program. University partners of three mentor programs had the opportunity to conduct a site visit, and they brought their district partners. The visit allowed the UPPI team to ask questions of their counterparts from the mentor program. Moreover, the visit allowed the UPPI team to focus intently on learning about the work involved in a redesign for a few days, instead of having a limited amount of time during weekly or monthly work sessions and being distracted by other obligations.

In addition to working directly with mentor programs, teams had many opportunities to share learning through PLCs. The Wallace Foundation convened PLCs for all UPPI teams approximately twice per year from December 2016 through December 2020. Participants included, at minimum, leaders from the university programs, partner districts, and state education organizations. Table 3.2 shows topics for these meetings. In addition to these whole-team PLCs, Wallace convened PLCs for UPPI program faculty and UPPI state leaders and invited UPPI team members to join other PLCs on related initiatives.

Table 3.2. Professional Learning Community Events

Calendar Year	Types of PLCs	Key Topics
2016 (*n* = 2)	• UPPI teams	• QM results
2017 (*n* = 7)	• UPPI teams • Faculty • State leaders • ULs	• Every Student Succeeds Act and state role regarding leadership • Program logic models and theories of action • Leadership standards • LTS • QM • Curriculum and course sequence • Program branding and marketing
2018 (*n* = 4)	• UPPI teams • State leaders	• Principal evaluation • LTS • Active learning • Assessing clinical practice • Leading for equity • Spreading UPPI work
2019 (*n* = 5)	• UPPI teams • Faculty • State leaders	• Leading for equity • Principal supervisors • LTS • Leadership academies • Rural districts and regional preparation • Adult learning
2020	• UPPI teams • Faculty	• Culture of colleges of education • Diversity, culturally responsive, equity minded leadership • Marketing • State levers • LTS • Simulations

Wang et al. (2018) reported that these PLCs were valuable to UPPI team members, giving them the opportunity to learn from experts and peers, prompting deeper thinking about their work, and energizing them (see Box 3.5). These findings hold true in the later years of the initiative. Both university and district leaders especially valued the opportunity to talk with their peers: "I think also being a part of the PLC's, when we could, and being able to communicate with our peer institutions has really helped us to not so much feel like we were on an island by ourselves, but to kind of gauge what we were doing, where we were, those types of things has really helped us." For example, a UL and district leader from the same team praised the lunchtime roundtables, where their peers shared challenges and solutions. In this case, the challenge was about how the program could address candidates' dispositions. In another case, the "aha moment" was about using simulations in a new and deeper way. In particular, district leaders were able to use the PLCs as an opportunity to learn with other districts at these events:

> Most of those sessions have been profoundly helpful. . . . For the most part, those
> PLCs where you're able to listen to everyone's progress . . . and to interact and
> share ideas and learn from them, from others, that networking component of the
> PLCs, it's just been astoundingly helpful for me. . . . I'm so grateful for those

opportunities. My only concern is, "Oh, my goodness, when the grant ends, we won't have that." But we do have universities that we know we'll stay in contact with.

Even outside of the PLCs, district leaders consistently reported that they turned to their partner districts to discuss strategies including but not limited to UPPI work. One UPPI district leader shared that they have exchanged ideas ranging from projecting staff retirements to managing data systems with partner districts:

So they've helped guide us. . . . So the working relationship is outstanding. We meet monthly. And they are substantive discussions around the work. I think it's even branched out farther past this work relating to Wallace to other things. First of all, it's hard to find somebody in a job-like role, and then everybody's so busy. It's hard to find somebody who will take the time to answer questions as you have them.

Several universities expressed the value of the PLCs in helping them think about social justice and equity. One UL referenced the SDSU's coaching demonstration at one PLC as well as VSU's model: "We've always wanted social justice as something that goes across our programs. It's a part of our department's philosophy and our program's philosophy. . . . All of those were additional fonts of information that I think allowed us to expand our thinking around institutional bias."

> **Box 3.5. Faculty PLC Participation Fostered Engagement in the Redesign**
>
> Although they were not part of the original UPPI design, Wallace began convening faculty PLCs in the second year of the initiative. Direct engagement in the redesign activities at the faculty PLCs was, for at least one site, an effective way to get senior faculty to rethink their courses: "When we started having the faculty PLCs and they would go and hear and learn themselves, that was completely different than having me go and hear these things and try to bring them back. So, I think the faculty PLCs were a huge part of pushing the work forward." Faculty members reported that the PLC helped them learn from peers and reduced "reinvention."
>
> Adjunct—district-based instructors who taught in the redesigned program contributed to and benefited from participating in the PLCs. According to one UL, adjuncts raised important questions and applied the ideas from the PLCs in their courses. District staff who participated in PLCs also generated enthusiasm:
>
>> It's like the last one with Ellie Drago-Severson and Muhammad Khalifa and those kinds of people. [Faculty are] used to it so we're kind of like, "Oh, okay, it's this person or that person." We're all higher ed. They're not, and these are the people that they're implementing their work in their schools. And so, that excitement and that adrenaline kind of, from my perspective, rubs off on the faculty. It keeps them motivated and on track."

Along with mentor programs and PLCs, partners emphasized the importance of technical assistance and reporting requirements and templates in supporting the redesign process. Partnerships had access to technical assistance through visiting other programs, which helped partners develop an intuitive understanding of what a feature looks like in operation. This type of assistance primarily occurred after the first year. Demonstrations by other programs occurred mostly in the third year. Lastly, the reporting requirements and templates offered by The Wallace Foundation also served as a support to move the redesign process forward. Multiple partners

noted that these requirements and deliverables helped keep them focused on the redesign and inspired them to work harder. A university partner highlighted the importance of a reporting requirement that kept the work on track:

> [F]or instance, when you had to look at the strategies that were first provided to you by Wallace Foundation, those yearly reports or mid-year reports I think kept us focused, too, because they pretty much aligned what was on our Theory of Change. So, based on those reports that we had to complete, we had strategies and we had actions and then we had timelines to complete it.

The redesign process was iterative rather than sequential

Much of the most intensive redesign group work happened in the first two to three years. Across sites, redesign of recruitment and selection took from 3 to 30 months (see Figure 3.3), curriculum and instruction from 12 to 48 months (see Figure 3.4), and clinical experiences from 6 to 36 months (see Figure 3.5). Program components—recruitment and selection, curriculum and instruction, and the clinical experience—were closely connected in the redesigned programs, and UPPI teams worked concurrently on redesigning different components. For example, ASU worked on all three components as well as the LTS in 2018 (see Figure 3.6). FAU, on the other hand, focused on curriculum and instruction before turning to clinical experiences (see Figure 3.7).

Moreover, UPPI design principles—using data and engaging district and state partners in shaping the program—meant that even when a program component was being used with a cohort, the team was continually improving it. The sequence of launching the program components, use of pilots or soft launches, and timing of cohorts show this non-linear process. For example, SDSU pilot tested and revised the curriculum multiple times prior to full implementation (see Box 3.6 and Figure 3.8). Five of the seven programs used pilots or soft launches for at least one redesigned component (recruitment and selection, curriculum and instruction, and/or clinical experiences).[11] Three piloted the curriculum before launching their first cohort using the fully redesigned curriculum. Three piloted the clinical component, and two piloted the recruitment and selection processes.

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[11] For a pilot, grantees implemented the component with a subset of their candidates or cohorts, collected feedback, and revised before implementing it across candidates or cohorts. For a soft launch, grantees implemented the component across candidates and cohorts with no or limited publicity.

Figure 3.3. Recruitment Redesign
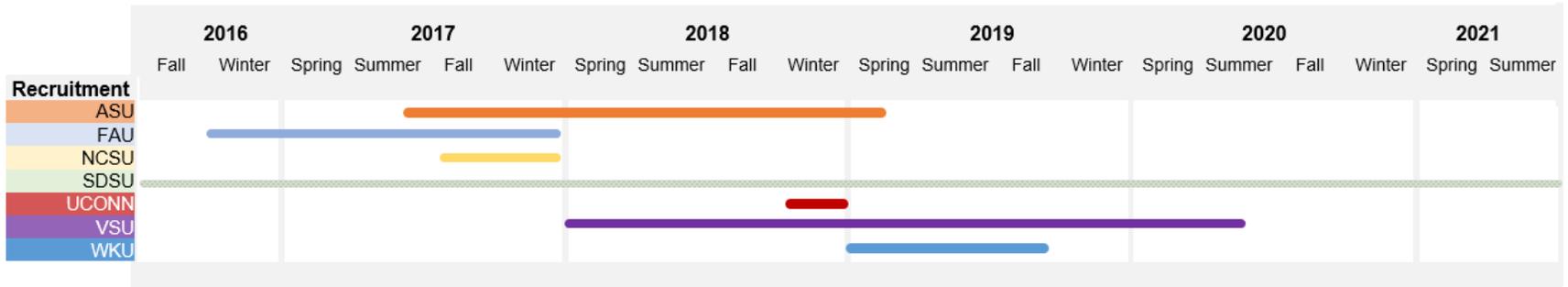
Figure 3.4. Curriculum Redesign

65
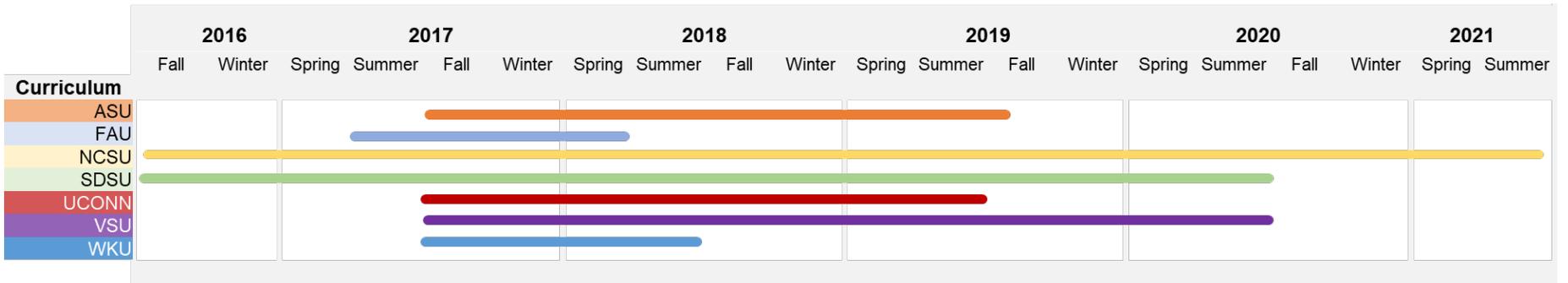
Figure 3.5. Clinical Experience Redesign
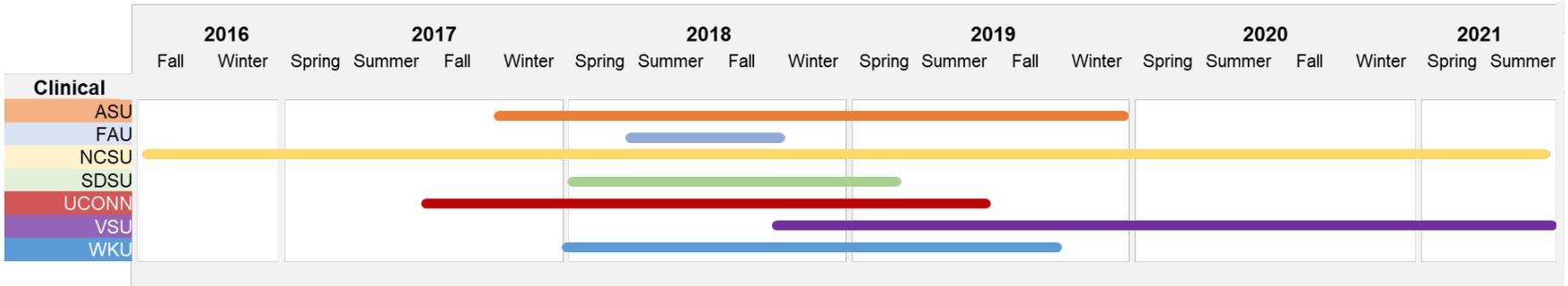
Figure 3.6. Leader Tracking System Redesign
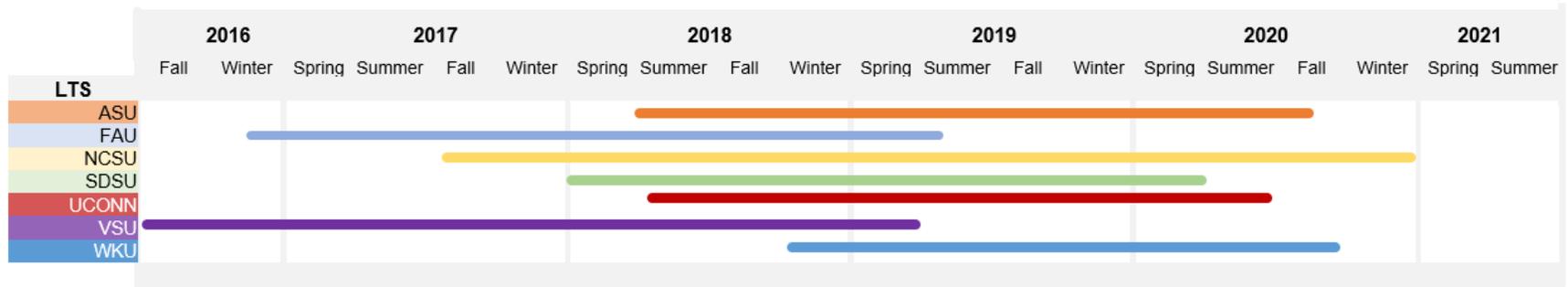
Figure 3.7. Development Timeline by Site and Component

Box 3.6. SDSU Tested and Revised Its Curriculum Throughout the Development Period

The SDSU redesign team iterated on the development of its curriculum over the course of UPPI. This process involved redesigning and piloting individual courses, revising the courses and revisiting the curriculum structure based on feedback from students and data from the state licensure assessment, and then implementing a redesigned curriculum. Although the process began in 2017, the "fully redesigned" curriculum was not implemented until May 2020.

In early 2017, the redesign team specified the skills and knowledge that a principal needs to be effective and conducted an analyses to identify potential gaps in the curriculum—skills and knowledge that were not sufficiently emphasized. By fall 2017, they had revised the syllabi for all courses. Program leaders obtained systematic feedback from faculty and students on each course, reviewed student work, and monitored results from the state licensure assessment to identify areas for further improvement on specific courses and the curriculum as a whole. They also made changes to integrate core program concepts, such as equity-driven leadership, throughout the curriculum.

The initial plan was to focus on the redesign of the curriculum during the first year of the initiative and clinical experiences during the second year of the initiative. However, the university recognized that these components are inherently linked and ended up iteratively redesigning both over the course of UPPI. Anticipating this iterative approach during the first year of the initiative, the UL stated,

> I believe that as we get results from the [state licensure assessment] this spring . . . and we start to look at the implementation and the changes that we want to accomplish in our clinical, we're still going to make more curricular changes, because I think there'll be additional things we realize. For example, when they go deeper into the clinical experiences next year, we're going to say, "Oh, we need to change this in the curriculum." Or "Wow, this [state licensure assessment] part, we missed this one—our students are all getting a bad score on this rubric piece. We need to change this in the curriculum." So I do think it's more of a cycle of curriculum than, okay, curriculum's done. . . . So we're going to be in a multi-year curriculum revision process to get this to where it needs to be.

During the 2019–2020 school year, SDSU rolled out a version of the redesigned curriculum that embodied some of the anticipated changes of the "fully redesigned" curriculum that did not require approval from the university's formal curriculum review process. This version of the curriculum organized the coursework into three major buckets—instructional leadership, change leadership, and system leadership—with fieldwork integrated into each bucket. By fall 2019, the university had approved the "fully redesigned" curriculum. When student feedback indicated that the sequencing resulted in an unbalanced workload for candidates, program leaders revisited the sequencing of courses. The launch of the "fully redesigned" curriculum in May 2020 incorporated these additional changes to the sequencing of courses. Thereafter, the redesign of the curriculum slowed, although feedback from students, faculty, and district partners as well as data from the state licensure assessment continued to inform continuous improvement efforts.

Figure 3.8. SDSU Curriculum Development
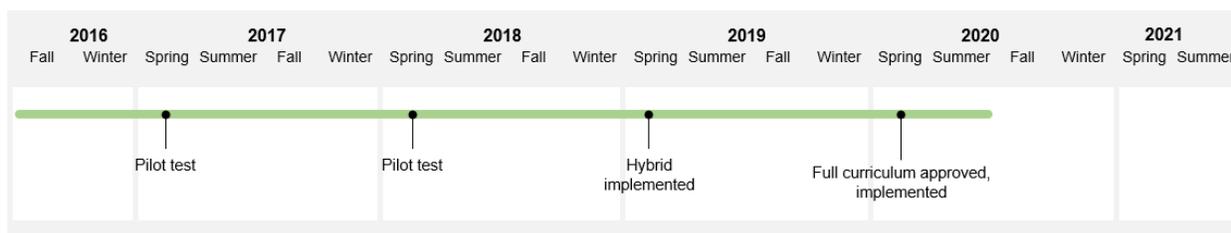
Even "program approval," which might be seen as a demarcation of the end of the development process, was not clear-cut. In most cases, changes to education programs required the approval of the university and state oversight office. However, specific requirements and

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processes vary. One program, for example, was not required to go through the approval process because the changes were within courses. Another program sought and received approval early in the redesign (fall 2018), while several programs were not able to seek approval until they had completed the redesign of all components (spring 2020). ULs credited close communication with university and state leaders throughout the redesign as facilitating when it can be a lengthy process. They worked with university and state leadership to smooth the approval process, tapping their own and Wallace partnerships.

The leader tracking systems were developed separately from the program components

To this point, we have focused on the activities to redesign program components (e.g., recruitment and selection, curriculum and instruction, and clinical experiences). In addition to redesigning the program itself, UPPI grantees also committed to creating a tool to support continuous improvement: the LTS (see Box 3.7). UPPI required grantees to build LTSs by the end of year three of the initiative. At a minimum, the LTS would house data on the performance of program graduates employed in the districts and provide a mechanism for communicating that performance to the programs (UPPI request for proposal, pp. 10, 22). With encouragement and support from The Wallace Foundation and substantial engagement from the UPPI partners, the LTSs became much more.

UPPI teams, taken as a whole, designed their LTSs to support district decisions related to PD, evaluation, long-term principal pathway planning, and principal and assistant principal placement. UPPI LTSs based in districts generally included current and aspiring leaders at all levels and from preparation sources other than the UPPI program, to facilitate planning across the leadership pathway. These district LTSs incorporate a wide range of information such as school-level achievement, prior training, and preparation program assessments. A few districts included leadership and soft skills (e.g., communication skills) of employees. Program-level LTSs tended to include their graduates, whether the graduates were hired by their partners or other districts. Other than the one grantee that developed a state-wide LTS, most LTSs focused on district staff and/or program graduates.

The process of building the LTS had a profound impact on the participating organizations. Multiple districts and universities changed the name from "leader tracking system" to "leader development system" to emphasize the use of such data to support PD. For example, while not all districts designed their LTS to be accessible to principals and aspirants, one district did, using

> **Box 3.7. Leader Tracking Systems**
>
> An LTS is "a database with longitudinal information about current and aspiring principals that would potentially support data-driven decisionmaking regarding principal selection, hiring, and support" (Kaufman et al., 2017). In UPPI, districts lead the development of such a system, which should interface with the data system at the university in order to provide the preparation program with data on program graduates' performance, including placement rates. Developing an LTS requires districts "to identify all the relevant data sources regarding current and aspiring principals (typically housed in different district offices across the district); address issues with data quality, including critical gaps in the data; compile the data into a usable, longitudinal format; and develop user-friendly systems through which district personnel could access information that would meet their most-pressing needs" (Kaufman et al., 2017; for more on LTSs, also see Anderson, Turnbull, and Arcaira, 2017; Gill, 2016).

the LTS as the platform for professional learning events for aspiring leaders. The learning materials were available through the LTS, and aspiring leaders' participation in professional learning was documented through the LTS. Another district included leadership standards within its LTS, allowing leaders to self-reflect on their areas of growth and the district to provide more personalized professional learning. In LTSs that contained evaluation data, district leaders hoped to chart the performance of individuals over time to focus on mentoring and PD.

To create the LTSs, UPPI teams needed to make decisions about their vision (e.g., the scope of the LTS and the purposes it would serve), where it would be housed, whether to develop in-house or through a vendor, and specific decisions about the programming. Each UPPI team participated in a grantee-specific two-day "visioning" event designed to help them conceptualize potential uses, data elements and sources, and users for their eventual LTS. The events were led by the School Superintendents Association (AASA) and IBM and attended by district, university program, and state leaders and IT staff. The only requirement was that the LTS enable districts to share data about program graduates with the university program by year three of the grant.

To help ground their vision, UPPI teams appreciated the opportunity to see other LTSs in action on site visits and learning tours: "Because it was so ethereal in some of our minds. People had been talking about predictive logic that might be in it, that it can help us identify schools three, four years out that might need a leader. You wonder like, 'Okay, how does it really do that? What does it look like?' It was good because it was very real." The LTS site visit hosted by FAU, which had eight to ten districts talking about the LTS over several days, helped UPPI teams weigh different approaches. Respondents also appreciated the opportunity to visit other sites with operational LTSs. Respondents were aware of the concern that seeing other LTSs might limit their own vision but felt that it helped with the visioning process and was necessary to be able to take practical steps.

> We just had a meeting with Florida Atlantic University and their LTS team from the university, which was oh so helpful for us. We got to hear about how their university has handled all of this . . . it was very helpful to our new people who we've brought in to develop this so that they got to see what their LTS looks like. And they got to ask questions and think about things through a different lens. So, that was very good.

From this visioning process, UPPI teams created tools to guide LTS development such as the following:

- requests for proposals (RFPs) to solicit vendors
- a data "Pictionary" to create common data definitions, document the data elements, and establish who can access the data and how and when data can be shared
- feasibility assessments to help shape LTS planning
- a users' manual.

One respondent noted that having a clear vision and conceptual tools helped prevent "mission creep" and keep the work on track. The data "pictionary," for example, reflected

agreement on the partners' needs and provided some stability to the work. Some respondents indicated that having more examples, such as model RFPs, would have helped them avoid some missteps.

UPPI teams chose different hosts for their LTSs—most were hosted by the districts, as originally stated in the UPPI RPF. Some were hosted by the state department of education or the preparation program either in lieu of or in addition to district-based systems. Table 3.3 lists the types of LTSs created, and Table 3.4 provides an overview of the advantages of each type of system.

Table 3.3. Home Locations of Leader Systems by Grantee

LTS Location	ASU	FAU	NC State	SDSU	UConn	WKU	VSU
District	1[a]	3	1[a]	3[a]	3[a]		3
University		1			1[a]	1	
State			1				
Total Systems	1	4	2	3	4	1	3

[a] Some or all of these systems were in development as of spring 2021. UCONN's university LTS, ASU's cross-district LTS, and one NC State, two SDSU, and two UCONN district LTSs were in development.

Table 3.4. Advantages of District, University, and State Systems

District	University	State
• Ability to protect data • Ability to use data for district decisions	• Data easily available for research • University IT infrastructure supports development • Integrate program and outcomes data	• Data already entered into electronic system • Ability to track graduates beyond partner districts • May be more sustainable through state budgets

NOTE: Some or all of these systems were in development as of spring 2021. UCONN's university LTS, ASU's cross-district LTS, and one NC State, two SDSU and two UCONN district LTSs were in development.

Of the 16 LTSs that were either launched or further along in their development at the time of our last data collection, seven were developed mainly under contract to vendors, two were developed by in-house teams, and seven were developed by a combination of vendors and in-house teams. UPPI districts considered capacity, sustainability, and flexibility in deciding whether to contract the LTS work. Table 3.5 summarizes the advantages of working in-house or with a vendor and Box 3.9 provides an example of how districts in Florida took different approaches to the development of their LTSs.

Table 3.5 Advantages of In-House Versus Vendor Development

In-House	Vendor
• Build internal capacity • Knowledge of existing district systems • Full access to data • Full access to code • Flexibility to add to system • Maintenance and updating costs more manageable	• Greater capacity • Faster—more focused on project • Knowledge of data systems software development • Familiarity with various tools and features (security, expertise with K–12 data, user experience) • Prebuilt tools

Box 3.8. In Florida, District Partners Took Different Approaches in Developing Their LTSs, but All Emphasized Using the LTS to Develop Leadership Capacity

In Florida, each of FAU's three partner districts created its own district-based LTS, and the university also built its own university-based LTS to share information more easily between the districts and university. Two of the partner districts in particular demonstrate how districts took different factors into consideration in their approach to developing their LTS. Broward, a larger district whose existing data systems were operated by an outside vendor, largely relied on that vendor, while St. Lucie, a smaller district, did most of the development in-house. The districts experienced trade-offs in these decisions. St. Lucie's approach allowed it to integrate the LTS with existing software, and it was also able to build its own modules. Meanwhile, Broward faced more obstacles in customizing its LTS because it had to work with an outside vendor.

St. Lucie ultimately expanded its LTS to include data on not only principals and assistant principals but also teachers. In the words of the district leader, "We could have just stayed with just that idea of who are our assistant principals and principals, but being a smaller district, it is easier to say, 'Hey, let's open it up to our 2,600 teachers,' as opposed to another district that has triple the number of teachers." This would then allow the district leaders to examine their whole workforce capacity and leadership capabilities. In contrast, Broward's LTS focused on leadership roles at the school level and above (e.g., district leadership, principals, assistant principals, and principal supervisors). Broward district leaders did similarly emphasize the use of their LTS for leadership development purposes. It primarily uses the system to document the progress of leaders in the district and identify areas of strength and growth.

Districts had the following suggestions for working with vendors:

- Have district IT staff help develop the request for proposals and choose the vendor.
- Explicitly differentiate vendor versus district roles and responsibilities in collecting, uploading, and maintaining the data.
- Specify in the contract that the district owns the data in the LTS and can take the data out of the LTS at any time to move it to a different system in the future.
- Purchase "consulting hours" for vendors to troubleshoot issues and guide the district team through unfamiliar tasks.
- If the LTS is hosted on a non-district platform, such as Amazon, consider whether the platform may be subject to changes that might affect the LTS.
- Prioritize tools the district is already using to minimize the learning curve and ease the transition.

Another key decision point for LTS development was on the tools, software, or platforms to use. Respondents pointed out the efficiencies of having software and platforms that can easily communicate with existing systems. One district respondent noted, "We were having real fits early on with PowerSchool, and then PowerSchool bought out Hoonuit and that made a huge

change because instead of having these two black boxes that wouldn't talk to each other, we now have one box that communicates with itself. . . . That made a huge, huge, huge difference."

UPPI teams also needed to make decisions about whether to embed the LTS in an existing system, such as the human resources system, or create a stand-alone LTS that called up data from existing systems. The former might be more sustainable because the district maintains existing systems under ongoing budgets, and because some updates (e.g., when a person changes positions) will automatically feed into the LTS. However, in one case, getting approvals to make changes to the existing system delayed LTS implementation.

Throughout the LTS development, teams addressed challenges such as costs, capacity, quality of data entry, and data privacy. UPPI teams planned data updates and cleaning with an eye toward managing costs and maintaining quality. Some favored automatic data entry from existing systems or building LTS-specific items into human resource protocols. Some used principal applications or professional development records to add data to the systems, limiting the need for additional manual entry. Automatic updates from district data systems occurred regularly, such as nightly or weekly, often at night, to reduce system costs. Updates calling on data from state and university data systems were less frequent because the data changed less frequently. Data requiring manual entry also were updated less frequently.

Cleaning the data can be expensive and time-consuming, and program teams developed efficiencies that fit their circumstances. One small district flagged self-reported data, which was more likely to have errors, and called the handful of school staff to verify the information. A larger district linked its LTS to the state data system to check the accuracy of credential information.

District size and capacity were limiting factors in development. Six UPPI districts had fewer than ten schools, and another four had between ten and 20 schools.[12] Both large and small districts, as well as universities, identified district size as a factor in the development and use of the LTS. Although not universally true, most small districts did not have the capacity to develop the LTS alone. They did not have IT professionals to develop the LTS, existing online databases to tap, or resources to maintain it after launch. One option for small districts was to band together into consortia for the LTS. This worked for one set of small districts, which decided to develop a cross-district LTS, but did not work for another, which indicated that a single LTS would not meet the unique district needs. In another case, the university took on LTS development in part because it had the IT department and capacity. Small districts consistently reported that they did not need the LTS to place candidates in positions. As one respondent noted, with only three schools, district leaders already knew the principals and principal candidates well. One small district leader noted that the LTS did not help with placement decisions but did help validate the decisions to others. Small districts also tended to include teachers in the LTS so they could "develop from within" and have visibility into their long-term leadership bench.

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[12] We counted district average size for each consortium.

Districts large and small experienced capacity issues related to staffing the LTS work. Organizations with high turnover struggled to retain institutional knowledge of the LTS purpose or design. Some districts had sufficient staff but not the necessary mix of expertise. Respondents identified two helpful roles: (1) a point person with experience with both university and district to manage development and (2) a technical person on staff with knowledge and time to guide the development. Technical expertise was key: "We did not know up front what we did not know, and we did not ask the right questions up front because we did not know what we did not know."

Almost all respondents raised concerns about protecting individual-level LTS data. Some districts and states had legal or policy prohibitions on sharing disaggregated data. Respondents indicated that if individual staff were identifiable, that put both the staff and their students at potential risk, raising legal and human resource concerns. Districts also expressed concern about the possibility that proprietary data, especially salaries, might be made public.

To address concerns about privacy, respondents suggested the following:

- Selectively share data with trusted partners.
- Share flat files (electronic or paper reports) rather than linking the systems.
- Limit access to dashboards with individual-level data; display data in the aggregate unless there is a need to know.
- Aggregate data on graduates across the partner districts before sharing with the university.
- Aggregate data within districts across cohorts before sharing with the university.
- Put in place nondisclosure agreements.
- Involve those most worried (e.g., human resource departments, superintendents) in planning meetings to hear and address their concerns.

The partnerships evolved to support implementation

As with the redesign process, districts had a greater-than-typical role in implementing the program

All the UPPI programs had formal partnerships with districts and their states as a precondition to winning the grant from The Wallace Foundation. In that sense, they were unlike similar programs in the same states, which were less likely to have formal district partnerships. In spring 2021, only four of seven such similar programs had formal district partnerships.

As indicated by the INSPIRE survey, district partners became not only more involved in instruction and supervision, but also more involved in principal candidate selection, internship arrangements, and curriculum and program design. This was not the case for comparison programs. Most or all UPPI programs (five to seven, depending on the particular task) involved local partners in advisory committees, selecting applicants, designing curriculum, placing candidates in internship positions, teaching, and/or hiring graduates, in 2021. Comparison

programs, on the other hand, decreased district partner engagement in all categories except selecting interns.

Team structures became less formal during implementation but the partnerships endured

When the programs shifted to implementation and continuous improvement, there was less need for working groups. After the redesigned programs were launched, most teams reduced the number of formal, cross-team meetings to once or twice per month. The districts' role shifted from actively engaging in the redesign to responding to progress reports or more targeted requests from the university. For example, one grantee's steering group met biweekly on a regular schedule until the program redesign was complete. They shifted to monthly meetings during implementation, with most interactions being informal. In the last two years, the programs shifted from frequent full-team meetings to meeting with specific districts about their cohorts. By the end of the redesign, routines had been established, formal and informal channels of communication were open, and patterns of meetings had been established, so there was little additional effort needed to continue the relationship. Program, district, and state staff seem to want to continue sharing best practices and supporting each other. As one interviewee put it,

> It's hard because the work itself right now is we're just implementing the cohorts. I don't know to what extent the people we work with at the district level need to be engaged with those cohorts other than we'll have our partner meeting today where we will talk about what are the experiences you want that cohorts to go through in spring, next semester. I think we'll have some of that, but outside of the LTS work, we have still been trying to lean on [district] to hire someone to work with the cohort more directly.

Most programs implemented their first official cohort after completing all redesign components

UPPI programs took one of two approaches for using the redesigned program with a cohort of principal candidates: they either completed all redesign components first (five programs) or started their first UPPI cohort early, while actively designing some elements of the program (two programs). All seven programs completed the curriculum before starting their first UPPI cohort.

Staff needed to be prepared and in place for full implementation

As described above, there was not always a clear demarcation between development and implementation. However, ULs did point out that several pieces needed to be in place to fully implement the redesign program: preparing and monitoring instructors and having university-based program coordinators in place.

UPPI teams stressed the importance of instructors having a deep understanding of and commitment to the program. Most universities engaged instructors in the redesign process in part to build that commitment. In addition, at least one program learned from their experience that

they would need to set aside time to acculturate new instructors, saying that it could take "a year of buy-in" for faculty who were not part of the redesign. Five programs created formal training sessions for their instructors.

The redesigned programs incorporated features to promote strong implementation, such as cohort coordinators, coordination meetings between instructors, and debriefs of staff and candidates (see Chapter 2). Sites seemed to vary in how formal these processes were, with some ranging from more formal (e.g., training for adjuncts, observing classes, or examining work samples submitted by candidates) versus more informal (e.g., greater opportunities for collaboration and conversation).

Districts anticipate higher-quality principals as a result of partnering on preparation program design and delivery

District leaders noted at least three mechanisms through which they expect principal quality to improve as a result of partnering: more strategic principal candidate recruitment and selection processes, program content aligned with district needs, and instruction and program delivery that reflects real-world responsibilities.

District and program leaders reported in interviews that, in their view, partnering on recruitment and selection of program participants is likely to lead to stronger program graduates who are better prepared to work in the district. By engaging in targeted recruitment and selection, districts believe that they improve the chances that the strongest aspiring principals participate in the program. In addition, districts' involvement bolstered program graduates' likelihood of working in the district. District leaders reasoned that if they tapped an individual to apply to the program, the individual might feel committed to staying in the district and taking on a leadership role. One district leader remarked, "If you do a better job of recruiting those kinds of candidates, then as [they] move through the program, they come out with not only the knowledge, but they already have the fit."

UPPI districts further believed that their contributions to preparation programs' framework and coursework and the clinical component would lead to better prepared principals. District leaders anticipated that their involvement would help develop graduates who have the knowledge, skills, and dispositions prioritized by the district. This is because through the collaborative redesign process, programs will be more attuned and responsive to the needs of districts. For example, programs may include course content and practical learning opportunities that help develop principals with a keen equity lens, and who are knowledgeable about trauma-informed teaching, which are skills and dispositions that some districts particularly value in principals. One district leader said:

> When we . . . gave input about . . . the curriculum, we talked so much about how administrators have to be problem solvers and foster collaboration and delegate . . . and build teams and build culture, and to be adaptive. . . . The [principal

candidates] I've seen most recently come out of . . . the program, I am able to pick up on some of the differences that we would hope that some of the tweaks we made in the curriculum would cause a new leader to . . . how they would hold themselves as a leader and function as a leader.

UPPI districts also expect that their contributions with respect to shaping programs' thinking around instruction and program delivery will result in graduates who are prepared for the real work of principals. Specifically, when sitting administrators (i.e., principals and district leaders, such as superintendents) serve as adjunct instructors, they can engage program candidates in issues and tasks that reflect the work of current principals. Districts expect this will produce graduates who are better prepared to step into the principal role "on day one."

The experiences of UPPI districts suggest that collaborative district-university partnerships focused on principal preparation are demanding but worthwhile for districts. One district leader recalled a conversation with a colleague:

I remember thinking, "You're really burning the candle at both ends. You're a superintendent . . . you're a professor. What are you doing?" And he said, "You know, the additional work I put in at [the partner institution] gives me a leg up on identifying and recruiting the best candidates [for principal positions]." And I'll never forget that because the reality is, yes you put in a little bit more work teaching a class, but if you hire an ineffective leader, you're going to work ten times more than if you would just identify the right person and hire the right person.

Continuous improvement was built into the redesign and implementation processes

All sites recognized the importance of continuously improving their redesigned program, that it was not a "once-and-done" process. They also recognized that the context in which principals work could evolve quickly, their needs reflect what is happening in the community and world, and university programs need to respond accordingly to adequately prepare leaders for a changing world. In this respect, the willingness and ability to evolve and continuously improve the program also contributes to its relevance and long-term sustainability.

Teams developed various data-driven processes to support the continuous improvement of the program. Notably, the UPPI LTSs were designed to help programs use data for improvement. Most teams indicated they would be able to use it for that purpose in the future, and some have already begun the practice as of spring 2021.

Sites committed to intentionally collecting multiple forms of data from a range of stakeholders, including annual principal candidate surveys, end-of-semester candidate focus groups, candidate work products, faculty focus groups, and district partners' feedback. Information used and collected for continuous improvement has helped improve the sequencing of courses and reduce redundancies in the curriculum. For example, at one university, program

leaders found that they had too many credit hours and an overfocus on law and policy, so they created modules from the stand-alone law course to embed in other classes.

Sites also took principal candidates' feedback into account when making changes to aspects of curriculum and instruction. For example, one university revised an initial idea of "bucketing" concurrent courses into major topical themes in response to candidate feedback that taking two courses at once was too overwhelming. Likewise, staff informed improvements. For example, adjuncts in one program provided feedback that they needed more pragmatic and syllabus-centered support, leading to more adjunct training.

Teams took steps to institutionalize the redesign features as well as the partnership and process of continuous improvement

UPPI teams used documentation, hard funding, and shifts in culture to institutionalize the redesigned program

For the most part, UPPI sites started thinking and talking about sustainability early, and these conversations involved university administrators and district partners. Mentor programs played an important role in helping sites think about and plan for sustainability. Programs set up structures to maintain the features of the redesigned program by documenting the program, getting university commitment on financial matters (staff positions, fee structure), and maintaining staff ownership.

Throughout the development process, programs articulated program intent, key roles and responsibilities, and key components of the program and then developed documents and materials (such as a comprehensive candidate support handbook and course materials/syllabi) to support continued implementation of the program as intended. In several cases, the program had no prior documents summarizing their comprehension vision for the program and graduates.

ULs strategically leveraged or navigated university bureaucracy to identify ways to institutionalize the redesign features. They explained that communicating strategically about the program helped to make its values and goals clear to their university leadership. Most ULs briefed their university administrators regularly on the redesign progress, highlighting elements that may be useful to share with other university programs and external stakeholders. Several ULs commented on the importance of briefing new university administrators in their first few weeks or months.

Throughout the redesign process, university administrators provided critical financial and other support and extended that support to sustain the program after the grant ends. For example, one university used grant funds to pay for the cost of coaches and part-time faculty for the first year of implementation and gradually shifted those positions to university funding. Eventually, the program will pay for itself through tuition and fees. In another case, university leadership committed to supporting the full cost of coordinator positions, making it part of allocation after

the grant ends. Most programs reorganized the fee structure to manage program costs. For example, one program was able to charge a lower fee by locating classes in satellite campuses closer to the district partners.

Finally, UPPI teams aimed to maintain the direction of the program by building a culture of collaboration and shared vision among faculty and staff. For example, one UL intentionally stepped back, giving program coordinators ownership over their own programs. This helped ease the programs off UPPI grant support into university funding. In addition, it eased coordinators into decisionmaking roles. In these situations, ULs needed to maintain a balance between continuity and distributed leadership. As one UL noted,

> I . . . think it's really, really important to keep that consistency, checkpoints on the fidelity. Lots of checkpoints on the fidelity. It can just slip so fast . . . There has to be someone or more than one someone that's consistent until it's solid. And then when it's solid, there has to be that opportunity to develop others to take over. . . . So, having solid leaders at the beginning who are willing to then grow other leaders to move forward. . . . We can do this much with our vision and our fidelity and implementation, but then by bringing in new people, new things can happen that we didn't even see, which is really important to keep a program alive and going.

Sharing leadership could also guard against the impact of staff turnovers on program implementation. Programs also worked to hire new faculty that would fit the new model; several programs began hiring faculty with a collaborative mindset/orientation who shared in the vision of the program.

Teams used advisory groups and within-program processes to institutionalize the improvement process

To maintain a focus on improvement, some sites created advisory groups to guide the program. For example, one site repurposed a task force, originally developed for curriculum work, to focus on sustainability in the last year of UPPI. This new advisory group has representatives from all organizations involved in UPPI, including three state agencies and the original partner districts. Representation in the advisory group is associated with the organization, not the individual, to ensure the work will continue with support from all partner agencies. Another site established an advisory board to build internal accountability measures and mitigate against turnovers at the program level. The board helps build shared decisionmaking and distributed leadership beyond one person (i.e., the program director). If key program personnel left, the Board would serve as institutional memory to help onboard the next key person. Advisory members include superintendents working with the program, alumni, faculty, representation from the state partner office, and leaders of principal and superintendent professional organizations, among others.

Some sites believe that being anchored to national standards (PSEL, NELP, CAEP) and/or state standards will help ensure that the program remains high-quality and relevant. Some

programs are engaging with national or state organizations to extend their focus on program quality. For example, several programs are planning to continue to use QM every two to three years, and several programs have sought or received grants to extend their work.

Finally, ULs report that continuous improvement cycles have been routinized into the work of program faculty, helping to ensure timely use of data to inform program improvement (see, for example, Box 2.6).

UPPI partners valued their partnerships and took steps to sustain them

UPPI created strong partnerships, as reported consistently by team members, which were a significant driver of the redesign work (see Box 3.9). Partnerships provided stability through political changes and leadership turnover; district engagement brought practical perspectives to the program; partnerships extended networks, and partnerships elevated visibility of school leadership (e.g., engaged the state department of education in leadership issues).

District engagement brought a practical perspective to the program. For example, one program described the redesigned program as "more inclusive . . . [which] is going to allow for a more well-designed, a more thought out and productive experience for the candidates," and that "having those who are on the front line, using practitioners in this process, is the best way to ensure that you are going to hit at the real work in schools." Working with practitioners (e.g., sitting administrators) opened the eyes of faculty as to what districts needed. Through The Wallace grant, one university sent faculty members to attend state administrator association meetings to get a better sense of what district leaders need, and they learned, for example, that the program was not great at preparing principal candidates for technology.

Partners also stabilized the UPPI work through shifts in the principal preparation system. One university reported that they were able to stay focused through political changes and leadership turnover because of the strong network they built through UPPI. The partnership was not only across the partners, but within multiple levels of the partners. Grantees also reported that partners helped each other directly, through sharing PD opportunities and models, and indirectly, by extending professional networks.

District partners were keen to sustain the partnerships with the university and each other past the end of the grant. Institutional engagement between the programs and the districts was baked into the redesigned program, especially in recruitment activities, cohort development discussions, candidate assessment day, mock interviews, instruction, and internship mentoring. Some programs also created new positions (e.g., full-time clinical director, program coordinators, cohort director) to ensure more touchpoints with district partners.

Another strategy that helped sustain strong partnerships was to hire liaisons responsible for connecting the university and district. This especially helps district engagement if the district person graduated from the program and/or the university person came from one of the districts. In some cases, additional coordinator or liaison roles helped. One university had both cohort directors and a superintendent liaison, with the latter specifically tasked with keeping the relationship warm at the senior level as well as providing a mentor for the principal candidate, who was more independent of both the university and the district and who might provide career-long, expert support. University staffing policies can make it difficult to establish these roles and sometimes require program leaders to negotiate terms of employment with university administrators.

Challenges and mitigating strategies

UPPI teams faced challenges in both carrying out the redesign work and maintaining and building the partnerships. In specific, they struggled to find the time to collaborate on the work, address competing priorities, and maintain their direction and team cohesion after staff turnover.

The most mentioned challenge, across teams, roles, and stages of development, was time to carry out the redesign work

Partners often reported the lack of time to work on redesign as a major challenge. Lack of time was a result of competing priorities, scheduling with multiple partner organizations, and proximity of partners. Team members consistently talked about spending half or more of their

time on the redesign work, especially in the early years. Partners also expressed that engaging in substantive continuous improvement takes time. The challenge was especially acute for small universities and districts, where the smaller staff had to manage several administrative roles in addition to UPPI. However, this was also the case at large school districts with a small and limited central office staff. Some faculty members at smaller universities served on multiple committees. Because of partners' time constraints, ULs have noted scheduling as a challenge. For example, one site has expressed the difficulty of getting district partners together for meetings because their schedules are dynamic, and things often come up last minute. This challenge was particularly evident among university and district partners. Attitudes shifted from struggling with the burden in the first year to appreciating the benefits of the investment later. Several universities used grant funds to buy out time, giving faculty more opportunities to work on UPPI. This was especially useful early in the redesign, to provide time for curriculum development. Other universities met virtually or on evenings and weekends to accommodate scheduling conflicts. Some districts also mentioned the importance of embedding this work in district strategic plans.

Competing needs and goals within or across organizations challenged the redesign work

Multiple partners have expressed the difficulty of competing needs and objectives in moving the work forward. For example, district staff are subject to last-minute schedule changes that make long-term scheduling difficult. Partners have expressed the importance of aligning needs and goals in the process of the redesign work. One district partner shared a scenario where district leaders disagreed on the location of coaching for mentor principals:

> I know that the coaching piece, I know that in the past that [district] has shared many times that the coaching that [university] wants for the mentor principals doesn't work for our particular district in the format that they want to utilize, just because our superintendent has indicated he doesn't want principals off campus, and [university] wants to bring all the principals off campus so many times a year. So we have built it in and this is one of the things that we sort of, I don't want to say, we've pushed back, but we've had to change based upon our own district directives.

The importance of aligning needs also occurs within organizations. For example, some faculty have expressed difficulties in balancing research with redesign work, especially because redesigning the program is less valued by the university than research activities. Some universities have addressed this challenge by building faculty research projects and papers into the UPPI redesign work. Faculty have also expressed the worry of engaging so many partners in redesigning coursework at the expense of academic freedom. No clear solutions to this challenge emerged.

Turnovers at all levels—university, district, and state—threatened partnerships and support for redesigned program

Turnover at multiple organizations has disrupted the redesign process and partner engagement since the beginning. Teams experienced turnover at all levels of the partnership, including university project managers, district leaders, state partner leads, and faculty. Because the programs are at the focal point of the initiative, university partner turnover was the most crippling. The difficulties come from having to onboard someone new, build new relationships, and align priorities. However, throughout UPPI, teams experienced turnover in multiple key district positions as well, including district superintendents, program personnel, and university administrators. In one case, the preparation program leader expressed concern that, given turnover in the district, the district may not prioritize UPPI or invest time, effort, and resources in the partnership. In circumstances involving turnover, it is critical for the incoming member to take the time to learn about the nuances of the partnership, their role, and the tasks at hand, and for others to onboard the newcomer, apprise them of the purpose and benefits of the partnership, and build new trusting working relationships. Teams developed strategies to ease turnover transitions. Most of these strategies are preemptive, including engaging in redundant staffing, cross-training team members in different roles and tasks so knowledge about the initiative would not be lost if an individual left the team, and maintaining clear documentation of timelines, objectives, and achievements.

District needs and readiness to partner are factors to consider before pursuing a partnership, but pre-existing relationships and a focus on building a culture of trust and collaboration can support successful partnerships

UPPI teams agreed that it is important to select the right partner organization. Most UPPI districts had a prior working relationship with their preparation program partner. The nature of the partnership varied. For example, the organizations may have partnered on a previous grant, the district may be the primary sender of principal candidates to the university, or the district may have engaged with the university on teacher preparation. Regardless, this prior relationship helped both sides commit to a partnership to improve principal preparation.

While there are numerous benefits to partnering, not all UPPI districts benefitted equally and not all partnerships achieved the same depth of engagement. In weighing whether to form a partnership, districts may wish to consider their system's needs and priorities. Smaller districts, for example, mentioned that for the number of principal positions they have available at any given time, they did not see a need for a LTS to support hiring, professional development, and placement practices. Similarly, some small districts have expressed that they do not send enough candidates to a university preparation program to warrant a formal partnership. Other small districts, however, felt that the partnership improved their approach to leadership development.

Districts may also wish to consider their system's readiness. This includes to what extent they can be a committed, responsive partner. UPPI districts made a commitment to the partnership for at least the duration of the initiative. Other districts considering something similar might also assess whether they can, as an organization, make a similar commitment. Third, districts should consider whether the university preparation program is ready for such a partnership. Would the program be willing and able to incorporate the district as a full partner in shaping and delivering the program? Not all university preparation programs may be seeking such a collaborative relationship.

Chapter summary and use of best practices

Over the course of the UPPI redesign, the teams developed and honed structures and tools to manage the work, and through continuous engagement with each other, internalized the work. That, coupled with baked-in changes needed to continue operating the programs, supports continued implementation and innovation.

The redesign process was consistent with best practices related to management

Many elements of the team structure, such as having clear partner roles, having decision-makers at the table, and sharing leadership roles, reflect best practices in management (King, 2014). The communication tools and protocols that UPPI teams reported as helpful are consistent with prior research on effective management practices, as are management strategies and tools such as having regularly scheduled meetings and documenting and disseminating minutes and decisions (King, 2014).

The redesign process was also consistent with best practices related to collaborative partnerships

Key elements of the redesign process also reflect the literature on forming and using collaborative partnerships. For example, effective teams have a common vision, including having a mission, shared beliefs and goals, and a joint agenda (King, 2014). And they work together to co-develop their program, as did the UPPI programs, especially for clinical experience and candidate selection (Anderson and Reynolds, 2015). The focus on the client—aligning the program design to the districts' needs—is a best practice in management (Anderson and Reynolds, 2015).

4. Extending Lessons Learned Beyond the UPPI Programs

Although UPPI was implemented by grantees in seven university-based PPPs and their district and state partners, lessons from the program redesign efforts they undertook extended through the respective state principal preparation systems (see Figure 4.1). These systems include not only PPPs and districts but also state agencies and non-governmental organizations. There were three main ways in which the program redesign efforts were extended:

- expanding the UPPI partnership to new districts
- applying lessons learned to other stages of the pathway to the principalship
- informing the work of other programs and districts in the state principal preparation system.

Figure 4.1. The Principal Preparation System Linkages Beyond UPPI
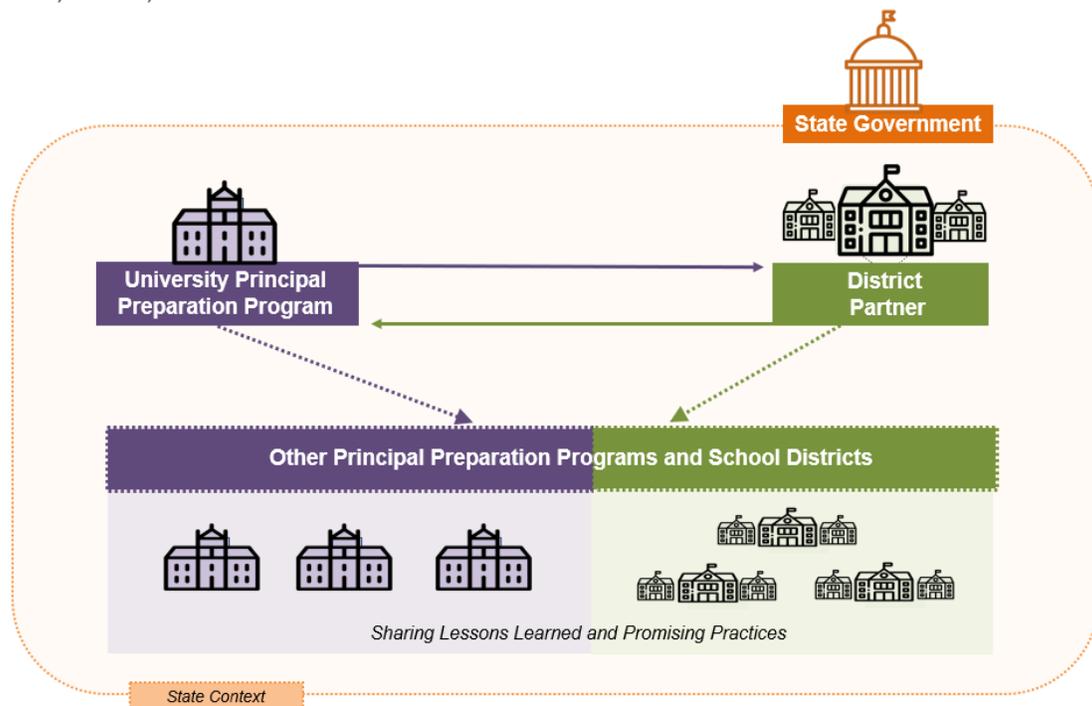

Table 4.1 summarizes where these three types of extension happened, highlighting three different mechanisms through which the third type of spread occurred. All UPPI programs developed partnerships with new districts. In most sites, UPPI partners applied insights from the redesign to inform other activities along the pathway to the principalship. Finally, in all sites,

UPPI programs and/or their district and state partners spread lessons from the program redesign effort across the state system for principal preparation.

Table 4.1. UPPI Sites Extended Program Redesign Efforts

	Expanding to New Districts	Extending Along Pathway	Informing State System		
	Universities Offered Partnership Opportunities to Additional Districts	Partners Extended Redesign Learnings to Other Parts of a Pathway	Universities Extended Redesign Learning to Other PPPs	Districts Spread Learnings to Other Programs and Districts	Partners Embedded Redesign Learnings into State Policy or Practice
ASU	✓	–	✓	–	✓
FAU	✓	✓	✓	–	✓
NC State	✓	✓	✓	–	✓
SDSU	✓	✓	✓	–	✓
UCONN	✓	✓	✓	–	✓
VSU	✓	✓	✓	✓	✓
WKU	✓	–	✓	✓	✓

NOTE: – indicates feature not present; ✓ indicates feature is present

Universities expanded the redesigned programs to include partnerships with additional districts

The structure and scope of the partnerships with additional districts differed across sites

Throughout the life of the UPPI grant, all universities scaled their redesigned program by offering partnership opportunities to additional districts beyond their original partner districts. The structure and scope of these expanded partnership opportunities differed across sites. In some cases, the university essentially replicated the partnership model developed under UPPI with the new partner districts, engaging deeply with the districts to provide tailored PPPs for districts' principal candidates. In two sites, the partnership opportunity focused on a more discrete piece of the broader UPPI initiative. In all cases, these new partnership opportunities extended the benefits of the redesigned program to more districts but did not include these districts in the program redesign process.

The ways in which the UPPI programs engaged with their original district partners on redesign provided the template for their engagement with new district partners. One such template was to branch out from an initial, discrete initiative. The Long Beach school district initially reached out to SDSU to develop a certificate program for district administrators who supervise principals. The partnership between Long Beach and SDSU evolved into a more

formal partnership; now, SDSU offers a preliminary administrative services credential program cohort for Long Beach candidates modeled on the UPPI redesigned program. The partnership later extended across the full range of the district's efforts to support the pathway to the principalship. Specifically, district leaders revised a range of leadership development and support activities with an equity focus similar to the one used in the SDSU credential program. As one program leader stated, SDSU's work with Long Beach "really fanned out into other areas" that were initially unexpected. This resulted in an intensive partnership with Long Beach that was not unlike the partnerships that SDSU had with its initial district partners, although Long Beach was not involved in the actual redesign process. Similarly, when FAU brought on additional district partners to one of its district-based cohorts, the UL noted that, even though they didn't receive UPPI funding, they were nevertheless "as much a partner in the program" as the original district partners.

In some of the UPPI sites, the new partnerships are more limited in scope but could provide the basis for deeper engagement in the future. Interactions between Jefferson County Public Schools (JCPS) and WKU have focused on leader tracking systems and principal pathway issues. JCPS had a need to develop technology to track their leaders and, because JCPS is a large district in Kentucky, WKU was interested in obtaining information about program graduates who are employed there.

Universities and districts both benefited from new partnership opportunities

These expansions were mutually beneficial for universities and districts alike. Engagement with additional districts allowed universities to expand their reach and get input about the leadership needs in different contexts. For districts, partnership opportunities with UPPI universities addressed a need that was not being met by existing interactions with pre-service providers. For example, FAU added two small districts as partners. This benefited the university by providing access to additional candidates to reach the desired size of the cohort. It also provided FAU with access to additional instructors. The districts appreciated FAU offering a rigorous program of classes (prior to the pandemic) in-person at a location convenient to the districts.

UPPI program redesigns extended changes along the pathway to the principalship

PPPs are just one element of the pathway through which aspiring leaders become principals (see Gates, Woo, et al., 2020)—albeit a central one. UPPI programs and their partners were able to take the lessons that they learned through the UPPI program redesign efforts focused on the PPP and apply them in other parts of the pathway to the principalship (and beyond). These efforts capitalized on the partnership aspect of the initiative and fostered alignment between the redesigned program and other stages of the pathway. Sometimes, it was the university programs

leading the charge to leverage insights or opportunities discovered through the UPPI program redesign to create new opportunities focused on other stages of the pathway. In other cases, district participation in UPPI led them to consider opportunities for greater coherence between the redesigned PPP and other district activities related to the pathway to the principalship. Table 4.2 summarizes how programs and districts applied key UPPI insights related to partnerships and coherence across the pathway.

Universities used insights from the UPPI program redesign to develop or revise learning opportunities targeting other stages of the pathway

We observed efforts by university programs at most sites to develop new partnership-oriented learning opportunities targeting the needs of aspiring or practicing leaders before or after their participation in the focal PPP or to support the district officials that would supervise them. While such efforts were not technically part of UPPI, they may be viewed as an outgrowth of UPPI. Table 4.2 lists some examples of efforts targeting stages of the pathway to the principalship other than the formal PPP. The examples included programs targeting teachers who want to develop leadership skills but do not want to be administrators, "bridge" programs to support the continuous learning of PPP program graduates until they obtain an administrative position, and principal supervisor programs (see Box 4.1). These new PD opportunities promoted substantive coherence across the pathway, as universities carried over their UPPI learnings and/or as districts shared lessons learned with district staff beyond aspiring administrators. This work also extended the emphasis on a partnership approach to professional learning as, in all cases, the programs collaborated with district officials—from UPPI partner districts as well as other districts—on the design and implementation of these programs. These efforts involved UPPI partner districts and often other districts as well. In some cases, the efforts resulted in a new formal program that had not existed prior to UPPI. In other cases, universities revised the content of these programs targeting other stages of the pathway substantively to align with the redesigned PPP and shaped the clinical component to leverage approaches used there as well.

Box 4.1. SDSU Developed a Teacher Leader Master's Program and Bridge Program That Drew from the Redesign of Its PPP

At SDSU, the faculty identified a need for a new master's degree program targeting teacher leaders because the revised PPP focused recruitment efforts on teachers who demonstrate a commitment to becoming building-level administrators. This focus left a gap in professional learning opportunities for those teachers who were looking to improve their practice and build their leadership skills while remaining in the classroom. The SDSU team leveraged the redesigned administrator preparation curriculum to develop the new teacher leadership program.

SDSU's partners also identified a need to support PPP participants who do not proceed to an administrative program immediately after completing the PPP so that they can continue to develop their leadership skills. To address this need, SDSU developed a bridge program to provide coaching to recent program completers, which was supported by the state Department of Education, in partnership with UPPI and other district partners. As one program leader stated, "When we started with this Wallace project, it was really about tier one and redesigning tier one. And then we really understood that it's more than just tier one. It's getting, it's the pipeline, all the way through."

Table 4.2. Examples of How Programs and Their District Partners Applied Lessons from UPPI to Other Stages of the Pathway to the Principalship

University	Activities Targeting Other Stages of the Pathway to the Principalship
ASU	• Program redesigned Tier I program (for aspiring teacher leaders and assistant principals) to align with principles of the Tier II program redesigned under UPPI.
FAU	• Program used UPPI resources to develop an assessment for use in the second phase of school leader preparation, which will be provided to Florida districts as an option for their use to assess principal candidates. • Program developed an executive leadership development series for leaders in one partner district. • Hosted a listening tour to assess needs of leadership statewide. • Program interested in developing Ph.D. program in school leadership.
NC State	• Some partner districts developed district-run assistant principal and principal academies, which shared tenets of the redesigned UPPI program, such as social justice, equity, succession planning, cross-training, understanding the capacity of staff. • Program established a version of NELA Ed.D. program.
SDSU	• Program, with partner and other districts and with state support, developed a bridge program to support ongoing leadership development for recent PPP graduates who had not yet secured an administrative position. The program leveraged pedagogical strategies (e.g., learning walks) from the UPPI redesign. • Program used the revised curriculum to develop a separate, new master's program for teacher leaders, targeting those who wanted to remain in the classroom but serve in leadership roles. • Program, working in partnership with a non-UPPI school district, developed a program to train principal supervisors to support principal professional learning and a doctoral program to prepare equity-driven leaders for the district. • Partner district made extensive revisions to district leader standards, principal and AP evaluation and job descriptions to align with the UPPI program's vision of equity-driven leadership.
UCONN	• Program developed training for district administrators who supervise clinical internships and support new administrators. The training is grounded in equity-driven leadership, which was a key tenet in the redesigned PPP curriculum. • One partner district is interested in having UCONN work with its leadership coaches in the district. • One partner district is embedding an equity lens in its approach to teacher preparation.
VSU	• Program and district shared lessons about the above collaboration at region-wide PLC addressing principal pre-service, principal PD and principal supervisor support there-by extending lessons across the entire region. • Partner district created aspiring principal academy, principal supervisor academy, inspired by UPPI efforts.
WKU	• Program coordinated with teacher education program to think about the continuum from initial educator preparation to advanced administration preparation, with specific focus on equity, diversity, inclusion, and social justice, which are key concepts in redesigned UPPI program.

Districts leveraged insights from the UPPI redesign to inform their own principal support activities, promoting coherence along the pathway to the principalship

The examples described in Table 4.2 also highlight ways in which lessons from UPPI spread within districts. UPPI district partner leads worked with other district staff to apply lessons learned to other stages of the pathway, including the supports principals receive once they are on the job. Such efforts fostered alignment *within* the districts and *between* the PPP and the day-to-day work of principals. This within-district spread did not occur in every partner district. Where it did occur, its emphasis and scope varied. The examples reflect a range of opportunities for districts to leverage insights from their partnership with PPPs. Box 4.2 describes the example of

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a Virginia district that leveraged its partnership with VSU in a comprehensive way. The district built out formal, district-centered PD courses to support the entire pathway to the principalship from teacher leaders to principal supervisors. We also saw more targeted examples of spread to specific induction or development efforts in the district. For example, Meriden Public Schools in Connecticut incorporated the University of Connecticut's program orientation activities focused on equity into its new teacher orientation.

Box 4.2. Henrico County Public Schools Built Out Professional Development Courses to Support Growth Along Every Step of Its Leadership Pathway

Henrico County Public Schools, in Virginia, credits its collaboration with the VSU principal preparation program for sparking improvements to every step of its principal pathway. According to one district leader, the UPPI work raised the visibility of school leadership in the district and created a window of opportunity where district leadership supported PD:

> I would say, [school leadership professional development is] all under one umbrella, but it was the development of a true, sustainable leadership development program in Henrico County. Beginning with teachers who aspire to be leaders, and now culminating to that we are actually providing professional learning for our principal supervisors. So we have hit every level in preparation and building a true succession and pipeline in the four to five years.

Henrico built new year-long PD courses:

- Aspiring Leader Academy for potential leaders, first offered within the district in 2016–2017
- Assistant Principal Learning Series, first piloted in 2018–2019
- Principal Supervisor Academy, developed by Henrico, The Wallace Foundation, and the Center for Creative Leadership, initially offered to districts near Henrico because of the COVID-19 pandemic (020–2021) and planned to be statewide in 2021–2022.

For sitting principals, Henrico shifted from its traditional PD to a districtwide Learning and Leading Conference for principals and some teachers, first offered in 2018–2019. Some of the topics addressed in the PD—such as leadership dispositions and equity—reflect VSU and partner district priorities discussed during the redesign.

According to the district leader, the UPPI work raised the visibility of school leadership in the district and created a window of opportunity where district leadership supported PD. UPPI funding supported the development of the academies, and guidance from a UPPI mentor program informed the design. Some of the topics addressed in the PD—such as leadership dispositions and equity—reflect VSU and partner district priorities discussed during the redesign. And at least one opportunity—the Learning and Leading Conference—used a similar approach to instructors, by pairing a district leader with a sitting principal for each learning strand, to incorporate both policy and practice.

Examples of spread involved formal programs and more informal efforts. In Connecticut and North Carolina, UPPI districts offered PD for principal coaches in the district relating specifically to the UPPI program's coursework, thus fostering coherence and continuity through ongoing PD as program graduates moved into administrative roles. In North Carolina, a consortium of districts created leadership academies to support PD of principals aligned with the PPP across many districts. For example, the academies reinforced tenets related to social justice, equity, succession planning, and understanding of staff capacity—all emphases of the NC State effort (see Box 4.3). UPPI helped the district move its agenda forward, with one district leader saying:

I feel like Wallace may have been . . . the catalyst to really put some organizational structures around leadership development. I think there was always the desire there, but just not sure how to navigate those waters. I think this has given us . . . clearer pathways to do that. . . .

District Leader 2: I think in the context of this work, it has also been able to spur on other ideas, like the Master Leadership Symposium, the simulations, the other things we want to do. An AP Academy has been a longstanding vision for us. This just really gave us the springboard that now we could do it and kind of move in that way. I feel I just can't imagine that the day the grant is gone, that this work is going to stop because it's now an embedded part of our district focus. . . . I think we're committed to build it into our strategic plan as far as the development of people.

Box 4.3. Districts in North Carolina Created Leadership Academies to Support Principal PD Aligned to the NC State Program

In North Carolina, the NELA coordinator observed that some school leaders from the NELA districts had not gone through the NC State program and did not have comparable skills and knowledge. She developed leadership academies for these principals and APs that covered the tenets addressed by the redesigned NC State program, such as social justice, equity, succession planning, cross-training, knowing staff capacity. This approach not only extended learning from the UPPI program redesign into the PD (post-PPP) phase of the pathway but also extended it to more of the NELA districts. Based on her experience recruiting participants, she would recommend starting these academies with one highly involved district and using the feedback to build interest in other districts.

At least one partner district, Chula Vista Elementary School District in California, applied insights from the UPPI redesign to shape changes to principal and assistant principal performance standards, evaluation tools, and job descriptions (see Box 4.4).

Box 4.4. Chula Vista Drew on Learnings from UPPI to Revise School Leader Evaluation Tools, Job Descriptions, and Interview Processes

Working on UPPI prompted Chula Vista to take a closer look at district policies around school leadership. SDSU's revisions to its preparation program highlighted California's state leadership standards. Chula Vista appreciated the direction of the SDSU changes and wanted to align its own leadership policies to SDSU's approach, which meant alignment with state standards. Up to that point, according to one district leader, few administrators within the district were aware of California's state leadership standards, the California Professional Standards for Education Leaders, unless they had recently obtained a credential.

District leaders revised the district's leadership standards, job descriptions and interview questions, and evaluations tools to align to the state standards, even though there was no requirement from the state that districts create such alignment. Whereas the previous standards and evaluation tools were more focused on principals' roles as managers, these shifts allowed for a greater focus on instructional leadership and similar roles. Overall, these changes helped to create greater alignment between the university and district and more consistency within the district.

UPPI programs and their partners shared insights from the UPPI redesign across the state

Lessons from UPPI also spread as initiative participants shared their experiences and approaches with other programs and districts. As described in Table 4.3, some of the sharing was

structured and facilitated by a state agency or nonprofit organization within the state. But there was also a lot of informal, organic sharing among programs, among districts, and between programs and districts.

States supported spread to other PPPs

Nearly all UPPI states require PPPs to develop and maintain partnerships with districts and other organizations to obtain input that can inform program attributes (Gates, Woo, et al., 2020, p. 35). Despite such requirements, practical guidance about what those partnerships could look like or structures to support them has traditionally been lacking. UPPI team members consistently reported that UPPI created strong partnerships, and these partnerships drove the quality of the principal preparation program redesign. State, district, and university program leaders indicated these benefits of partnering: stability through political changes and leadership turnover, extended networks, and elevated visibility of school leadership across the state. One university reported that they were able to stay focused through political changes and leadership turnover because of the strong network they built through UPPI. States took the opportunity to showcase UPPI program-district partnerships and encouraged the sharing of lessons learned. The Quality Measures formative assessment tool, which involved a structured process for programs to engage with districts, provided a framework for partnership activities. As mentioned earlier, some UPPI states encouraged the use of this tool by programs across the state.

In view of the reported success of the UPPI partnerships as described in the previous chapter, it is not surprising that state partner leads supported the spread of insights from UPPI program redesigns across the state. They actively highlighted the learnings of the UPPI programs in convenings and online forums. They also encouraged and sometimes offered tangible supports to other programs to undertake similar activities. For example, in California, where a major change to the administrator performance assessment was rolled out during UPPI with implications for PPPs across the state, SDSU was invited by the state's professional standards board (its state partner) to share its insights about program redesign and expertise around specific topics, such as teaching candidates how to reflect on their practice or addressing anti-blackness within PPPs. Such sharing occurred during large state-wide convenings and regular virtual office hours.

Table 4.3. Examples of How State Agencies and Other Organizations Promoted Sharing

Site	Convener	Extent of Sharing	UPPI PPP Role
ASU	• Georgia Educational Leadership Faculty Association (GELFA) • Georgia Professional Standards Commission • Georgia Department of Education • University System of Georgia	• All 16 universities in the state with PPP	• ASU shared its experiences with program features that are key state priorities (e.g., equity, cultural responsiveness)
FAU	• Florida Association of Professors of Educational Leadership (FAPEL) • Florida Association of School Administrators (FASA) • Florida Association of District School Superintendents	• All PPPs across the state	• FAU shared its redesign work and solicited feedback • FAU (with FAPEL and FASA) plans to organize discussions with district and university leaders about partnership development
NC State	• Wallace Foundation—Principal Fellows Program • North Carolina Professors of Educational Leadership (NCPEL)	• University-based programs working with NCPEL and the Principal Fellows/Transforming Principal Preparation Program (TP3) program	• NC State convened the group of universities to share best practices
SDSU	• California Commission on Teacher Credentialing • Stuart Foundation • Wallace Foundation—Principal Pipeline Learning Community (PPLC)	• CA Commission on Teacher Credentialing: All PPPs across the state • Start Foundation: 12 PPPs across the state • PPLC: 9 California districts	• SDSU shared its experiences with program redesign and made resources such as syllabi available to other programs. • SDSU mentored other programs as they developed partnerships with districts and redesigned their programs. • SDSU PD acted as a facilitator for Wallace PPLC initiative, sharing learnings from UPPI with a network of California districts
UCONN	• Connecticut State Department of Education (CSDE)	• PPPs and districts across the state	• UCONN shared its experiences with QM and aspects of program redesign, such as emphasis on leading with equity and community engagement
VSU	• Henrico County Public Schools, Hopewell City Public Schools, and Sussex County Public Schools	• Other large, medium, and small school districts in Virginia's Region 1	• District partners assumed leadership roles in Virginia's Region 1 by facilitating PLC's with seven other school districts.
WKU	• Education Professional Standards Board/ Kentucky Department of Education	• All PPPs across the state, selected districts and regional cooperatives	• WKU participated in and disseminated lessons through a convening of stakeholders led by the state partner

The Connecticut State Department of Education (CSDE) went a step further than just providing a platform for information sharing. CSDE was actively involved in disseminating the learnings of UPPI to other programs and had numerous initiatives that stemmed from the UPPI work. For example, the state not only informed PPPs across the state about QM but also encouraged programs to use them and offered to provide the facilitation. Three programs took the state up on this offer and participated in the state-facilitated QM. According to a state leader we interviewed, those three universities were revising their programs as a result of their QM work. CSDE has also embedded equity concepts into the resources and PD that they are providing to programs and districts. The UPPI work surfaced these equity concepts, shifting conversations in the state around equity.

In addition to the state partner leads, other state-level actors such as county or regional education offices, and professional associations of university faculty and school administrators helped spread the word about the UPPI activities. In Georgia, for example, the Georgia Educational Leadership Faculty Association (GELFA, which includes all 16 universities in the state with a PPP) has provided opportunities for ASU to share learnings from the UPPI redesign across the state. ASU's redesign, which began in 2017, focused on equity and cultural responsiveness. When interest in these issues spiked after the summer of 2020, GELFA provided a platform for ASU to share knowledge and resources quickly through webinars, conferences, and one-on-one conversations. GELFA, with support from the Georgia Professional Standards Commission, has also supported information sharing among the state's PPPs about PPP redesign more generally. Through this platform, other universities in Georgia learned about what was going on at ASU and provided feedback on the curriculum and the LTS. ASU program leaders are hopeful that other programs will adopt or adapt some of the things that they did.

Foundations also provided resources to extend the learnings from UPPI to other PPPs. For example, The Wallace Foundation provided NC State with additional funds to bring together the universities in North Carolina involved in the Principal Fellows program to convene and share best practices, fostering learning from NC State's UPPI redesign experiences. In California, the Stuart Foundation provided a grant to SDSU to directly mentor 13 PPPs as they redesigned their programs to align with a new state assessment. The work with these programs was modeled on SDSU's experiences redesigning its program with partners through UPPI. According to state and program interviewees, mentee programs—especially smaller programs with fewer faculty- found this collaboration with SDSU to be powerful. Many were surprised by how open SDSU was about sharing course materials and lessons learned with other programs.

While it is difficult to attribute state policy change to UPPI directly, it is clear that some UPPI university staff established leadership roles in their states over the course of the initiative. One UL posited that without UPPI, the state department of education would not have been so involved in the development of building leaders.

Districts spread learnings of UPPI to other programs and to other districts

As described above, UPPI partner districts applied learnings from the UPPI redesign within their own district at other stages of the pathway to the principalship. They also shared learnings with other districts and programs across the state. For example, in Virginia, VSU and its district partners have been developing a regional academy. The academy offered district-developed training, such as an aspiring leaders academy, to districts within the region. The specific PD would be offered by districts to other districts, and VSU would act at the hub for the learning center. This was especially useful for smaller districts that are not able to provide a full range of PD for their district:

> The essence of our scale strategy is really investing in PSEL-based regional district ALAs to improve not only our candidate pool but to provide continuous PD for current leaders in the region. So, I say that to say that it goes beyond our original Henrico, Sussex, and Hopewell and even when we added Hanover and Greensville. We're basically using Henrico's concept, because you know they have about four different learning series, using their concept to do that for the whole region.

Another way district partners spread learnings about UPPI was when district staff working on UPPI moved to other districts or positions in state or other organizations—taking their learning and also their relationships with them. For example, after a former district partner lead in Kentucky retired, he became the executive director at a professional association for school superintendents. According to the UL, this allowed him to elevate the work of WKU. Similarly, in Virginia and California, district leaders at partner districts eventually took on various leadership roles at organizations such as other school districts, the state department of education, the state board of education, national centers, and nonprofits.

State policy changes and initiatives can draw attention to insights from redesign efforts

The Wallace Foundation intentionally selected UPPI grantees from states that were already working to improve principal preparation when the initiative was launched. UPPI states continued the process throughout the grant period (2016–2021). Although UPPI may have influenced the extent and direction of the subsequent policy changes, the state-policy changes reported here primarily define the context rather than the results of the program redesign effort. Gates, Woo, et al. (2020) provides an overview of state policy changes that took place in UPPI states between 2016 and 2019. Some of the states had notable changes during 2020 and 2021 that are summarized in this section. State-level actors promoted improvements in the principalship by using seven common policy levers to influence PPPs and districts: standards, recruitment of aspiring leaders, licensure, program approval and oversight, evaluation, PD, and LTSs. Four of these levers—standards, licensure, program approval and oversight, and PD—were the levers most commonly used by UPPI states. All or most UPPI states engaged in key policy actions

associated with these levers. In addition, Gates, Woo, et al. (2020) found that these policy levers were interconnected, and states can heighten the effectiveness of a proposed policy change by leveraging its interconnections to other policy levers—for example, by tying changes in standards to changes in program approval, licensure, or evaluation. State officials recognized that changes in their leadership standards would go on to trigger changes in other policy levers (see Box 4.5). One state official in Florida stated, "If you're changing standards, you're going to change the evaluation system, you're going to change the testing. Everything in leadership is governed by those standards. So, if you change the standards, it's going to have repercussions down the line, because everything has to be based off the standards in Florida."

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Box 4.5. Nearly all UPPI States Engaged in Revisions to Their Leadership Standards over the Course of UPPI, with Implications for Changes in Other State Policy Levers

Over the course of UPPI grant, nearly all states engaged in revisions to their leadership standards, and most leveraged the national leadership standards, the PSEL, in those revisions. As reported in Gates, Woo, et al. (2020), California, Kentucky, and Georgia had revised their state leadership standards during the UPPI grant, with Kentucky and Georgia adopting or adapting the PSEL as their state standards. Since 2019, Florida and North Carolina initiated revisions to their state leadership standards. In North Carolina, a state-level committee, which included the NC State UL, compared state standards with the PSEL and conducted a gap analysis. Based on this effort, the state added a standard focused on equity leadership and revised an existing standard to emphasize ethical leadership. In Florida, state leaders reported that the UPPI work drove them to revisit their leadership standards to reflect the needs of school leaders across the continuum of school leadership, from teacher leader to school leader, district leader, and state leader. However, because the Florida Department of Education determined that legislation does not allow the standards to include district or state leaders, the leadership standards will pertain to only assistant principals and principals.

States also made efforts to provide guidance on the use of their updated standards. Aligning efforts related to other policy levers with updated standards appeared to be a key step toward promoting policy coherence across the state. For example, in Kentucky, after the adoption of the PSEL, the state created a guidance document containing a rubric for assessing each of the standards. Kentucky state officials leveraged the new standards in the program approval process by requiring all PPPs in the state to demonstrate Alignment between their coursework and the PSEL by late 2020. In North Carolina, state officials developed a new evaluation rubric for principals and assistant principals based on the updated leadership standards, with the goal of piloting the rubric in fall 2021 before adopting the rubric for statewide use.

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UPPI states used a range of policy levers to promote principal quality

Table 4.4 updates information presented in Tables 3.2 and 3.3 of Gates, Woo, et al. (2020). It provides a summary of the policy changes that occurred over the course of the UPPI grant, including those changes that occurred since 2019. The update indicates continued state activity around the policy levers of leadership standards and program approval and oversight (see Box 4.6).

Table 4.4. Summary of Policy Changes During UPPI by Policy Lever

Policy Lever	Policy Changes over the Course of UPPI	Prevalence of Such Change Among UPPI States Since the Start of UPPI	Changes Since Gates, Woo, et al., 2020 Report
Standards	• Update standards for school principals	• Most	• In Florida, the School Educational Leadership Enhancement Committee Task Force (SELECT) is revising the state's leadership standards and leadership program approval standards.
	• Promote the use of state standards	• All	
			• In North Carolina, leadership standards are being updated to strengthen emphasis on equity
			• In Virginia, the state adopted PSEL
Recruitment of aspiring leaders	• Subsidize participation in pre-service programs	• Few	• No additional changes.
	• Changes to state criteria for program admission	• Few	
	• Encourage programs to use effective recruitment practices	• Most	
Licensure	• Revise licensure pathways	• Few	• No additional changes
	• Adopt new licensure requirements	• Most	
Program approval and oversight	• Change program requirements	• Few	• One additional state, Kentucky ensured alignment to updated state standards
	• Shift focus of program oversight toward outcomes	• Few	• Efforts to strengthen program approval in Georgia, Connecticut, Kentucky by putting more emphasis on needs assessment and specifically QM
	• Improve procedural aspects of program approval	• Few	
	• Encourage or support program improvement	• Most	• One additional state, Georgia, streamlined program approval process
	• Streamline approval processes with technology	• Most	
Professional development	• Expand efforts to support principal PD	• Most	• FL passed legislation updating framework and priority areas for school leadership PD
			• Connecticut, Kentucky provided or facilitated PD on specific topics such as cultural responsiveness.
Evaluation	• Align evaluation with state standards	• Few	• Georgia, NC are aligning evaluation rubrics or standards to updated state leadership standards
	• Reduce emphasis on achievement growth	• Few	
	• Introduce performance pay tied to achievement	• Few	
Leader tracking systems	• Provide support for the development of a statewide data system for tracking aspiring and current principals	• Few	• In NC, the statewide data system was rolled out in November 2020

NOTE: Few = 1–3 of the states; most = 4–6 of the states.

Box 4.6. Program Approval and Oversight Continued to Be an Important State Policy Lever

Program approval and oversight continued to be an active area for states. Some states leveraged the QM process used by the UPPI universities during their redesign to strengthen program approval. For example, in Georgia, the PSC recommended that, as part of the seven-year accreditation cycle, Educator Preparation Providers undergo a formative assessment using QM or a similar process. In Florida, the SELECT drew from the lessons learned during the QM process at FAU to inform revisions to the state's program approval standards. The original program approval standards were perceived as a "checklist," and both the state partner and FAU UL desired to make the program approval process more rigorous by incorporating measures of quality.

Professional development (PD) has been an active area for states since 2020. We observed examples of state education agencies providing or coordinating **professional development** opportunities for aspiring principals, principals, PPP faculty, clinical coaches, and mentor principals. In many cases, these opportunities reflected topics that were central to the state's UPPI program redesign effort. In Florida, the SELECT, led by the PD from FAU and Florida Department of Education state partners, wrote legislation that addressed state-provided professional learning in alignment with the continuum-of-leaders model that was developed under the FAU Principal Preparation Initiative. In Connecticut, the state department of education provided or coordinated numerous professional learning opportunities, including sessions on culturally responsive teaching and leading for principal candidates, clinical coaches, and mentor principals. State officials in Kentucky and Connecticut were also involved in providing training relating to leadership simulations, which provided one way for candidates to obtain problem-solving experiences during the pandemic.

Although states have not actively emphasized the **evaluation** lever to promote principal quality in recent years, they did continue to promote greater alignment of evaluation practices—which are implemented by districts—with their updated leadership standards. State officials in both Kentucky and North Carolina developed tools to help stakeholders such as PPPs and district-based principal supervisors apply the state's updated standards for professional learning or evaluation purposes. Gates, Woo, et al. (2020) reported that two states deemphasized student achievement in required elements of school leaders' evaluation systems. Since then, states have continued to re-orient their evaluation systems to be more growth- and development-oriented, rather than punitive.

Licensure has been an active area for state policy in all UPPI states, as described in Gates, Woo, et al. (2020). Some states revised their pathways to the principalship, and most adopted new licensure assessments. For example, over the course of UPPI, most states made or anticipated making changes to their licensure assessments, with a shift toward performance-based assessments. This included changes driven by updates made by ETS to align their School Leader Licensure Assessment (SLLA) with the PSEL in two UPPI states that had adopted SLLA as their state licensure assessment. We observed no additional changes to states' licensure policies in the last few years, although most states had to make temporary, emergency adjustments to certification processes because of the pandemic.

As reported in Gates, Woo, et al. (2020), UPPI states did not lean heavily on the **recruitment** policy lever as a mechanism to improve the quality of principals. To the extent recruitment policies were modified, they tended to be relatively minor changes to allow more flexibilities for out-of-state candidates who may not have accrued experience in the state's education system or for all candidates lacking advanced degrees. We did not identify further policy action related to this policy lever since the publication of our 2020 report.

Finally, among all of the seven UPPI states, only one—North Carolina—developed a **statewide LTS**. North Carolina rolled out its statewide Leader Development Dashboard (LDD) in the fall of 2020. To support this rollout, state officials provided training on how to use the LDD for principal supervisors and principals throughout the state.

Through supports and resources as well as policy action, states drew attention to features of the UPPI program redesign

As described by Gates, Woo, et al. (2020), states can and do use mandates or requirements to influence principal quality, but they typically use mandates with restraint and couple them with supports. The perceived use of the state policy levers is most favorable when the requirements are evidence-based, when the state provides support to programs and districts to meet the requirements, and when there is oversight and accountability regarding the requirements.

In the interviews we conducted since 2019, state leaders at some UPPI sites described themselves as drivers of policy change rather than regulators. State leaders recognized that they could leverage multiple policy tools, including accountability, but also, importantly, the provision of support and the ability to convene groups of stakeholders.

As a first step, states must figure out what they want to prioritize. One state leader described their "gap analysis on their policies," whereby they compared their vision and mission for instruction (e.g., "where do we want to go?") against the actual state policies in place. Another interviewee echoed this same sentiment, noting that the state balances its roles of regulating through standards and accreditation with its role of crafting an "aspirational vision" and that part of the state's role lies in connecting aspirations to policy and practice. Box 4.7 describes how several of the state put an emphasis on equity.

Box 4.7. State Leaders Used Various Policy Levers to Promote Equity

State leaders used a number of different policy levers to explicitly emphasize the importance of equity in principal preparation and practice. In North Carolina and Kentucky, new or revised leadership standards placed a clear emphasis on equity. Officials in both states conducted a gap analysis between their existing state leadership standards and the national standards, PSEL. Based on this analysis, North Carolina officials added equity as a new leadership standard to the state standards. Officials in Kentucky decided to adopt PSEL as the state standards to elevate equity in addition to other topics, such as the use of technology for teaching and learning. In California, a statewide vision for creating equitable leaders drove much of the CTC's work around leadership preparation, including the development of its leader standards and the design of its new licensure assessment. In Connecticut, state leaders have emphasized equity and anti-racist work through PD opportunities.

States recognized they could drive meaningful policy change by supporting districts and programs. A key step in providing support is figuring out what support is needed. In Florida, state leaders described their visits to regional groups of districts in a "listening tour" to better understand what districts need in order to better tailor support that will be useful. As the UL involved in the state's policy task force described it,

> The function of the listening tour was really two-fold. Number one, to hear what districts really think they need in terms of educational leadership, professional learning and development, but also, changing the image of the state so that districts understand that when the state is calling them together, it's not always just to police them, but to actually hear and help and take them in new directions.

Although supports can promote change, sometimes supports alone are not enough. This sentiment was articulated by a state leader in Connecticut—that there was not enough "pressure from upstairs" to compel more universities to engage in the QM work; as a result, they were just able to involve those who share the same vision and have a desire to continuously improve. In Georgia, the state formally integrated QM into state policy (Georgia Professional Standards Commission, 2021a, 2021b) as a means for educational leadership program providers to conduct a formative self-study at the mid-point of their seven-year approval cycle. Soon after implementation, six program providers completed the QM process.

California's implementation of its new administrator performance assessment provides an example of how state agencies can build structures of support to improve PPPs and support their policy agenda in combination with accountability mechanisms. The requirements associated with the new assessment provided programs with an incentive to seek out mentorship from programs like SDSU and to attend virtual think tanks, series on how to teach and lead online, conducted weekly online webinars, and weekly office hours. In this example, policy change may spur redesign across the entire state and create urgency for non-UPPI programs to learn from UPPI programs. Learnings from UPPI could also be scaled and then codified through influence on state policy. In Florida, in-progress changes to program approval standards and leadership standards as well as the potential to eventually scale the Level 2 pilot assessment statewide, all based on the work of UPPI, are examples of how the lessons from UPPI could scale to the rest of the state. In Virginia, the state Department of Education placed a greater emphasis on cultural responsiveness in licensure requirements for the whole learning continuum as the result of a VSU leader's involvement in the Governor's commission and the recommendations that stemmed from that commission. This is another example of how one central piece of the UPPI redesign at one university—cultural responsiveness—scaled to a statewide level. In Georgia, state partners created an online assessment of leader dispositions that could be used by program providers in the state, as described in Box 4.8.

Box 4.8. Georgia's State-Wide Leader Dispositions Instrument

State partners at ASU convened a task force to create an online, 360-degree assessment of leader dispositions, which was developed and piloted with the support of UPPI funds. The online assessment was originally created because state leaders observed that district leaders often felt that, while school leaders had the appropriate skills and knowledge, they often were lacking in their leader dispositions. State leaders also realized that program providers lacked a validated instrument for measuring dispositions.

The resulting assessment, called the Interpersonal Leadership Dispositions Assessment (ILDA) can be used by Georgia Professional Standards Commission (GaPSC)-approved program providers in multiple ways and at various points along the leadership pipeline. For example, it can be used to inform recruitment and selection into a preparation program, or as a formative or summative assessment before, during, and/or after clinical experiences. The assessment includes constructs relating to visionary and ethical leadership, responsiveness, collaboration, and reflection, with school culture and equity as recurring themes throughout the 25-items. At the time of our last site visit in Spring 2021, the ILDA was being integrated into GaPSC's online portal and was about to be made available for voluntary use by all approved educational leadership program providers in the state of Georgia (GaPSC, undated).

Early on, one state leader articulated the connection between UPPI and the resulting instrument, stating, "that's a piece that was developed not because it was specifically part of the UPPI work, but I think our being engaged with UPPI sparked us to think even further and to address some other issues like leader dispositions."

Challenges, solutions, and observations

Expansion and extension efforts were not without their challenges, and not all were successful. Below, we summarize some common challenges that sites faced and that other PPPs might encounter in embarking upon a similar effort. We offer examples of solutions and some observations not as thematic findings but as a starting point for future research. Our examples highlight the importance of building trust and credibility with potential partners, fostering a culture of collaboration, and carefully considering the resource implications of expansion efforts.

Expanding partnerships can be challenging, highlighting the need to develop relationships between faculty and district staff

Although all universities were able to build one or more new partnerships, not all prospective partnerships took root. One factor inhibiting successful partnerships appeared to be the absence of existing, strong relationships with leaders in prospective partner districts. A core principle for the UPPI work is that the programs should reflect districts' needs. UPPI districts engaged with the programs, communicated their needs, and helped shape the program. Scale-up district partners—and districts that send candidates without a partnership in place—have less opportunity to work with the university and shape the program. When expanding the program to new districts, it is critical to consider whether having a new university-district partnership is essential and, if so, how to build that outside of a multiyear collaborative redesign effort.

One way to ensure good relationships with partners is for the university to select partners with which it already has strong, long-standing relationships. The SDSU UL provided

professional development for expansion districts for years and had strong relationships with district leaders there. "That's why we chose those places, because we're credible there."

When embarking upon new relationships, ULs emphasized the importance of building trust and credibility with district leadership—a process that can take time. Programs pointed to challenges of beginning new partnerships, even when the district context is not unusually complicated. Speaking of NC State's new relationship with Cumberland, one program leader was enthusiastic about the opportunity to, "to start a new partnership . . . from the very beginning. . . . I can say that we've just learned to be more intentional and involving the district partners and leadership from the beginning." Of course, relationship building is a two-way street. Another university program leader noted that aspects of the district context could be a barrier to engagement and relationship building. One interviewee at that university described a tumultuous context in a potential large district partner where turnover in senior leadership positions forced a need to build relationships from scratch. According to the interviewee, getting the attention of and building relationships with people who are "learning their jobs . . . does become really difficult." Thus, where relationships between district and programs do not already exist, university leaders recognized the importance of developing those relationships to cultivate a strong partnership but that external factors can make such efforts challenging.

Two UPPI programs developed an online program prior to the pandemic, although they also recognized the challenges of developing and fostering partnerships in an online setting. Some sites recognized, in their transition to online learning during the pandemic, that virtual learning had some benefits, such that they expressed a desire to continue some elements of virtual learning even after the return to in-person instruction. Online programs can extend the geographic reach of the program within and even beyond state borders. This expansion can open up the pool of districts from which candidates are drawn and increase the share of candidates who are not from a partner district or a district with which the university has established relationships. There are open questions about the feasibility of partnerships in this environment. One program leader said, "It'll be interesting to see if, when this goes statewide online, how the credibility plays out, because that'll be different from how we've worked in the past with our partners that know us, that trust us. . . . Most people don't get to do that. You know, there's a trust of an inner circle you just don't get to go to."

Altogether, these examples highlight the importance of leveraging or cultivating relationships with district partners when expanding partnerships to ensure that the partnership is as effective as possible.

A culture of collaboration might help overcome reluctance about sharing ideas and resources

In two states, interviewees reported difficulties in engaging non-UPPI programs in efforts informed by UPPI partners. They pointed to several factors that might have led to this reluctance, including a culture of competition between the universities. Historically, universities compete

not only for resources, such as grants, but also applicants. In such a context, program documentation, syllabi, and course materials can be viewed as proprietary material. Another factor is complacency. Interviewees reported that some universities feel that their existing program improvement efforts are adequate and that assistance from state officials is unnecessary. State officials speculated that without a mandate or other driving factor, some programs might not feel compelled to consider much less undertake substantial revisions or improvements to their programs. Interviewees reported similar challenges in another state, stating that it was difficult to share learnings across the universities engaged in a statewide program because there was more of a culture of competition than collaboration among universities in the state.

A culture of collaboration among stakeholders, whether PPPs or districts, can be helpful in spreading lessons learned. All the UPPI states undertook efforts during the initiative to communicate with PPPs and promote collaboration among stakeholders focused on program improvements and other changes to improve principal quality. We observed a range of formal and informal ways that states can leverage their visibility and influence to foster such collaboration through stakeholder convenings, office hours, fostering professional learning communities, highlighting or communicating about examples from specific PPPs, and creating state-level task forces or working groups. State officials in one state reported that they were able to build that culture of collaboration over time "through lots of communication, lots of support, lots of answering questions, and perseverance." State officials recounted how, although programs were at first reluctant to engage in the state's initiatives, state leaders provided stipends for faculty members to engage in the QM work and nevertheless continued to persevere and share offerings to programs to signal that "we're all in this together and the department is supporting all of you." In another state, changes to state policy created an optional funding source; if programs wanted to take advantage of this opportunity, they were required to implement certain research-based practices. According to the UL, this change "has forced everyone to think harder about how they are doing things." One state leader explained how state encouragement for cross-program collaboration has promoted program revision beyond the UPPI grantee.

> We also have other higher ed institutions that are very interested in doing the best work for their principal prep program . . . so we're trying to work with them and share the experiences that [grantee] is learning with them. . . . So, I think the work is being propelled by the fact that they like this network, they like working together on things, they like communicating. There's still going to be competition, I mean, I can't get rid of all that competition, but they're talking with each other and they're getting these "ahas."

As noted in Gates, Woo, et al. (2020), in states with professional educator standards boards, the legislation authorizing such boards calls for broad stakeholder representation. This means that such boards, where they exist, have mechanisms for communication and engagement with PPPs, districts as well as educators. In California, the professional standards board, the Commission on Teacher Credentialing (CTC), provided supports, communicated directly with

programs, and fostered collaboration among programs when carrying out new policies. Pointing to the importance of all three dimensions of engagement, one state leader noted that,

> For a quite a while, [the programs] operated kind of in a vacuum in a way. And now that there has been a lot more interaction with the commission that was astounding to them that we would provide that kind of service. . . . So, that over the years has built, I think, a level of trust that wasn't necessarily there before.

CTC has fostered collaboration by highlighting the work of PPPs throughout the state—including but not limited to SDSU—to align their programs with the new performance assessment—sharing specific practices and resources (such as syllabi) as a learning opportunity for other PPPs.

In states without a professional standards board, the department of education can engage in similar efforts. For example, in Connecticut, the state department of education has been leveraging the expertise of different organizations in order to sustain their work on equity-driven leadership, especially given that the UPPI grant was coming to an end. A state leader explained, "Given that this is a limited grant opportunity, you know, how do we capitalize on some of the great resources that already exist in the state or organizations that already exist in the state? . . . I think a lot of it is recognizing the own capacity of the department and saying that, like, we can't be the only go-to." As a result, the Connecticut Department of Education's goal was to bring together different partner organizations, such as the Leadership Academy, the State Education Resource Center (SERC), the Connecticut Center for School Change, the Connecticut Association of Public School Superintendents (CAPSS), and representatives from PPPs to collaborate and strategize on how these organizations might be able to provide services to districts and schools. State officials sought to better understand their areas of expertise across the state in leadership development and support so that when districts reach out, state officials are able to direct them to these external partner organizations.

Support for the culture of collaboration among PPPs can have meaningful benefits for programs that lack extensive networks with other programs and districts. For example, university program leaders at SDSU felt that mentoring supported by the Stuart Foundation provided faculty members at these PPPs with an especially valuable opportunity to collaborate, get input and collectively problem-solve. Many of the PPPs had a small number of faculty members, and some had just one faculty member. In such programs, faculty had difficulty getting input from others about program redesign. Similarly, VSU's spread strategy that focused on providing regional district-based professional learning such as aspiring leader academies especially benefited small districts, as they do not have the capacity to offer such professional learning opportunities on their own.

University-based leads weighed costs and benefits when considering expansion efforts

As noted previously, all the UPPI sites expanded their programs to accommodate new partners. Some of the programs expanded the number of candidates served by their program.

While there are potential benefits to expansion for both districts and universities, a decision to expand requires that districts and programs assess whether and how expansion would be mutually beneficial within their particular context. After weighing factors such as the costs, benefits, and convenience of expansion, districts and universities may realize that not all partnerships or expansions are worth pursuing.

University-based leads had to weigh the costs of expansion against the benefits, considering the alternative uses to which resources devoted to expansion might be put. They had to consider not only where the investment resources for expansion would come from—the resources to cover the up-front costs—but also whether the expansion would generate ongoing revenue streams that could sustain the expansion over time. All the UPPI universities are public institutions, and some are part of state systems that have formal service areas. While such structures could discourage expansion outside of the local area, we observed examples of programs expanding to explicitly serve candidates outside their service area and even outside of their state. In contrast, one UL considered replicating the program in other parts of the state but ultimately decided not to. This UL recognized that expansion would require additional resources and that those resources would have to come from within the program. Faced with the choice, this UL preferred focus resources on ensuring the quality of the program under redesign, stating, "I don't want to push us out into expansion until I feel like this is a well-running machine."

Another UL also pointed out that programs might consider the level of resources available to them alongside the broader state context when making weighing the benefits and costs of expansion. Considerations might include whether the state is currently underproducing or overproducing principal candidates overall and also whether there are other high-quality programs in the state that might have a location more conducive to expansion into a particular district or region. For example, one university decided to skip a cohort in their program due to the overproduction of principals and insufficient resources to support a cohort every year.

As universities expanded to new partner districts, programs grappled with tensions between adaptation to meet local needs and adherence to program elements.

Some programs made a strategic choice not to tailor programs to the needs of specific districts. For the programs that did choose to tailor programs, expansion posed new questions about whether and how to adapt the redesigned program to the local needs of new partners. ULs had to consider how to ensure continuity and coherence across the different programs, even while they adjusted the programs to fit the local context. An interviewee in one such site stated that it was a challenge to ensure that each program "[reflected] the same program design, the same quality of content and pedagogy, and the same commitment for outcomes," which is an inherent challenge with scaling up. One common approach to tailoring was through the use of partner district administrators as adjunct faculty. The approach posed challenges for some programs as they had to hire and train district leaders who had never taught in the program before.

To address these challenges, one site leveraged the QM process to examine each program, including those of the new district partners. This process helped to make sure that all programs reflected the same values, structure, and high-quality instruction. To ensure the quality of instruction even with district leaders acting as new adjunct faculty, program leaders created on-boarding systems as described in Chapter 2 and paired these new faculty with core university faculty, and generated feedback loops to support the quality of instruction. Overall, faculty members felt that this process of ensuring continuity and coherence across scale-up programs requires program leaders to "continually reinvest in what the program is," by examining what is happening within the programs and "[staying] true to the program values that they've committed to."

States might consider their capacity and the size of the state in planning their strategies to support programs.

For example, the Connecticut SDE was able to offer intensive hands-on support to programs because the state has very few administrator preparation programs. In comparison, while the California professional standards board provided numerous supports to preparation programs to implement the new statewide performance assessment, it could not offer the same depth of technical assistance to all of their roughly sixty programs. Instead, the board encouraged learning networks, including organizations such as SDSU, that provided intensive supports and resources to other programs seeking guidance. States differ, too, in how centralized principal preparation policy is. In Kentucky, the Education Professional Standards Board (EPSB), Kentucky Department of Education, and Council on Postsecondary Education were all separate. When EPSB moved into the Kentucky Department of Education, the consolidation created an opportunity to have face-to-face conversations about an integrated plan for P–20 education. There is now intentional collaboration, communication, and relationship-building within the department.

Chapter summary

In this chapter, we described how lessons learned by UPPI sites extended or diffused throughout the state's principal preparation system. Some of this spread was planned and intentional, while some occurred organically through the interactions between program and districts, among programs, and among districts. This spread included the development of new partnerships that may contribute further insights about how to support principal quality across the entire pathway to the principalship.

Some of the spread we observed involved expansion of program redesign insights to other stages of the pathway to the principalship. In particular, we found that districts worked to align principal supports and management tools with the content of the PPP. While this type of spread may not have been explicitly expected, it is not surprising. A 2019 survey of district leaders of

districts serving 10,000 or more students revealed that districts play important roles along the pathway to the principalship (Gates, Kaufman, et al., 2020). Nearly all school districts responding to the survey reported that they provide coaching for new principals as well as PD and support for aspiring leaders (Gates, Kaufman, et al., 2020, p.15), and a majority provide that support themselves (p. 21).

The mechanisms of spread that we highlighted in this chapter align with a distribution network pathway for scaling-up social programs described by Larson, Dearing, and Backer (2017). The Wallace Foundation, as a lead organization, worked with university programs and leveraged their existing and developing networks to scale-up the program improvements in a manner consistent with the program's and the state's objective. But within each state, further scale-up—or spread around the state—can follow an affiliate model.

The diffusion of innovation literature suggests that spread is more likely when the innovation is observable by principal preparation system members who have the capacity and motivation to adopt the innovation (Dearing and Cox, 2018). This implies that dissemination, capacity-building, and incentives can all play a role in supporting the spread of innovations. In this chapter, we described examples of organic, peer-to-peer dissemination among role-alike groups on topics of mutual interest. We also described how states are in a position to influence the visibility of lessons learned from UPPI and foster such dissemination by enhancing the capacity and motivation of programs and districts to adopt them. A supportive state environment and culture of collaboration that could continue to inform insights by creating opportunities, supports, and even incentives for such sharing. State actors also facilitated the spread of lessons learned from UPPI program redesign beyond UPPI programs and district partners by leveraging their formal policy levers such as program approval and licensing requirements.

UPPI spread activities suggest that programs and districts have a common aim of improving principal quality. Yet the 2019 survey of districts mentioned above found that only about half of districts reported that they do partner with PPPs. That survey also found that nearly 80 percent reported moderate or strong interest in *more* engagement with PPPs. When asked about the barriers to such partnerships, district respondents mentioned a range of issues on both sides of the partnership equation. Nearly 20 percent reported a lack of a willing PPP with which to partner, while 37 percent pointed to lack of time and 22 percent to lack of funding.

We found compelling evidence in our study of UPPI that while partnerships are time-consuming, they can provide tangible benefits to districts and programs alike. Larson, Dearing, and Backer (2017) argued that finding such "common ground" is essential to the scale-up of social programs. Not all district-program pairs are able to accomplish this aim. We did find that more than half of the UPPI programs scaled by offering partnership opportunities to additional districts beyond their original partner districts. The structure and scope of these partnership opportunities varied and were organized around mutually beneficial activities. This suggests that finding the right partners who share a common purpose may be an important factor supporting spread. Larson, Dearing, and Backer (2017) identified key mechanisms through which potential

partners in an endeavor such as UPPI might find one another, and we saw examples of each of these in UPPI. One is pure luck. A second is tapping prior relationships. A third is an active search by the lead (PPP) or partner (district) organization. Outside organizations can also facilitate partnership by supporting searches or promoting matchmaking.

5. Summary

Our study illustrates that it is feasible for universities—in partnership with high-need districts and state agency leaders, and with the support of mentor programs that have already been redesigned—to improve PPPs to reflect the best available evidence.

UPPI required collaborative partnerships among multiple organizations, all with a stake in developing strong principals. Implicit in this approach was a recognition that the pathway to the principalship is not defined by the PPP but rather is part of a system that includes districts and state actors.

Under UPPI, each team developed a clear and ambitious vision for its program. Overall, the changes the teams enacted ensured that the programs were more rigorous, coherent, and authentically connected to the work of on-the-ground school leaders. In the candidate selection process, programs incorporated more activities and assessments and established explicit criteria to assess applicants' skills and dispositions. Coherence was achieved with increased connections across courses and between the coursework and clinical components. Clinical experiences linked the program and principalship. Moreover, candidates were supported by clinical supervisors, coaches, and mentor principals in ways that advanced their individual professional growth. Instruction and the instructors also shifted to reflect an emphasis on practice and continuity. This was achieved, in part, by employing more district leaders as adjunct faculty and using more problem-based pedagogy. Programs also expanded or deepened their use of the cohort model. The changes in the programs were consistent with many best practices.

All the UPPI states have leader standards that reflect clear expectations for principals across the state. State officials leveraged those standards to varying degrees to promote coherence across the pathway to the principalship—principal preparation, hiring, evaluation, and professional development. The degree to which a particular step of the pathway is in fact guided by the standards varies based on the degree of state influence over that step. For example, all UPPI states require an assessment for licensure that is aligned to either state or national standards and have program oversight practices that are grounded in the state standards. In contrast, with regard to evaluation and professional development, state efforts focus on providing guidance, standards, or requirements for districts with regard to the professional development they provide and evaluations of the conduct. As of 2019, none of the UPPI states required districts to report principal evaluation data to the state, although some provided guidance about how districts should set up their own system to align well with standards. Some of the UPPI districts made changes to their evaluation and/or professional development systems during the timeframe of the initiative, but these areas remained works in progress in terms of aligning expectations across the entire pathway state-wide.

Throughout, the teams balanced having common objectives and structure with flexibility for their specific context and changing conditions. Thus, this report provides an example but not a blueprint.

Appendix A. UPPI Programs and Partners, and Timeline

In this appendix, we profile the organizations participating in UPPI and provide a summary timeline of the initiative. In recognition of the complex, multi-partner structure of UPPI, we aim to provide useful information about the initiative that is targeted to each type of organization. This full report is accompanied by a report in brief for all readers, and three shorter reports targeted to school districts, PPPs, and state education agencies, respectively.

UPPI programs and partners

Table A.1 lists the university programs and each of the districts, state, and mentor organization(s) each program has partnered with to engage in the redesign. The information we present was gathered from publicly available sources and characterizes the organizations at baseline before UPPI.

Table A.1. UPPI Sites

University	District/Consortium Partners			State Partner	Mentor Program(s)
Albany State University M2,[a] historically Black public university in Albany, Georgia	Pelham City • 3 schools • 1,473 students • 63% Minority[b] • 79% FRPL • Rural	Calhoun County • 3 schools • 652 students • 98% Minority • 95% FRPL • Rural	Dougherty County • 23 schools • 15,194 students • 92% Minority • 100% FRPL • City	Georgia Professional Standards Commission	• Quality-Plus Leader Academy • The Leadership Academy
Florida Atlantic University R2, public university in Boca Raton, Florida	Broward County • 353 schools • 269,098 students • 49% Minority • 62% FRPL • Suburb: Large	Palm Beach County • 277 schools • 189,322 students • 67% Minority • 60% FRPL • Suburb: Large	St. Lucie County • 51 schools • 40,045 students • 64% Minority • 74% FRPL • City	Florida Department of Education	• The University of Denver
North Carolina State University R1, public, land-grant university in Raleigh, North Carolina	Johnston County • 46 schools • 34,857 students • 42% Minority • 53% FRPL • Rural	Wake County • 177 schools 157,839 students • 53% Minority • 34% FRPL • Suburb	Northeast Leadership Academy (NELA) • Consortium (13 districts) • 140 schools • 60,119 students • 37–95% minority • 80% FRPL • Rural	North Carolina Department of Public Instruction	• The University of Denver
San Diego State University R2, public university in San Diego, California	San Diego Unified • 226 schools • 129,380 students • 77% Minority • 59% FRPL • City	Chula Vista Elementary • 47 schools 30,230 students • 87% Minority • 54% FRPL • Suburb	Sweetwater Union High • 31 schools 41,050 students • 92% Minority • 55% FRPL • Suburb	California Commission on Teacher Credentialing	• University of Washington
University of Connecticut R1, public university in Storrs, Connecticut	Hartford • 63 schools 20,874 students • 94% Minority • 78% FRPL • City	Meriden • 17 schools • 7,927 students • 68% Minority • 69% FRPL • Suburb	New Haven • 44 schools 21,631 students • 85% Minority • 57% FRPL • City	Connecticut State Department of Education	• University of Illinois at Chicago • The Leadership Academy

University	District/Consortium Partners			State Partner	Mentor Program(s)
Virginia State University M2, historically Black, public, land-grant university in Petersburg, Virginia	**Henrico County** • 73 schools • 51,534 students • 59% Minority • 43% FRPL • Suburb	**Sussex County** • 3 schools • 1,066 students • 80% Minority • 72% FRPL • Rural	**Hopewell City** • 7 schools • 4,376 students • 73% Minority • 68% FRPL • Suburb	• Virginia Department of Education	• Quality-Plus Leader Academy
Western Kentucky University M1, public university in Bowling Green, Kentucky	**Green River Regional Educational Cooperative** • The 43 member districts are spread across South Central Kentucky • 349 schools • 149,836 students • Rural, town, suburb, and small city • Initially, three of the member districts were involved in UPPI; two more districts joined in late 2017			• Kentucky Education Professional Standards Board	• University of Illinois at Chicago
	Bowling Green Independent • 10 schools • 4,100 students • 41% Minority • 53% FRPL • City	**Owensboro** • 13 schools • 5,150 students • 35% Minority • 68% FRPL • City	**Simpson County** • 6 schools • 3,037 students • 19% Minority • 59% FRPL • Town		
	Warren County • 35 schools • 15,066 students • 31% Minority • 57% FRPL • Rural	**Daviess County** • 22 schools • 11,814 students • 16% Minority • 52% FRPL • Suburb			

SOURCES: The source for number of schools and students, and urban/rural locale classification is the National Center for Education Statistics (NCES; U.S. Department of Education, 2017). Data on student enrollment reflect the 2015–2016 school year. All other data reflect the 2016–2017 school years.
NOTE: FRPL = free or reduced-price lunch.

[a] According to the Carnegie Classification System (Indiana University Center for Postsecondary Research, 2021), colleges and universities are identified against specific criteria as Research (grant at least 20 doctoral degrees or at least 30 professional practice doctoral degrees), Master's (grant at least 50 master's and fewer than 20 doctoral degrees), Baccalaureate (at least 50 percent baccalaureate or higher, fewer than 50 master's or 20 doctoral degrees), and Baccalaureate/Associate's. Research schools are further sorted into R1 (very high research activity), R2 (high research activity), and D/PU (doctoral/professional universities). Master's schools are further sorted into M1 (larger), M2 (medium), and M3 (smaller).

[b] % Minority = percentage of Black or African American; Hispanic or Latino of any race; American Indian or Alaska Native; Native Hawaiian or Other Pacific Islander; two or more races; % FRPL = percentage of students eligible for FRPL. The source for the percentage of minority students and students eligible for FPRL is the Office for Civil Rights' Civil Rights Data Collection (CRDC) survey conducted in 2013 (U.S. Department of Education, undated-a, undated-b).

Appendix B. Methodology

In this appendix, we provide details of our qualitative data collection and analysis spanning the beginning of the initiative in spring 2017 to spring 2021. We also describe our administrations of the INSPIRE survey to program administrators, along with the data analysis approach.

Qualitative data collection

Our primary form of data collection was biannual site visits, which consisted of a two-person team traveling to each site for three to four days. When COVID-19 hit, we shifted to online data collection. During each cycle, we conducted 60–75-minute interviews with leads of each partner organization (i.e., university-based UPPI lead, university administrator, district partner leads, state partner leads, and mentor program leads). Furthermore, at baseline and in the final round, we conducted 75- to 90-minute focus groups with research and/or adjunct faculty, university-based supervisors or coaches of clinical practice, district-based mentor principals, and principal candidates from the program. Overall, from spring 2017 to spring 2021 we completed 525 interviews and 112 focus groups. Table B.1 summarizes our interview and focus group data collection activities.

In addition to the interviews and focus groups, we observed a total of 29 UPPI leadership team meetings across the seven sites from spring 2017 to fall 2019. Guided by an open-ended observation form, we intended to capture first-hand the issues being discussed and decisions that had to be made; how various partners engaged in the discussion; what tools, processes, and strategies were being used to support the collaboration process; and any challenges encountered.

From spring 2017 to fall 2019, we also conducted regular (e.g., monthly or bimonthly) check-in calls with the UL of each site and attempted to check in regularly with the district partner leads via phone, email, or online survey. In total, we conducted over 60 calls with ULs and completed over 50 check-ins with district leaders. The protocol prompted respondents to provide updates about the key tasks the UPPI leadership team worked on, any new tools, processes, or strategies used to manage the change process, the extent of partner engagement, and any new challenges. As the pace of the redesign work slowed, we ceased to require regular check-ins. This was also done to lessen the data collection burden on respondents.

Finally, we collected several types of documents and artifacts from each UPPI site (summarized in Table B.2). These were meant to supplement the interview and focus group data by helping us better understand contextual conditions and providing evidence and concrete examples of key program changes and work processes. We collected program-related documents at two main timepoints: at baseline (i.e., spring/fall 2017) and at the time the redesigned program was submitted for institutional approval.

Table B.1. Total Site Visit Data Collection (Spring 2017 to Spring 2021)

	# of Interviews (60–75 minutes each) Involving Individuals in Each Role (# of Participants[a])					# of Focus Groups (75–90 minutes each) Involving Persons in Each Role (# of Participants[b])					
	ULs and Program Leaders	University Administrator	District Partner Leads	State Partner Leads	Mentor Program Leads	UPPI Leadership Team	Research Faculty	Adjunct/ Clinical Faculty and Coaches	Mentor Principals	Principal Candidates	# of Data Collection Activities Completed (# of participants)
	UL, Key Faculty	Provost, Dean	(Associate) Super-intendent, Chief Academic Officer	Division Director, Chief Talent Officer	Director, Coordinator, Vice-President	Typically persons participating in individual interviews	Tenure-track faculty teaching in program	Often sitting administra-tors from districts, teaching in program	Site-based principals in partner districts supervising candidates in program	Program enrollees, not necessarily from partner districts	
ASU	17 (17)	7 (7)	23 (27)	9 (12)	13 (20)	2 (31)	2 (6)	2 (4)	1 (3)	3 (18)	79 (145)
FAU	29 (35)	6 (9)	28 (51)	13 (30)	7 (7)	2 (30)	2 (9)	6 (19)	6 (33)	9 (69)	108 (292)
NC State	30 (43)	4 (4)	30 (47)	7 (11)	3 (3)	1 (9)	4 (7)	4 (22)	5 (20)	3 (18)	91 (184)
SDSU	34 (33)	5 (5)	41 (44)	8 (8)	8 (8)	3 (27)	3 (19)	2 (6)	3 (6)	3 (22)	110 (178)
UCONN	30 (33)	4 (4)	29 (35)	12 (15)	7 (10)	2 (16)	4 (15)	3 (15)	4 (1)	4 (29)	99 (173)
VSU	14 (28)	7 (9)	24 (42)	5 (17)	4 (7)	1 (9)	3 (4)	4 (6)	0 (0)	5 (24)	67 (146)
WKU	20 (20)	5 (5)	26 (52)	8 (12)	8 (11)	2 (28)	3 (6)	3 (6)	4 (15)	4 (13)	83 (168)
TOTAL	174 (209)	38 (43)	201 (298)	62 (105)	50 (66)	13 (150)	21 (66)	24 (78)	23 (78)	31 (193)	637 (1,286)

[a] The number of participants includes repeated participation by the same individual over multiple cycles. It is not a count of *unique* participants. For example, a UL that participated in each of the nine rounds of data collection would be counted nine times.

[b] In some cases, participants were part of multiple data collection activities and are double-counted in a given data collection cycle. For example, the UL is counted for both the individual interview and also the UPPI leadership team focus group, and a research faculty member may have been part of both the UPPI leadership team and the research faculty focus group. Also note that in some cases, due to scheduling difficulties, faculty, mentor principals, or candidates were interviewed individually. Nevertheless, for the purpose of the tally, such individuals are considered participants in an intended focus group.

Table B.2. Documents Collected

Document Category	Examples
UPPI planning	• Logic model for program • Workplan • Project timeline
Overall program	• Leader standards • Crosswalk of program/courses to national or state standards • Program description • Materials for admitted applicants (e.g., handbook)
Recruitment and selection	• Recruitment materials • Selection process/activities/assessments • Applicant evaluation tools
Course	• Scope and sequence • Course syllabi • Core//milestone assessments
Clinical experience	• Description and requirements • Mentor principal selection and responsibilities • Clinical practice tracking, coaching, and evaluation tools
Leader tracking system	• Vision statement • System description and documentation
District documents	• Principal job description • Principal evaluation tool (if different from state tools) • LTS-related documents
State documents	• Principal/administrator preparation program accreditation guidelines • Principal/administration certification guidelines • Leader standards • Principal evaluation tool

Interview and focus group protocols

Our data collection protocols were keyed to the four research questions and tailored to the target respondent. An overview of our initial interview and focus group protocols, used in the 2017 site visits, is provided in Appendix C of our 2018 report on the launch of UPPI (Wang et al., 2018). We iteratively revised our protocols with each round of data collection to reflect the evolution of the partnerships' work. In brief, for *program change*, we asked about the program features at baseline. Subsequently, we probed on shifts in these features, reasons for the shifts, and how the features contrasted with baseline. For the *redesign process*, we elicited strategies, processes, and tools for managing various phases of the work, including the initial launch of the project, redesign and transition to implementation, and continuous program improvement. For *partner engagement*, we probed on how and the extent to which each partner organization engaged in UPPI, including any evolution of their roles. Finally, for challenges and mitigating strategies, we sought to document organizational factors at all levels that might pose as barriers to the improvement effort. We asked whether these changed as the work progressed. Table B.3 presents a sample of questions included in our protocols as the initiative progressed.

Table B.3. Sample Questions from Interview and Focus Group Protocols

Research Question	Sample Questions 2017 for Certain Respondents/Protocols	Sample Questions 2020–2021 for Certain Respondents/Protocols
Background/ context	ULs/University Administrators • What is your role in the UPPI? • What motivated you/your organization to think about redesigning the principal preparation program? District Partner Leads • Please describe the hiring environment for principals/ assistant principals in your district. • What current district policies or standards do you believe support the UPPI work? How? State Partner Leads • Historically what has been the [state organization's] role with respect to influencing/shaping principal preparation and development? Mentor Program Leads • What is your organization's prior experience with principal preparation program redesigns? Mentor Principals • What are the work conditions like as a principal in your district?	ULs/District Partner Leads/State Partner Leads • Briefly, please tell us about any changes to the context in which you work that might affect the redesign work or the roll-out of the redesigned program University Administrators • Have there been changes in the general availability of resources—financial, human, or other—that affect the UPPI work or may affect the program? District Partner Leads/State Partner Leads • How, if at all, has your role within your organization changed since we last talked? Mentor Program Leads • How, if at all, has your work with the university program changed since the last time we spoke?
Program change	ULs/Research and Clinical Faculty • Can you describe the application, recruitment, and selection strategies prior to any program redesign? • Can you tell us about the curriculum for the principal preparation/ education leadership program prior to any program redesign? • What curriculum changes have been planned so far as a result of the UPPI? • Describe the typical clinical learning experience or internship with [program].	ULs and Program Leaders • Since we last talked in [month, year], what notable changes have there been to course content or sequence? Instruction? Clinical experiences? Recruitment and selection processes? • How, specifically, has the curriculum/instructional approach/clinical component in the redesigned program changed from pre- to post-redesign? • How has or will the program ensure the faculty is implementing the curriculum and instructional approach as intended? • What activities have you engaged in related to continuously monitoring or improving the redesigned program?

Research Question	Sample Questions 2017 for Certain Respondents/Protocols	Sample Questions 2020–2021 for Certain Respondents/Protocols
	Mentor Principals/Principal Candidates • To what extent do you think the content covered by the course prepares candidates to take on an internship and eventually a principalship?	ULs/District Partner Leads • Can you update us on the status of the LTS? What are the implications of the roll-out and use of the LTS for your organization? Please provide an example. Mentor Program Leads • How, if at all, have you supported the redesign or implementation of the curriculum? Clinical experience? Recruitment and selection process? • What documents, tools, processes, and mechanisms does the university have in place to sustain the changes to the program or continuously improve the program? Research and Clinical Faculty/Coaches/Mentor Principals • Describe your specific role and responsibilities with respect to supporting candidates in the program. • What training/orientation did you receive on the redesigned curriculum and how to implement it? • What mechanisms/structures are in place to support ongoing communication and collaboration among faculty/instructors? Clinical Candidates • What two or three words or phrases best characterize the curriculum of the redesigned program? Clinical component? • Thinking across your courses, what are the main knowledge/ understandings/ideas emphasized across the curriculum? • How would you characterize the balance of theory and practice in the courses? • How, if at all, do the courses connect with each other? With the clinical component?
Redesign process	ULs/District Partner Leads/State Partner Leads • To what extent do you believe the partners have common/shared goals for the UPPI project? • To what extent do you believe the various partners are clear about their roles and responsibilities?	ULs • How, if at all, have you used the logic model that your team developed in the first year in the redesign process? • How did the Quality Measures tool and process affect the redesign?

Research Question	Sample Questions 2017 for Certain Respondents/Protocols	Sample Questions 2020–2021 for Certain Respondents/Protocols
	• What tools, processes, protocols, and strategies do you and your partners regularly use to manage the change process? District Partner Leads • Can you describe the district's roles and responsibilities in planning and implementing program changes? Research and Clinical Faculty/Mentor Principals/Principal Candidates • What have you heard about the [program] redesign? • What are your greatest concerns about the [program's] redesign or the redesign process?	
Partner engagement	ULs/Leads of All Partner Organizations • How often do you interact with the various partners? • Are there organizations or individuals missing that are essential for the program improvement effort? District Partner Leads • Is your district's engagement in the UPPI consistent with your expectations at the start of the partnership? State Partner Leads • Please describe the [state organization's] role in the reform of [program]. Mentor Program Leads • What are some limitations to the support you are able to provide?	ULs • How, if at all, have district partners been engaged in supporting the implementation of various components of your redesigned program? • How, if at all, have your scale-up partners been engaged since we spoke last? • What does your partnership with each of the organizations look like beyond the life of the grant? District Partner Leads/State Partner Leads • Since we last talked, how, if at all, has your district engaged in curriculum redesign or implementation, implementation of the clinical experience, and/or recruitment and selection processes? State Partner Leads • How have you engaged other programs or organizations across the state in program improvement? District Partner Leads/State Partner Leads • What continued role, beyond the support of UPPI, are you and your organization expected (or prepared) to play as the university continues to implement the redesigned program?

Research Question	Sample Questions 2017 for Certain Respondents/Protocols	Sample Questions 2020–2021 for Certain Respondents/Protocols
		ULs/Leads of All Partner Organizations • What factors help keep the UPPI work on track or propel it forward? • What factors make it difficult for you or people on your team to engage in UPPI-related activities? • How would you characterize the value of UPPI for your organization?
Challenges and mitigating strategies	ULs/Leads of All Partner Organizations • What one or two major challenges have you encountered? • What lessons learned or advice would you offer to other universities or programs attempting similar initiatives? Or other districts or state agencies looking to support such redesign?	ULs/Leads of All Partner Organizations • What would you say are the major challenges your team has experienced related to the UPPI work? • What lessons learned would you be most eager to share with fellow university education leadership program directors/district leaders/state leaders about your experience with UPPI?

Qualitative coding and data analysis

With permission, we recorded all interviews and focus groups, and, immediately upon the conclusion of each cycle of data collection, we produced transcripts and coded them into overarching topics or 'big bins' in Dedoose (SocioCultural Research Consultants, 2021), a cross-platform internet application that assists with qualitative data analysis. Following established qualitative research procedures for ensuring reliability in the coding process (Denzin and Lincoln, 2003; Lincoln and Guba, 1985; Miles and Huberman, 1994), we generated the coding scheme, established code definitions, trained on these for the first application, and refreshed training as necessary with each subsequent cycle and/or as new analysts joined the team. A primary analyst—typically the junior site visit data collector—coded the data for each site. We applied multiple codes as relevant to an excerpt. We held occasional meetings and had impromptu exchanges to discuss and resolve ambiguities and discrepancies. We revised the coding scheme and documented decision rules, as necessary. The four main "bins" and corresponding codes in our coding scheme are presented in Table B.4.

Table B.4. Sample Questions from Interview and Focus Group Protocols

The "What" and Why	Change Process	Partnerships and Engagement	Policy Change
• Baseline • Program-level • Recruitment and selection • Curriculum and instruction • Clinical experience • LTS	• External supports • Internal management • Scaling • Sustaining	• Partner engagement in redesign process • Value of partnerships	• District level • State level • University/program level

Subsequently, we took the excerpts coded to each of the main codes and applied finer codes, The finer codes are thematic codes that answer analytic questions keyed to our four primary research questions. This fine-coding process involved rereading and iteratively coding excerpts within and across sites. We generated a priori codes based on our synthesis of data to date and emerging themes, while also allowing for emergent codes (Miles and Huberman, 1994). We identified themes following established techniques (Bernard, Wutich, and Ryan, 2016; Ryan and Bernard, 2003). After each site visit, we produced internal memos summarizing key findings that characterized each site. We also held team debriefs after each site visit and regular discussions of potential themes in our project meetings. These meetings also provided regular opportunities to check for underlying analyst assumptions or biases (Denzin and Lincoln, 2003; Lincoln and Guba, 1985). We recorded potential themes in a running spreadsheet.

For *program change*, for example, our analytic questions were (1) What was each of the elements within a component (e.g., program foci, balance of theory and practice, required

clinical experiences, applicant selection activities) like pre-redesign? (2) Post redesign? (3) What shifts or patterns do we see in the elements pre- and post-redesign? What might account for the shifts or patterns? Taking the excerpts within "Curriculum and Instruction," we coded excerpts as relating more specifically to one or more topics (e.g., curriculum, instructors) and specific themes within topics (e.g., coherence of curriculum, curricular emphasis, selection of instructors). We simultaneously coded each excerpt as pertaining to pre- or post-redesign to aid future comparative analysis, as well as reasons for the program change. See Table B.5 for examples of these finer codes.

Table B.5. Finer Coding Categories/Topics and Themes for "Curriculum and Instruction"

Curriculum	Instruction	Instructors	Assessment	Reason for Change
• Coherence and structure of curriculum – Use of frameworks – District-specific tailoring • Focal topics/ emphasis – Equity – Reflection – Link to clinical component – Dispositions	• Methods – Experiential – Adult learning • Mode of delivery – Online – In-person	• Ensuring program implementation as intended – PD/training/ orientation – Tools and processes to support fidelity • Selection – Use of district adjuncts – Hiring/fit criteria	• Formative • Summative • Performance • Spanning courses	• State requirements • Finances/ budget • QM • Candidate/ faculty feedback

We applied a similar process for excerpts pertaining to our other research questions (e.g., Change Process, Partner Engagement). For example, for *change process*, we generated guiding analytic questions focused on the drivers of the work, roles that were pivotal to the redesign, and tools and processes that supported various phases of the redesign. We developed guidelines as needed to help clarify and bound the coding and subsequent analysis. For example, we delineated among efforts related to institutionalizing the redesigned program from scaling-related efforts.

After fine-coding excerpts, analysts summarized key themes pertaining to each site in spreadsheets. For example, each row may be a theme, and each column represents a site. Within each cell, where applicable, analysts summarized how the theme manifested at that site. Analysts then looked across each row for similarities and differences among sites for a theme and drafted the major pattern or finding. We took multiple steps to ensure the integrity of our findings. In addition to generating internal memos and meeting regularly, as described earlier, throughout the analysis process, we sought both confirmatory and disconfirming evidence and triangulated data across sources and time. Also, we conducted fact-checking. We presented draft findings to ULs

and partner leads, and we also made the sections of the report that explicitly referenced specific sites available for ULs to review for accuracy.

Limitations

The data for this study are subject to several limitations. First, all interview and focus group data were self-reports, reflecting personal perspectives that cannot be independently verified. Second, focus group participants were typically a convenience sample; we did not include all eligible faculty, clinical coaches, district-based mentor principals, and principal candidates in our data collection. Given this, the focus group participants may not represent all possible participants' perspectives. Finally, our planned in-person site visits in spring and fall 2020 were preempted due to COVID-19. We were required to adjust our data collection method such that we conducted a more limited set of interviews via videoconference or phone. While this may have disrupted the rhythm of the data collection and meant we missed some perspectives during 2020, we do not believe this compromised the quality of the study, and in fact, was a necessary reprieve for our would-be participants. Our final data collection cycle in spring 2021—also completed remotely—was comprehensive, and we were able to retrospectively capture key events and processes from 2020.

Appendix C. INSPIRE Data Collection and Analysis

This appendix provides an overview of the data sources, sampling approach, and methods used for all analyses involving the University Council for Educational Administration's (UCEA's) Initiative for Systemic Program Improvement through Research in Educational Leadership (INSPIRE) surveys. Our survey-based estimates of the results of the UPPI program reforms are based on a pre-post comparative case study design. Using this method, we estimate the impact of the UPPI program reforms by comparing the outcomes for the UPPI programs with the outcomes for a set of similar programs (Lijphart, 1971). The appendix concludes with select detailed results from the survey administrations. Complete survey results are available in a separate online document, which is available at www.rand.org/t/RRA413-3.

Overview of the INSPIRE surveys

The UCEA INSPIRE Leadership Survey Suite includes four surveys that are administered to different stakeholders to produce evidence that can be used for evaluating and improving leadership preparation programs. These surveys include the INSPIRE Preparation Program Features (INSPIRE-PP) Survey, the INSPIRE Graduate Edition (INSPIRE-G) Survey, the INSPIRE Leader in Practice (INSPIRE-LP) Survey, and the INSPIRE 360 Edition (INSPIRE-360). INSPIRE-PP and INSPIRE-G focus on leadership preparation activities and INSPIRE-LP and INSPIRE-360 focus on leadership practice in the field. Accordingly, for this evaluation, we administered only INSPIRE-PP and INSPIRE-G.

The INSPIRE Survey Suite was appropriate for this evaluation because the constructs and topics measured by the surveys align with the desired program outcomes of the UPPI redesign, and several of the UPPI grantees are UCEA members and have already administered the INSPIRE surveys as a part of ongoing program monitoring and evaluation. Finally, the population of programs that administer the INSPIRE surveys is national in scope. As such, the relevance of the surveys across diverse contexts (seven states) is higher than using any state- or region-specific survey. While we considered alternatives (including the QM assessment and several state-specific surveys), given these benefits, we ultimately determined that the INSPIRE surveys were best suited for the needs of this study.

INSPIRE-G survey

The INSPIRE-G is a survey of recent program graduates focusing on their perceptions of program quality and their own learning outcomes. The INSPIRE Graduate (INSPIRE-G) Survey is designed to be administered to recent program graduates and focuses on perceptions of program quality as well as on graduates' self-assessment of skills, knowledge, and practices. The

skills, knowledge, and practices assessed by the INSPIRE-G are aligned with the national PSELs. The survey also collects information about respondent demographics, professional background, and professional/career aspirations.

UCEA has conducted several studies to establish evidence of the measurement quality of the INSPIRE-G survey, and these results suggest that the survey covers important aspects of the candidate experience (i.e., has strong construct validity) and that the items measure the constructs they are purported to measure (i.e., has strong structural validity). Internal consistency estimates of reliability suggest that the survey scales are not unduly influenced by measurement error, with Cronbach's alpha ranging from 0.85 to 0.96 for most scales (Pounder, 2012). Table C.1 provides the scales subscales and the number of items for the INSPIRE-G survey.

Table C.1. INSPIRE-G Scales

Scale	Subscales	Items
Program Quality	• Rigor and Relevance • Faculty Quality • Peer Relationships • Program Accessibility • Internship Design and Quality	26
Learning Outcomes: Preparation for Leadership Practices	• Ethical and Professional Norms • Strategic Leadership • Operations and Management • Instructional Leadership • Professional and Organizational Culture • Supportive and Equitable Learning Environments • Family and Community Relations	42

INSPIRE-PP survey

The INSPIRE-PP survey was developed by UCEA to describe the key features of preparation programs (including degree information, program focus, admission and selectivity, credit hour requirements, and program enrollment and completion data, among other features). INSPIRE-PP survey can be completed by program directors, coordinators, or other program staff that have knowledge of the leadership preparation program. Table C.2 provides the topics that are covered by the INSPIRE-PP survey and the number of items for each topic.

UCEA has conducted several studies to establish evidence of the measurement quality of the INSPIRE-PP survey, and these results suggest that the survey covers important aspects of the candidate experience (i.e., has strong construct validity) and that the items are predictive of program graduates self-reported leadership practices (i.e., has evidence of predictive validity; see Pounder, 2012, and Black, 2011).

Table C.2. INSPIRE-PP Scales and Selected Items

Topic	Items (2019 Version)	Representative Question
Program identifying information	4	• Program name • Department and institution name • Location • Academic years
Program information	31	• Degree information • Licensure information • Accreditation information • Program focus • Program admissions information • Credit hour requirements and program duration • Program enrollment and completion
Program design elements	47	• Cohort model • Class scheduling • Course locations • Course delivery methods • Partnership characteristics • Program content focus and priorities
Candidate learning experiences	70	• Instructional strategies • Clinical experiences • Assessment and evaluation information • Program staffing
Post-program experiences	2	• Graduate support • Graduate tracking

Changes to the INSPIRE-PP survey

Surveys were administered at two time points to all participating university programs. We administered the INSPIRE-G from February 19 to March 20, 2019. We administered the INSPIRE-PP from March 4 to March 22, 2019. These administrations served as *baseline* data collections for our analysis. At baseline, respondents provided program information that applied to the 2017–2018 academic year. However, as noted in the body of the report, UPPI teams began the redesign process in 2016; some changes may have occurred before the baseline survey.

We administered the INSPIRE-PP from March 1 to March 26, 2021. This administration served as a *follow-up* data collection for our analysis. At follow-up, respondents provided program information that applied to the 2019–2020 or 2020–2021 academic year.[13]

A few features of our survey administration schedule merit further explanation. First and most importantly, survey administration was heavily impacted by disruptions to university programming that resulted from the COVID-19 pandemic. After consulting with UCEA and program administrators, it was determined that we would not administer the INSPIRE-G survey to graduates at follow-up in order to minimize burden and allow candidates to focus on their

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[13] Because the survey references a cohort that had already graduated, respondents used the 2019–2020 academic year if they had not graduated a cohort in 2020–2021 prior to the survey.

program and the needs of their schools and students. Secondly, the INSPIRE Survey Suite is revised and updated annually by UCEA staff, and several items were modified or removed between our baseline and follow-up data collection periods. As a consequence, some items cannot be directly compared across survey forms. Where possible, we established recoding rules in conversation with UCEA to allow for comparisons across survey forms. In some cases, however, direct comparisons were not possible (see below for details).

Sample identification

This section describes the sampling approach taken to identify comparison programs for the survey analyses. Our objective was to select comparison programs that were as similar as possible to the UPPI programs in terms of location, governance, delivery, and other important factors that make the comparisons seem reasonable and sensible (i.e., have strong "face validity"). Selecting comparison groups that are as similar as possible to the UPPI programs helps minimize case selection bias and other threats to validity (Shadish, Cook, and Campbell, 2002). Below, we describe the process for determining the criteria we used for selecting the best possible comparison institutions, as well as the rationale for each criterion.

Criteria for identifying comparison programs

Our identification of comparison programs was driven by two main priorities:

- We focused on the importance of within-state comparisons. Within-state comparisons are necessary because of confounding factors, including policy shifts, regional labor market shocks, etc., that can affect all PPPs and graduates within a state.[14] Within-state comparisons are also the most appropriate given the significant cross-state variation in requirements for approved educational leadership programs and administrative credentialing (e.g., states accredit university-based programs, and requirements such as the number of clinical hours required in a program States often set baseline admissions requirements for administrative credential candidates in terms of years of teaching experience, some states have two-tier credentialing systems versus one-tier, etc.). Finally, within-state comparisons will allow us to account for common trends affecting all educational administration programs within a state in order to provide the best opportunity to understand and characterize the influence of the UPPI program reforms and distinguish these influences from other state policy shocks.
- We focused on the importance of program structure. Given that many of the UPPI reforms focus on reimagining structural elements of PPPs (e.g., nature of curriculum, residency, and other learning experiences and program elements, alignment with state and national standards), we prioritized structural characteristics (e.g., length of the program, degree awarded) to identify comparison programs. In this way, programs should

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[14] Examples of policy shifts include Georgia's 2016 shift to a two-tier leadership preparation system and 2015 adoption of new leadership standards and California's adoption of a performance assessment for all candidates in approved educational administration programs (which is in a pilot phase and will be fully implemented by 2020).

operate in similar institutional contexts, be of similar duration, provide similar modes of course delivery (e.g., in-person versus online programs), and terminate with similar degrees or credentials.

Based on these priorities, we determined six criteria for identifying UPPI comparison sites:

1. located in the same state as the UPPI program
2. public institution of higher education
3. university-based PPP (e.g., remove district-based programs and alternative pathway programs)
4. in-person program (e.g., remove online-only programs)
5. same degree options as the UPPI program (e.g., masters)
6. similar number of credit hours necessary for program completion (e.g., keep only universities for which the highest degree option is within +/– 10 credit hours of the UPPI site highest degree option).

There are several other potential criteria that we ultimately excluded from consideration: student demographics, program enrollment, university type (e.g., historically Black colleges and universities, land grant universities), as well as the context in which programs are working within each state. Ideally, we would be able to use these criteria in identifying comparison universities. However, these criteria were excluded either because we were unable to identify reliable, publicly available data or because the criteria would remove all potential comparison universities from consideration within a state or otherwise make within-state comparisons infeasible.

Table C.3 shows the potential size of these comparison pools in each state. The third column of the table displays the total number of state-approved programs offering graduate-level programs in education leadership or administration. These programs are all university-based and exclude district-embedded or online programs. In total, there are 145 such programs across the seven participating states. The fourth column lists only the programs that are housed in public universities in each state; this excludes private universities and for-profit universities. This resulted in a total of 75 viable comparison programs across the seven states.

Table C.3. Treatment and Potential Comparison Group Sample Sizes, by State

State	Treatment Programs	Comparison Programs	
		Total Universities	Public Universities
California[a]	1	52	23
Connecticut[b]	1	6	3
Florida[c]	1	22	11
Georgia[d]	1	15	9
Kentucky[e]	1	11	6
North Carolina[f]	1	20	12
Virginia[g]	1	19	11
Total	**7**	**145**	**75**

[a] California Commission on Teacher Credentialing, 2022.

[b] Connecticut State Department of Education, undated.

[c] Florida Department of Education, 2016.

[d] Georgia Professional Standards Commission, 2016.

[e] Kentucky Education Professional Standards Board, undated.

[f] Public Schools of North Carolina State Board of Education undated.

[g] Virginia Department of Education, undated.

Recruitment of comparison programs

Based on the identified criteria and the identified universities, we created a preference list to prioritize outreach to preferred comparison programs within each UPPI state. We then contacted program directors of the educational leadership programs or the chairs of the educational leadership departments within the identified programs to invite universities to participate in the study. Potential comparison programs were offered incentives for participation. Programs were also offered access to data collected and reports generated via the INSPIRE surveys by UCEA (programs typically need to pay for these surveys and the resulting reports if they are not UECA members), which provides an additional benefit to participating programs.

All universities were initially contacted by email. Email addresses for appropriate contacts at each university were obtained by internet search. Recruitment emails described the purpose of the study, details on how to enroll, contact information for project principal investigators (PIs) and RAND's institutional review board, as well as information about payment incentives and benefits. The recruitment emails also outlined procedures that would be undertaken to ensure confidentiality. One week after this email was sent, non-responders were contacted by telephone and then were sent information packets (i.e., hard copies of the recruitment letter) via FedEx.

Survey response rates

Table C.4 presents survey response rates for all three administered surveys.

Table C.4. Survey Response Rates

University	UPPI	Comparison
INSPIRE-PP (2019)	100%	100%
INSPIRE-PP (2021)	100%	100%
INSPIRE-G (2019)	47%	31%

Analysis methods

The objective of the INSPIRE analyses was to obtain evidence of the valence of program changes under the UPPI reforms, with a particular focus on five aspects: (1) the quality of school leadership programs, (2) program recruitment, retention, and graduation of high-quality candidates, (3) the skills, knowledge, and behaviors of program completers, (4) graduate placement, hiring, and first-year retention in school leadership positions, and (5) performance in the first year after placement. Our overall approach to these explorations is based on a pre-post quantitative comparative case study.

The comparative case study method can be used to discover empirical relationships among variables and to estimate the impacts when the number of cases under consideration is too small to permit for statistical inference (Lijphart, 1971). Using this method, we can estimate the impact of the UPPI program reforms by comparing the outcomes for UPPI programs with our selected comparison cases. This method is particularly useful when there is no existing administrative source (e.g., a state agency or university system) of data for a particular outcome or when intensive data collection efforts are required to obtain the necessary data.

Analytically, we compared the aggregate outcomes for the UPPI programs with the aggregate outcomes for the comparison programs to estimate the impact of UPPI. Given the small sample size, these comparisons were exploratory in nature and relied on descriptive comparisons of trends across groups. Specifically, after tabulating survey results for all survey items, we grouped items by topic and looked at mean differences across groups and over time. We identified any differences that were larger than 0.75 scale points or 10 percentage points for follow-up and then summarized these findings into cross-item themes around recruitment and selection, curriculum and instruction, the clinical experience, the student experience, and partnerships. These initial theme codes were shared with the larger project team, revised, and refined.

Survey item modifications to enable comparisons over time

As mentioned above, the INSPIRE Survey Suite is revised and updated annually by UCEA staff, and several items were modified or removed between our baseline and follow-up data collection periods. As a consequence, some items cannot be directly compared across survey forms. Where possible, we established recoding rules in conversation with UCEA to allow for comparisons across survey forms. In some cases, however, direct comparisons were not possible.

This section describes the transformations that were employed to enable credible comparisons over time. Table C.5 displays all INSPIRE-PP survey items that had different response options in the 2019 and 2021 administrations. In the second column of this table, the response options for the 2019 survey are displayed. The third column likewise displays the 2021 survey response options. In the last column, we describe how the response options were modified to enable comparisons over time. For some items, no modifications were possible, particularly if an item was removed from the 2019 Survey or added to the 2021 Survey. These cases are also noted in Table C.5.

Table C.5. Survey Item Modifications

Survey Item	2019 Survey	2021 Survey	Modification
What level of licensure or certification will candidates earn?	• School building leader/principal license or certificate • District-level leadership/superintendent license or certificate • Other specialty license(s)	• School building leader/principal license or certificate • District-level leadership/superintendent license or certificate • Other specialty license(s) • Comprehensive administrator license • No license	• Comparison of common categories only
What test(s) do students take for leadership licensure and certification for this program?	• School Leadership Licensure Assessment • State-developed test • Other • None	• National licensure exam • State developed test • Other • None	• Recode School Leadership Licensure Assessment as National licensure exam
What leadership standards does your program align to?	• Educational Leadership Constituent Council • Interstate School Leaders Licensure Consortium • State standards • Other • None	• National Standards; State standards • A combination of national and state standards • Other • None	• Educational Leadership Constituent Council and Interstate School Leaders Licensure Consortium recoded as National standards • Respondents selecting a combination of these options and state standards recoded as • A combination of national and state standards
What accreditation bodies either review or accredit your program?	• National • State • Other	• National accreditation • State program approval • Regional accreditation • University graduate school • Other	• Mapped text "Other" responses in 2019 version to relevant categories in 2021 version

Survey Item	2019 Survey	2021 Survey	Modification
Do you have a specified course sequence for core/required courses?			• Not available in 2019 version and excluded from over-time analysis
Do you have any impact data to support the selected sequence?			• Not available in 2019 version and excluded from over-time analysis •
To what extent are classes typically held during the following times?	• Extent Likert-type scale	• Percentage of classes	• Scales not reconcilable across survey versions. Excluded from over-time analysis
How many program courses are offered at the locations below?	• Count of courses	• Percentage of courses	• Scales not reconcilable across survey versions. Excluded from over-time analysis
How many program courses use the following delivery mechanisms listed below?	• Count of courses	• Percentage of courses	• Scales not reconcilable across survey versions. Excluded from over-time analysis
Do you have a recognized partnership with one or more local districts?			• Not available in 2019 version and excluded from over-time analysis
If your program has affiliations with local partners, please rate the extent to which the following are attributes of this affiliation.	• Extent Likert-type scale	• Percentage of classes	• Recoded "not at all" and "a little" to "No" and all other responses to "Yes"
Rate your agreement with the following statements about the influence of this program's accessibility and attractiveness.			• Not available in 2021 version and excluded from over-time analysis
How much emphasis is given to the content areas below in this program's curriculum?		• Ethics and Professional Norms • Supportive and Equitable Learning Environment	• Not available in 2019 version and excluded from over-time analysis
To what extent are the following instructional strategies or learning activities part of program course work?		• Simulations • Collaborative activities or assignments	• Not available in 2019 version and excluded from over-time analysis

Survey Item	2019 Survey	2021 Survey	Modification
To what extent are the following types of candidate assessment data collected?		• Within course assessments; program midpoint assessment • Program assessment • Standardized tests of candidate knowledge • Assessment of candidate clinical experience	• Not available in 2019 version and excluded from over-time analysis
To what extent are the following strategies used by your program faculty to review students' knowledge and skills?			• Not available in 2021 version and excluded from over-time analysis
To what extent are the following summative assessment strategies used by your program to evaluate students to be recommended for program completion (e.g., degree and/or license recommendation)?		• Evaluation feedback from internship/field supervisors • Cumulative academic performance (e.g., grades)	• Not available in 2019 version and excluded from over-time analysis
To what extent are candidate assessment data used for program improvement?			• Not available in 2019 version and excluded from over-time analysis
Identify to what extent candidate assessment data are used in this program.			• Not available in 2021 version and excluded from over-time analysis
To what extent are the following types of candidate assessment data collected?			• Not available in 2021 version and excluded from over-time analysis

Limitations

The INSPIRE-PP, like all surveys, relies on self-report; that is, the INSPIRE-PP is administered to the faculty member who is most familiar with the preparation program. Although self-reported data can be prone to certain kinds of bias, including social desirability bias and acquiescence bias, the majority of the questions in the INSPIRE-PP survey are intended for program improvement and are objective (e.g., when classes are held), which should minimize the likelihood of biased responses. Nevertheless, there is a small possibility that social desirability influences some individual's response tendencies, perhaps motivated by a desire to demonstrate that they are meeting UCEA's membership criteria. In addition, surveys may be susceptible to reference bias; individuals may have different interpretations of terms used in questions (i.e., authentic field-based research) or may differ in their implicit standards of comparison. However, the survey includes definitions and examples for some terms, which we believe promotes a

greater common understanding of the items and mitigates the possibility of inconsistent item interpretations.

In addition to the limitations of self-report methods for data collection, our analysis was also limited in several important ways. First, the analysis is limited by a small sample size as a result of singular responses from each of the 14 programs of interest. Given the comparative nature of this analysis, all analyses explore the differences and similarities between the seven UPPI programs and seven comparison programs. Such small overall sample sizes preclude any further nuanced or subgroup analyses. Second, the selection of comparison programs was done by using publicly available information on universities, and the number of reported university characteristics were limited. We note that no matches are ideal, and our interpretation of results will consider the findings in the context of these potentially important omitted characteristics. However, we do believe that the identified criteria will help to surface evidence about the early impacts of the UPPI reforms. Third, while our analysis is based on a pre-post methodology, we acknowledge that the baseline administration of the survey is not a "pure" measure of pre-UPPI implementation, as aspects of the UPPI reforms may have been taken up in some universities prior to the survey administration. Finally, the data include only UCEA-affiliated institutions, meaning that the data cannot be directly compared with non-member institutions that are potentially better matches to UPPI programs. Given this constraint, we feel that this survey analysis is still an important contribution and hope to address this limitation with further research. The results and conclusions should be interpreted with all these limitations in mind.

Abbreviations

ASU	Albany State University
CAD	Candidate Assessment Day
CSDE	Connecticut State Department of Education
CTC	California Commission on Teacher Credentialing
FAU	Florida Atlantic University
GELFA	Georgia Educational Leadership Faculty Association
INSPIRE	Initiative for Systemic Program Improvement through Research in Educational Leadership
INSPIRE-G	Initiative for Systemic Program Improvement through Research in Educational Leadership Graduate
INSPIRE-PP	Initiative for Systemic Program Improvement through Research in Educational Leadership Preparation Program
LTS	leader tracking system
NCPEL	North Carolina Professors of Educational Leadership
NC State	North Carolina State University
NELA	Northeast Leadership Academy (NC State)
NELP	National Educational Leadership Preparation
PD	professional development
PLC	professional learning community
PPP	principal preparation program
PSEL	Professional Standards for Education Leaders
QM	Quality Measures
RFP	request for proposal
SDSU	San Diego State University
SELECT	School Educational Leadership Enhancement Committee Task Force
UCEA	University Council for Educational Administration
UCONN	University of Connecticut
UIC	University of Illinois at Chicago
UL	university-based lead of UPPI (typically the program director)
UPPI	University Principal Preparation Initiative
VSU	Virginia State University
WKU	Western Kentucky University

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