

The Elgin Children's Foundation's Principal Support Program: An Early Program Assessment

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Foreword

This study was a year-long assessment of the Elgin Children’s Foundation’s Principal Support Program. Survey, interview, and observation data were collected and analyzed to evaluate the impact of the Principal Support Program on its participating principals. This study was conducted by three doctoral students to fulfill the requirements of the Doctor of Education degree from Peabody College, Vanderbilt University located in Nashville, Tennessee

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Key Terms

Term	Definition
Appalachian region	A region of the United States along the Appalachian Mountains
Chronic absenteeism	Missing ten percent or more of the academic year for any reason, including excused and unexcused absences, suspensions, and time missed due to changing schools.
Implementation gap	A gap between knowledge and application of knowledge
Instructional leadership	A set of principal practices related to instruction or learning
Proficiency	A level (often based on a standardized tests) that indicates a student is reading on grade level
Principal support program (PSP)	A program designed by the Elgin Children’s Foundation to support principals in Appalachia
Logic model	A graphic that illustrates the inputs, processes, outputs, outcomes, and assumptions of a program or organization
Organizational management	In school leadership, a set of practices concerned with managing resources (information, facilities, personnel, money, and time)
School climate	The perceptions of students, teachers, and parents of the school’s leadership of the building’s environment
School culture	The values that are reflected in the common behaviors inside the school building
Visibility practices	In school leadership, practices that involve being present in the classroom

Executive Summary

The school principal plays a significant role in a school's success, and research highlights the importance of principals learning through others (Smylie, Murphy, & Louis, 2020). Unfortunately, principals often work alone. In rural settings, this circumstance is heightened, as principals have reported feeling isolated in their leadership role.

The Elgin Children's Foundation, which is dedicated to breaking the cycle of poverty for children living in rural Southern Appalachia, launched its Principal Support Program (PSP) in 2017 to support the development of effective school leaders with the ultimate goal of improving student academic achievement.

We partnered with the Foundation to design and oversee an early evaluation of the PSP centered on three research questions:

1. What is the impact of the PSP on principal mindsets and practices as related to school climate and culture, instructional leadership, and organizational management?
2. How do the mindsets and practices of PSP principals compare to non-PSP principals in similarly situated schools?
3. What components of the PSP are most beneficial for principal development?

Methods

The design of our study is mixed methods, including both quantitative and qualitative analyses. We conducted semi-structured interviews with PSP coaches, principals, and district officials to gather data regarding perceptions of the program and how it has influenced principals' mindsets and practices. We also collected survey data from principals who have been part of the PSP for at least two years, as well as data from a sample of their school-based staff. Additionally, we collected survey data from principals who did not participate in the PSP (but participate in other Elgin services), as well as their school-based staff, in order to conduct a comparison analysis.

Key Findings

First, *principals perceive school climate and culture as an asset* in their schools, and their school-based staff agreed. However, principals did not identify *standardized processes* to evaluate their school climate and culture. Some principals relied on survey data while others based their evaluation on the feeling they had about the building.

Second, PSP coaches described a shift from principals as *managers* to principals as *instructional leaders*. As instructional leaders, principals were more aware of methods to examine and utilize data, but their implementation of using data varied. Principals also conducted more teacher observations to help drive instructional changes, but their processes to provide teachers with feedback also varied.

Next, principals also highlighted changes in their mindsets and practices regarding *shared leadership* in their schools; some principals developed leadership teams or site-based councils to help make school-wide decisions. However, principals still *struggled to implement time management practices*, a concern that PSP coaches also noted. Lastly, coaches found that the impact of the PSP was influenced by principals' mindset toward learning and improvement, not their years of experience.

These findings must be further contextualized with quantitative analysis. *Non-PSP principals rated themselves higher* than PSP principals in all three areas of school climate and culture, instructional leadership, and organizational management. This could be the result of PSP principals having increased *awareness* of the work needed to achieve higher qualities of school climate and culture, instructional leadership, and organizational management; subsequently, PSP principals rated themselves lower because full *implementation* had not occurred. There also could be *push-back* from PSP school-based staff who are hesitant about new, additional initiatives in their schools.

Ultimately, the PSP *fulfilled a need for leadership development for rural principals*. These principals are often isolated and have severely limited access to professional development and networking that occur on a far more frequent, systematic basis in larger school districts. The PSP offers support through professional development, mentoring, networking, and learning plans, and additional structural supports would help sustain continuous improvement of the PSP while allowing for easier progress monitoring of program outcomes.

Recommendations

Based on the findings from the evaluation, the capstone team makes the following recommendations:

1. Create a differentiated curriculum for principals centered on principal learning objectives aligned to standards of practice.

The National Policy Board for Educational Administration has developed Professional Standards for Educational Leaders (NPBEA, 2015). NPBEA's standards outline major objectives for principals to learn that could be adopted or incorporated in the PSP as benchmarks of proficiency. The PSP would benefit from providing differentiated learning for principals by creating a curriculum for more proficient practitioners.

2. Establish program structures to increase accountability.

The PSP would benefit from creating a unified tracking system to keep a strong count of principals who have participated and the content they have received. The PSP could also implement a beginning and end of year survey to measure individual growth on changes in principals' mindsets and practices.

3. Support school-based leadership teams with PSP programming.

The PSP could help improve its impact by providing teachers with skills and training to share leadership responsibilities with principals, as well as providing best practices on developing effective leadership teams.

4. Standardize the process of how school climate and culture are evaluated.

The National School Climate Center offers a tool that the PSP could implement to evaluate school climate called the *Comprehensive School Climate Inventory* (CSCI). This tool assesses student, parent/guardian, and school personnel perceptions to collect the data needed for decision-making in five broad categories: Safety, Teaching and Learning, Interpersonal Relationships, Social Media, Institutional Environment, as well as two distinct dimensions for school-based staff only.

5. Develop a shared protocol for providing instructional feedback designed in collaboration with teachers.

The New Teacher Project (TNTP) provides an example of protocol that can be adapted for the PSP that principals could use when structuring their teacher observation processes.

Introduction

Research highlights the importance of the school principal's role in K-12 education (Beteille, Kalogrides, & Loeb, 2009; Bryk, 2010; Grissom & Loeb, 2011; Horng & Loeb, 2010; Hitt & Tucker, 2016; Murphy, 2016; Whitaker, 1997). Bryk (2010), who studied hundreds of elementary schools in Chicago over a fifteen-year period, identified five essential components to improve schooling and concluded that school leadership was the component necessary for the other four to drive change. Similarly, Wahlstrom, Louis, Leithwood, and Anderson (2010), who used a national sample of schools to study factors that impact student learning, found that aside from classroom instruction, leadership emerged as the most important school-related factor to contribute to what students learn.

While we know that school leadership matters, effective instructional leaders also operate within a network of other principals (Niece, 1983). Despite that effective instructional leaders are well connected, we also know that, unfortunately, principals report that they feel isolated or alone in their role (Smylie et al., 2020; Wieczorek & Manard, 2018). This isolation is heightened in rural areas, where principals are sometimes the only leader in their district, schools are physically far apart, and school leaders are sometimes the only leader in their building.

After engaging in reading programming, the Elgin Children's Foundation founded the Principal Support Program (PSP) in order to leverage their impact on reading in the Appalachian region. Elgin was motivated by the large gaps in reading among the schools they served (some schools reported that 20%

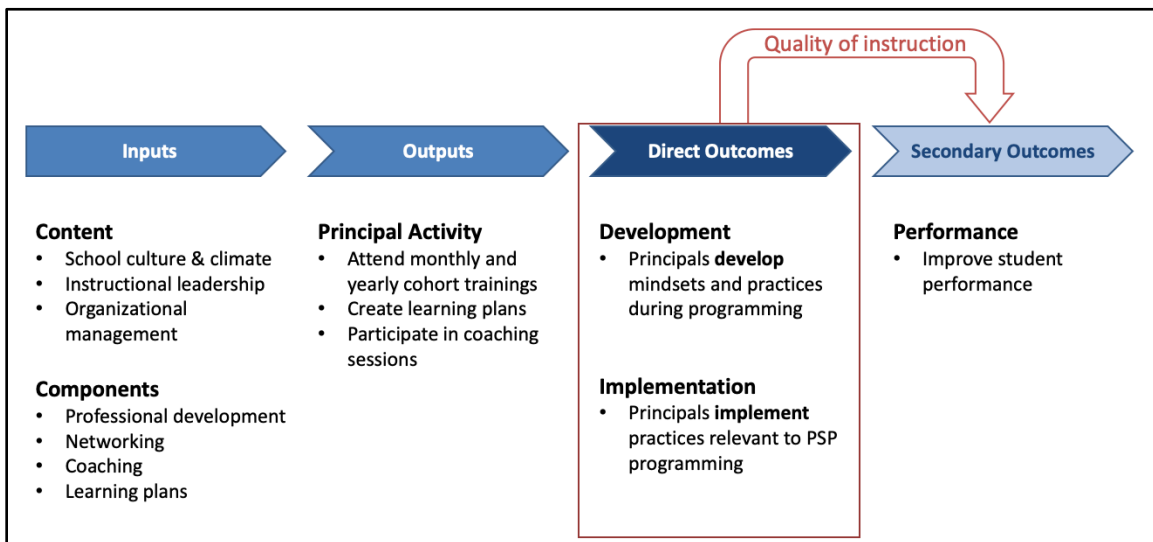
of their students were reading on grade level while others reported that 80% of students were reading on grade level), as well as a recommendation from an early evaluation of their reading programs to partner with school leaders.

Purpose of study

We partnered with the Elgin Children's Foundation to better understand the early impact of the PSP, identify components that were most beneficial for principals, and to provide a set of recommendations for the organization to learn and improve.

In preparation for this evaluation, preliminary efforts were made to understand the content of leadership programming during the first two years of the PSP. These efforts included a document analysis of agendas from PSP training as well as informal interviews with all PSP coaches. While the original PSP goals covered six categories of school leadership, preliminary findings identified that principal development was focused on three content during the first two years (2017-2019) of PSP programming: school climate and culture, instructional leadership, and organizational management. Additionally, the PSP offered four components for principal development including professional development, opportunities to network, coaching, and learning plans. While the ultimate goals of the PSP are to positively impact student achievement, this early evaluation focuses evaluating the direct outcomes of the PSP, or whether principals learned about and implemented practices from the specific content areas (See Figure 1, PSP Logic Model).

Figure 1: PSP Logic Model Legacy



We hope our findings and recommendations will be useful to guide the program structurally to continue to learn and improve in the areas of principal development, as well as strengthen learning and implementation across the three content areas.

Context

The Elgin Children’s Foundation was established in 2003 to break the cycle of poverty for children living in Southern Appalachia. Specifically, the organization’s mission is to “ensure that children, no matter their background or status in life, have full access to dental care and reading assistance” (Elgin Children’s Foundation, 2019). While historically the Foundation focused its impact on partnering with schools to provide access to dental care, it has expanded its scope of work to the following categories:

- Child protection and rescue
- Discipleship
- Academic support

The Foundation is based in Knoxville, Tennessee, but its region of service includes counties in rural Kentucky and Virginia as well; Elgin’s original partnerships were focused within 10 counties (known as legacy counties), and its impact has expanded in recent years to include counties bordering the legacy counties (See Figure 2).

The PSP was originally offered to all partnering principals within the Elgin legacy counties but has since expanded to include bordering counties. PSP is most present in Kentucky, where it operates in 7 counties, and least present in Virginia, where it currently operates in 1 county; in previous years, PSP also convened in Tazewell county (see Figure 3). The PSP’s reach is not as extensive as its dental work (see Figure 4) and dental and PSP programming overlap in some counties (see Figure 5).

Figure 2: Elgin Context

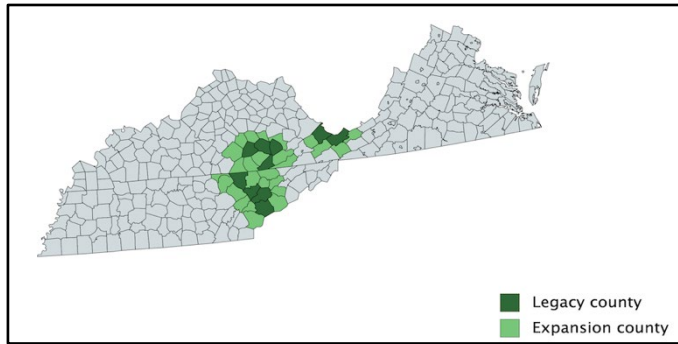


Figure 3: PSP Partnerships

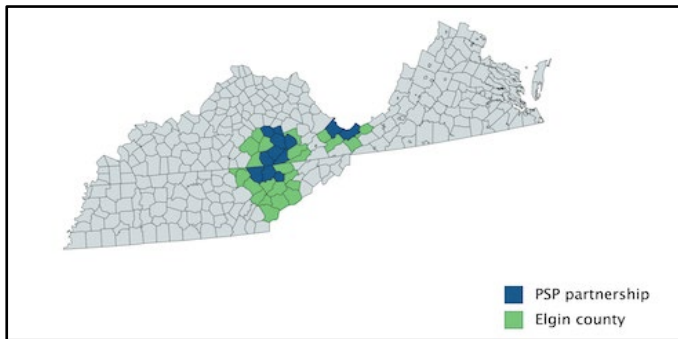


Figure 4: Dental Partnerships

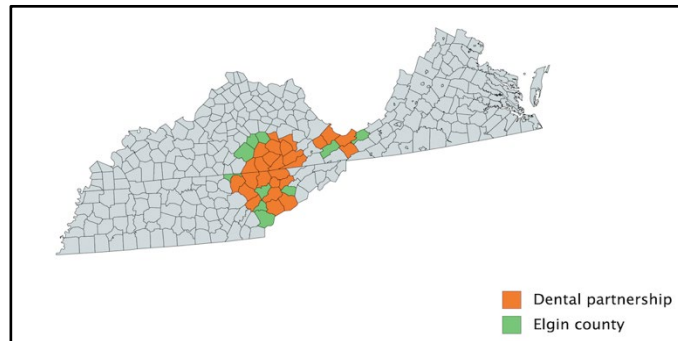
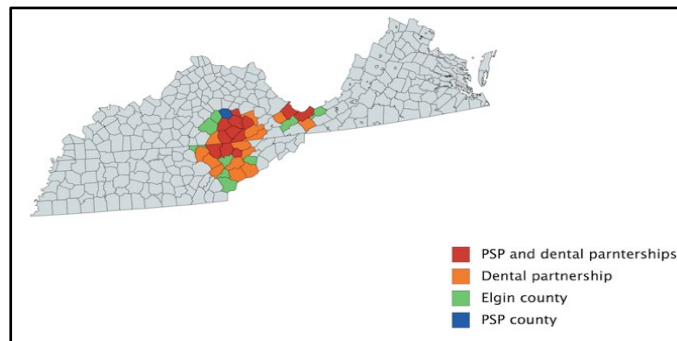


Figure 5: Dental & PSP Partnerships



Consistent with the mission of the Elgin Foundation to serve areas with high poverty rates, the PSP counties have an average poverty rate of 28.6%, with more severe poverty rates in Kentucky than in Tennessee and Virginia, as noted in Table 1. The Appalachian Regional Commission aggregates the three measures (unemployment rates, per capita income, and poverty rates) to create economic status

labels for each of the counties within the states they serve.

The designation is on a five-point scale that correlates to distressed, at-risk, transitional, competitive, and attainment. Out of the 12 counties that send principals to the PSP, ten are designated as distressed and two are at-risk.

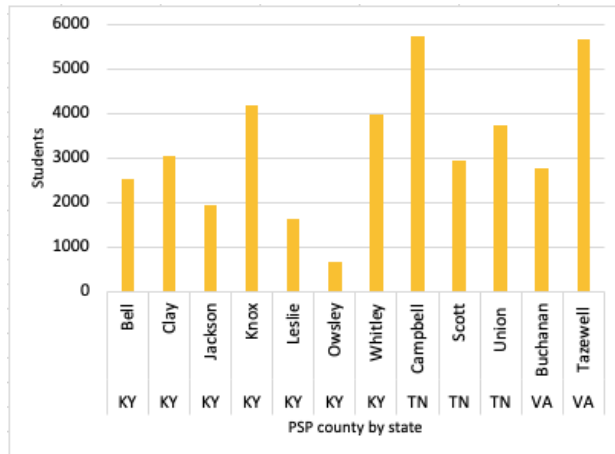
Table 1: Economic Status of PSP Counties

County	Unemployment Rate	Per Capita Income	Poverty Rate	Economic Status Designation
Kentucky				
Bell	6.6%	\$29,612	37%	Distressed
Clay	6.5%	\$30,566	38.6%	Distressed
Jackson	6.0%	\$28,352	30.4%	Distressed
Knox	5.4%	\$29,431	33.3%	Distressed
Leslie	9.7%	\$32,724	35.6%	Distressed
Owsley	6.0%	\$31,486	34.7%	Distressed
Whitley	4.7%	\$33,447	26%	Distressed
Tennessee				
Campbell	4.2%	\$33,967	19.7%	At-Risk
Scott	3.7%	\$29,758	22.3%	Distressed
Union	3.6%	\$31,693	21.6%	Distressed
Virginia				
Buchanan	5.9%	\$36,229	27.7%	Distressed
Tazewell	4.3%	\$38,888	16.2%	At-Risk

Data retrieved from U.S. Bureau of Labor Statistics (2019), Bureau of Economic Statistics (2018), Poverty USA (2018), Appalachian Regional Commission (2020)

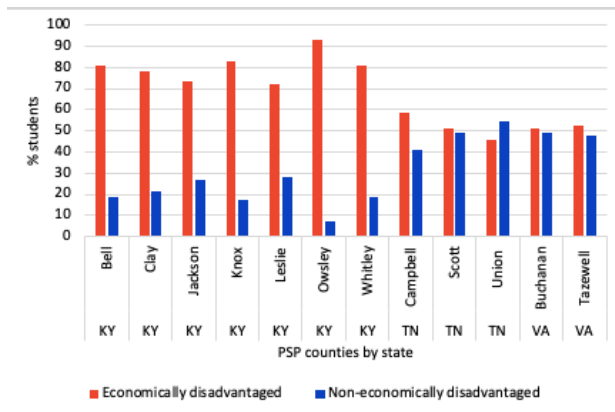
Student data vary across all PSP counties. The Elgin Foundation partners with schools that serve grades K-6. However, because some middle and high schools include grade 6, their principals are eligible to participate in the program as well. The counties which PSP schools reside in are small, which is evident when examining data from school enrollment by county (see Graph 1).

Graph 1: PSP student enrollment by county



A majority of PSP counties (11 out of 12) serve more students that are identified as economically disadvantaged than those who are not identified as economically disadvantaged, although the gap is more pronounced in Kentucky counties (see Graph 2).

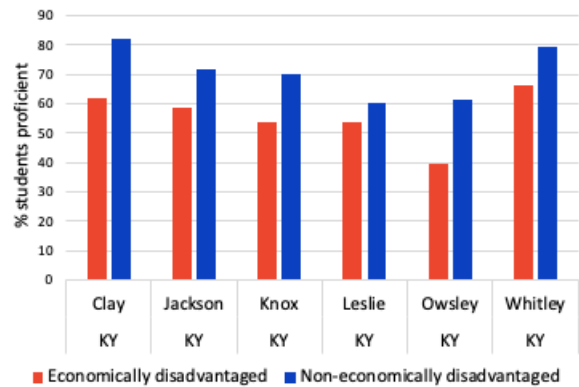
Graph 2: PSP Student Enrollment by SES



Despite the fact that states provide different information on student achievement, gaps in reading proficiency exist for students within all states based on these groups, although the gaps are more pronounced in some counties (see Tables 2-4). Graph 3 demonstrates gaps in reading proficiency based on these groups in PSP Kentucky counties.

Again, when comparing data across counties, it is important to note that states have different standards and measures used in accountability reports. Therefore, we have included data specific for each state. In Kentucky (Table 2), attendance rates hover around 92%, and the percentage of economically disadvantaged students ranges from 71.8% to 82.6%. Those from an economically disadvantaged background also score lower on state assessments on Reading/English Language Arts.

Graph 3: PSP Kentucky reading proficiency by student SES



For Tennessee (Table 3), attendance rates are slightly higher and range from 92.2% to 95.7%. The percent of students who are economically disadvantaged ranges from 45.5% to 58.7%. Similar to Kentucky, students who are economically disadvantaged perform lower on state assessments on Reading/English Language Arts.

For Virginia (Table 4), students from economically disadvantaged backgrounds performed higher on state assessments on Reading than in Kentucky and Tennessee, though they still lag behind the state average.

Overall, students from economically disadvantaged backgrounds, which encompasses the majority of PSP counties, perform lower on state assessments in Reading/English Language Arts across all three states.

Table 2: Kentucky Student Data for PSP Counties.

	Bell	Clay	Jackson	Knox	Leslie	Owsley	Whitley
Enrollment	2,542	3,059	1,928	4,178	1,637	670	3,976
Attendance rate (%)	92.6	91.1	92.1	91.3	92.4	91.3	93.3
% of students economically disadvantaged	81	78.4	73.3	82.6	71.8	93	81.1
Reading (Elem.) proficiency non-economically disadvantaged students	N/A	82.3	71.5	70.1	60.3	61.5	79.2
Reading (Elem.) proficiency for economically disadvantaged students	N/A	61.9	58.7	53.9	53.6	39.3	66.1
<i>Data retrieved from the Kentucky Department of Education (2020)</i>							

Table 3: Tennessee Student Data for PSP Counties

	Campbell	Scott	Union
Student Enrollment (2016-17)	5,726	2,950	3,747
Attendance Rate (2016-2017)	92.2	95.7	92.25
% students economically disadvantaged (2017-2018)	58.7	51.1	45.5
% students proficient (ELA 3-8, 2016-17)	22.3	30.6	25.9
% students proficient for economically disadvantaged (ELA 3-8, 2016-17)	18.2	23.6	19
<i>Data retrieved from the Tennessee Department of Education (2020)</i>			

Table 4: Virginia Student Data for PSP Counties

	Buchanan	Tazewell*
Student Enrollment	2,758	5,655
% Economically disadvantaged	51	52.2
% Chronic Absenteeism	14.3	22.2
% Proficient in Reading	73	83
% Proficient in Reading for economically disadvantaged students	67	78

*No longer a PSP partner as of 2019-2020 school year.
Data retrieved from the Virginia Department of Education (2020)

The Principal Support Program (PSP): Early design

The PSP was developed in partnership with the Kentucky Education Co-op using a collaborative process with the goal of supporting principals in becoming effective leaders. According to Elgin (2017), the original goals of the program included:

- Develop a network of administrators who can share, collaborate and develop strategies to improve student performance
- Provide support to principals to be able to implement strategies for increased student achievement
- Provide professional learning opportunities for principals to increase effectiveness
- Provide principals with support to grow as leaders

The design of the program was a one-year process that involved principals from schools in Southeastern Kentucky. When describing the needs of principals, one

school leader shared that principals wanted “an opportunity to talk to each other” and “learn for growth, not just meet compliance check-lists.”

Principals wanted an opportunity to “learn for growth, not just meet compliance check-lists.”

Throughout the 2016-2017 school year, members of both organizations (Elgin Foundation and the KY Education Co-op) researched other programs focused on principal growth, including the National Institute for School Leadership and the Knox County Principal Pipeline. The content of the program was originally based on Kentucky Principal Performance Standards, specifically within six main categories: Instructional leadership, school climate, human resources management, communication and community relations, organizational management, and professionalism.

However, as we noted earlier, preliminary findings from document analysis and conversations from PSP stakeholders revealed that during the first two years of the program learning revolved around three content areas:

- School climate and culture
- Instructional leadership
- Organizational management

As noted in the logic model, Elgin predicted that four different components would be important for principal development: professional development, networking, mentoring, and learning plans (see Table 5).

Professional Development. Principals attend long-term meetings with all PSP principals and monthly meetings led by their coach with principals who lead in the same state. As noted earlier, informal interviews with PSP coaches and a document analysis of PSP agendas revealed that professional development focused on principal mindsets and practices related to school culture and climate,

instructional leadership, and organizational management.

During training, principals participated in a variety of learning activities, including hearing from guest speakers, discussing books, reflecting on their practices, and learning with other principals during informal conversations. Figure 6 displays the PSP kick-off training in July 2019.

Figure 6: PSP Kick-off Training



Principals meet during Kick-off training

Table 5: PSP Components

Professional development	Networking	Mentoring	Learning Plans
<p>Long-Term Trainings Principals retreats with all principals in the program and monthly meetings with principals in their cohort</p> <p>Year 1: 14 days Year 2: 7 days Year 3: in-progress</p>	<p>Cohort-Model Principals will learn with and through others during long-term training with a cohort of principals who meet monthly</p>	<p>PSP Coach Each principal is assigned to a professional coach to provide support in the implementation of learning that occurs during long-term training and monthly meetings</p>	<p>Learning Plans Principals develop learning plans based on two goals after performing a personal needs assessment</p>

Networking. The cohort-model of the PSP provides principals the opportunity to learn through and with each other. Networking occurs during the program when school leaders attend long-term training (in which they gather with principals from Tennessee, Virginia, and Kentucky) and monthly meetings (in which they gather with principals from their home state). A by-product of this networking is the opportunity for principals to attend school visits to observe the implementation of best practices of principals in similarly situated schools.

Mentoring. PSP principals are also provided a coach who meets with them monthly at their school to provide individual support. The PSP coach supports principals as they implement the learning that occurs during PSP professional development. All PSP coaches have experience as a principal and were chosen by Elgin based on previous success in the principal role. Collectively, coaches have an average of 36 years of educational experience and an average of 14 years of experience as a principal (see Table 7). PSP coaches also lead monthly training and collaborate to establish long-term goals and monthly meeting agendas.

Table 6: PSP Coaches’ Experience

PSP Context in which the coach serves	Years of Total Educational Experience	Years of Principal Experience	Context of Coach’s Principal Experience
Tennessee	42	19	Urban and Suburban
Tennessee and Kentucky	37	18	Rural
Kentucky	35	10	Suburban
Virginia and Tennessee	36	14	Rural
Kentucky	37.5	5.5	Rural
Kentucky	30	14.5	Rural

Learning Plan. The fourth component of the PSP is a reflection in the form of a learning plan. Principals develop learning plans with their coach centered on two goals.

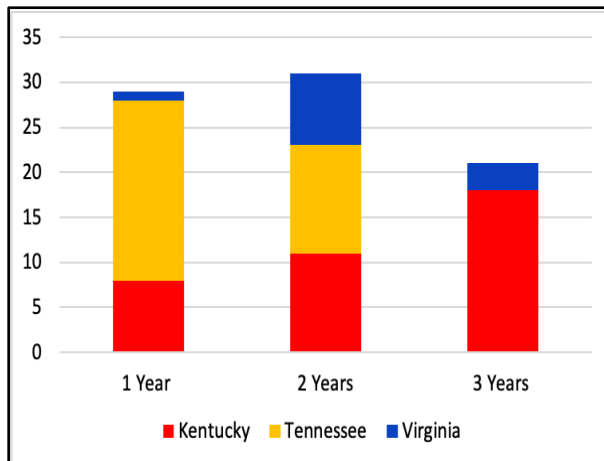
Principal Support Program: Early Implementation

The PSP started in the summer of 2017, and the 2019-2020 school year marks the third year of programming. Over the past three years, PSP programming has included:

- Indirectly reaching approximately 25,000 students
- Providing 450+ hours of professional training
- Delivering 85 different professional learning opportunities
- Coordinating 1500 face-to-face coaching visits
- Providing 5,000+ hours of direct coaching

To date, the program has served 81 principals in Elgin counties with most principals from the state of Kentucky. In the current PSP model, some principals have been part of the program for three years while others just started this year (2019-20). A majority of PSP principals (80%) have participated in the program for at least two years (see graph 4). During yearly training, all PSP principals convene together whereas during monthly training PSP principals convene in their cohort. Notably, some districts required principals' participation while other principals volunteered to be part of the program.

Graph 4: PSP participation



Principal Support Program: Early Measures of Progress

Prior to this evaluation, few measures existed to evaluate how principals' mindsets and practices changed due to the PSP. The Elgin Children's Foundation previously collected data that examined the PSP in terms of engagement, student achievement, principal growth, and perceived benefit. PSP coaches complete a rubric which scores principals on a point-scale on the first three items. Only one rubric item addresses principals' changes in mindsets or practices during the program. District supervisors provide input as to whether they have seen "no growth, little growth, moderate growth, or exemplary growth" in their principals. No measure existed that specifically examined growth in terms of the specific content areas covered during the first two years of the program.

Principals also provide feedback on the program by answering a series of questions about the benefits of each component of the program and asked to provide an overall rating. The survey also contains open-ended questions where principals can comment on each program component and offer recommendations for improvement.

Table 7: Current Measures of Progress

	Rubric	Achievement Data	Principal Survey
Measures	Professional practice Achievement data Principal engagement	MAP/NWEA Data	EOY survey
Type	Direct Outcomes (principal mindsets and practices)	Secondary Outcome (student performance)	Perceived Benefit

Evaluation Project Design

Based on this information, we view our evaluation as two-fold. First, we examine the early impact of the PSP on principals' changes in mindsets and practices as perceived by PSP coaches, principals, school-based staff, and district officials based on the major learning objectives from the first two years of the program: school climate and culture, instructional leadership, and organizational management. Second, we compare results from PSP principals to principals who do not participate in the PSP. The Foundation initially requested an evaluation connected to student performance outcomes; however, because the program is in early stages of implementation, we do not view an evaluation focused on student performance outcomes as applicable or appropriate at this time. It is our intention to assist the Foundation to better understand the program's levels of fidelity at the school-level. Future evaluations may (and should) examine the relationship between the PSP and student performance.

Research Questions

1. What is the impact of the PSP on principal mindsets and practices related to school climate and culture, instructional leadership, and organizational management?
2. How do the mindsets and practices of PSP principals compare to non-PSP principals in similarly situated schools?
3. What components of the PSP are most beneficial for principal development?

Research Design

The design of our study is mixed methods, including both quantitative and qualitative approaches. As described by Greene et al. (1989), our design is categorized as

complementarity, as our qualitative data will enhance and illustrate our quantitative data. We collected survey data from principals who have been part of the PSP for at least two years, as well as data from a sample of their school-based staff. We selected these participants because these district and school officials are in a position to assess changes in principals' mindsets and practices since these principals began the PSP. We also conducted semi-structured interviews with PSP coaches, principals, and district officials to gather more in-depth data regarding perceptions of the program and how it has influenced principals' mindsets and practices. Additionally, we collected data from principals who did not participate in the PSP, as well as their school-based staff, in order to conduct a comparison analysis. The comparison group of principals and school-based staff were selected from schools with similar demographics as the PSP schools and received services from the Elgin Foundation but were not a part of the PSP. This comparison group assisted us in assessing whether the PSP impacted principals' mindsets and practices in different ways as compared to non-PSP principals who are leading in similar social and demographic contexts but did not receive PSP training.

In terms of quantitative data, survey items addressed the major learning objectives from the PSP: school climate and culture, instructional leadership, and organizational management. These surveys included Likert scales as well as multiple choice questions regarding demographics. All surveys to principals and school-based staff were collected starting in October 2019 with follow-up requests in November 2019 through February 2020. Semi-structured interviews were conducted to gather richer data about

principals’ and district officials’ experiences specific to school climate and culture, instructional leadership, and organizational management, as well as beliefs about changes in principals’ mindsets and practices. These interviews took place between October 2019 through February 2020 and were conducted

in-person, by telephone, or by video conference. Lastly, in-person observations were conducted at three schools as follow-ups to the interviews.

Data Collection

Table 8: Data Collection

Research Question	1. What is the impact of the PSP on principal mindsets and practices related to school culture and climate, instructional leadership, and organizational management?	2. How do the mindsets and practices of PSP principals compare to non-PSP principals in similarly situated schools?	3. What components of the PSP are most beneficial for principal development?
Method	Mixed-Methods	Mixed-Methods	Mixed-Methods
Type of data	<p>Observations/site visits to schools of PSP principals</p> <p>Semi-structured interviews with PSP principals, coaches, and district officials</p> <p>Survey data from PSP principals and their school-based staff</p>	<p>Survey data from PSP principals and their school-based staff</p> <p>Survey data from non-PSP principals and their school-based staff</p> <p>Semi-structured interviews with PSP principals, coaches, and district officials</p>	<p>Semi-structured interviews with PSP principals, coaches, and district officials</p> <p>Survey data from PSP principals and their school-based staff</p>

Sample

Our sample includes principals, coaches, school-based staff, and district officials. Based on the belief that principals need to have been in the program for a full year to see an impact on their mindsets and practices, we focused analysis on principals who had participated in the program for at least two years. We sent

the survey to 197 principals who were either part of the PSP or the Dental Program from Elgin. We received 93 responses from principals for a response rate of 47%. We removed anyone who had only been in their position or the PSP for one year only. The tables below show the quantitative and qualitative sample that was analyzed.

Table 9: Sample

Stakeholder	Quantitative (Survey Respondents)	Qualitative (Interview Respondents)
PSP Principals	32	14
Non-PSP Principals	33	N/A
PSP School-based Staff	87	N/A
Non-PSP School-based Staff	32	N/A
PSP District Official	N/A	7
PSP Coaches	N/A	5

Table 10: Sample by State

	Kentucky	Tennessee	Virginia
Qualitative data			
PSP Principals	6	7	1
PSP District Officials	2	3	1
PSP Coaches	2	2	1
Quantitative data			
PSP Principals	19	11	2
Non-PSP Principals	44	12	5
PSP School-based staff	16	37	6
Non-PSP School-based staff	14	7	1

Table 11: School Visit Sample

	State	Grades Served	Enrollment	Free/Reduced
School A	Kentucky	Pre-K - 6th	~400	~80%
School B	Kentucky	Pre-K - 8th	~500	~75%
School C	Tennessee	Pre-K - 5th	~500	~45%

Enrollment and Free/Reduced Lunch rates are approximated to maintain confidentiality

Descriptive Statistics

Within our study design, there are two groups of data to describe - our interview respondents and our survey respondents. Interview data include 25 PSP stakeholders, including principals, district officials, and PSP coaches. The composition of our principal respondents by state was representative of the PSP, given that a majority were from Kentucky and Tennessee (see Table 9). Most of these principals had been in the PSP for at least two years. These principals had a wide range of principal experience as some were new to the role with only two years of experience while others had ten years of experience. Collectively, they have an average of 4.6 years of experience as a principal. Semi-structured interviews were also conducted with a majority (5 out of 6) of PSP coaches who partner with PSP principals in Kentucky, Tennessee, and Virginia. These coaches have an average of 36 years of experience in education and 14 years of experience as a principal. The remaining seven interviews were conducted with district officials: two from Kentucky, three from Tennessee, and two from Virginia.

Our survey yielded a total of 174 eligible respondents, including 32 PSP principals, 87 PSP school-based staff, 33 non-PSP principals,

and 22 non-PSP school-based staff. For eligible PSP principals (i.e. those who had been in PSP for at least two years), the response rate was 62%. Again, our survey yielded a composition of PSP principals by state that is representative of the PSP (see Table 10).

Based on self-reporting of survey respondents, 77% were serving at a school with above a 60% rate of Free/Reduced Lunch; 83% of respondents were serving at a school that was classified as located in a small town or village with under 5,000 people. These statistics demonstrate that schools were located in low-income, rural communities. More specifically, when reviewing subgroup data, 90% of stakeholders at PSP schools reported that their schools were above a 60% rate of Free/Reduced Lunch, and 87% of schools were in a small town or village. On the other hand, 77% of stakeholders at non-PSP schools reported that their schools were above a 60% rate of Free/Reduced Lunch, and 77% of schools were in a small town or village. These statistics reflect that the context for both PSP and non-PSP schools is low-income and rural; however, there is a higher degree of poverty, as well as smaller communities, within the PSP reflected in these data.

Data Analysis

To analyze the data, we first created alpha scales for the three areas of training that the PSP provided: school climate and culture, instructional leadership, and organization management. The chart below shows the questions that were asked under each area that were consolidated to create the scales.

We conducted a Cronbach's Alpha analysis to ensure reliability, and the values of the scales are highlighted in the table below. The scales all demonstrate reliability as they exceed an alpha of 0.7 (Taber, 2017), the commonly utilized threshold.

Table 12: Overview of Survey Scales

	School Climate and Culture	Instructional Leadership	Organizational Management
Question Topics for All Participants	Mission, Leadership, Learning Environment, Communication	Teacher Growth and Development, Using Data	School Goals, Using Student Performance, Principal Initiative, Clear Decision-Making
Cronbach's Alpha	0.96	0.86	0.93
Additional Question Topics for Principals Only	New Ideas and Orderly Atmosphere	Instructional Approach Support, Improving Teaching	Teacher Accountability, Rule Implementation, Resolving Problems
Cronbach's Alpha	0.96	0.85	0.93

As noted earlier, we conducted a comparative analysis to observe the differences between PSP principals and non-PSP principals. We examined confidence intervals and conducted ANOVAs on principal and school-based staff survey results regarding changes in principal mindsets and practices; these tests were also run for the non-PSP group. These results helped us determine whether there were differences within the PSP group or within the non-PSP group. The PSP and the non-PSP principals

were then compared using a t-test to determine whether there were significant differences between these groups. We also examined both tests by sub-groups, including state and whether the principal had volunteered for the program. For our analysis, we use statistical significance at the 0.05 level.

For our qualitative methods, we employed classic qualitative methods for data collection in the form of interviews and observations. We focused on "capturing and understanding diverse perspectives, observing

and analyzing behaviors in context, looking for patterns in what human beings do and think, and examining the implications of those patterns” (Patton, 2015, p. 8). We realize that factors (i.e. school climate and culture, instructional leadership, and organizational management) do not exist in a vacuum, and therefore a qualitative design complements our purpose in that interview questions can generate in-depth, individualized, and contextually sensitive understanding.

For qualitative data analysis, our team first completed an interim analysis. Each team member reflected on the data that they collected individually and developed a page and a half, single-spaced analytic memo. The purpose of the memo was to record our initial reactions from our observations and interviews. This memo was then shared with each team member so that we all could review our first impressions. Both before and after writing the analytic memo, each group member had the opportunity for quiet time for further reflection on their individual data.

Next, we began to review and organize the data by listening to the audio recordings from the interviews. The listening and reviewing occurred in three phases. The first phase, or level 1, was a ‘listening tour’ in which we listened to refresh ourselves about the data collected throughout the day. During this phase, the goal was purely to process each interview and to gain more familiarity with its content. During the second phase, or level 2, we listened again, but this time to derive themes and identify quotations with the goal of organizing the data. To derive themes, we searched for patterns in the data (i.e. concepts that were repeated). We then created individual concept-cluster matrices for each interview that focused on key concepts based on our literature review. Each matrix was

organized around our key concepts of school climate and culture, instructional leadership, and organizational management. During our third round of listening, or level 3, we synthesized the data by combining single interview matrices into combined matrices with pseudonyms for interviewees to maintain anonymity. For our project, this consisted of one consolidated matrix organized by major themes. We then compared this analysis to our quantitative data in order to expound upon those findings.

Strengths and Limitations of Design

The strength of our survey is that it is specifically tailored to the programming that the PSP offered and efficiently gathered significant amounts of data. We surveyed stakeholders who have information regarding the PSP principal mindsets and practices during the first two years of the program in addition to non-PSP participants as a comparison group. Additionally, the qualitative data gave us further insight on how principals, coaches, and district officials believe the program has impacted mindsets and practices in ways not captured through survey data.

The major limitation to our evaluation is that we are not able to specifically correlate student performance outcomes as initially requested. This Foundation has expressed that its primary interest is knowing whether its program is causing a direct impact on student performance, as Elgin wants to ensure they are making a sound financial investment in providing this program. The Director specifically commented on how he is concerned that principals simply agree to take part in PSP because of the other wraparound services that Elgin provides to participating schools and district.

Limitations

Qualitative. Limitations to both the internal and external reliability and validity of our study exist for our qualitative data. To begin, five issues needed to be addressed for external reliability: researcher status position, informant choices, social situations and conditions, analytic construct and premises, and methods of data collection and analysis. As for the researcher status position, we addressed this during our interviews by not interviewing people we knew, by stating that we were graduate students at Vanderbilt University, and by not disclosing our professional careers to our participants. We described that the nature of the project was to inform our own learning as graduate students. For participant choices, we relied on the literature to help us determine who should be selected for interviews, which involved principals and district officials. We then narrowed these informants to those who had been part of the first two years of the PSP. Key informants were identified by the list of participating principals and district officials from Elgin's leadership team. For social situations, we allowed interviewees to select the location of their interview to promote their comfort level in speaking openly, including in-person, by phone, or by Zoom. We also allowed interviewees to decide if they were comfortable being audio-recorded.

In regard to analytic construct and premises, we determined our conceptual framework from the literature. Our conceptual framework then informed our interview protocols and scripts for principals, district officials, and coaches. Throughout each interview protocol, we ensured that our questions avoided jargon, especially since these educators all came from different backgrounds and may not use the same

terminology. For example, instead of asking about RTI, we inquired about principals' utilization of data to inform decision-making. Lastly, as aforementioned, our methods for data collection and analysis were informed by the literature. We collected data from multiple sources, including interviews, observations, and documents, and we analyzed the data by identifying emerging themes and comparing them to our analytic framework.

On the other hand, internal reliability has the goal of achieving agreement on the description of events among multiple observers; strategies exist to reduce its threats, including low-inference descriptors, multiple researchers, and mechanically-recorded data. For low-inference descriptors, we utilized our audio-recordings of interviews to reproduce verbatim accounts of our participants' conversations if participants were comfortable with being recorded. By relying on direct quotations, we ensured that little interpretation by the researchers occurred. To address the need for multiple researchers, our team consisted of three members who were all trained on how to interpret results through our qualitative methods course as well as from the literature review. Additionally, we each developed an analytic memo that was shared with the group to help us evaluate each other's understanding of the interviews. Lastly, in regard to mechanically-recorded data, we utilized audio-recordings of the interviews and photographs from spaces throughout various school buildings to collect our data. We then reviewed recordings and photographs as we analyzed data to determine themes and to develop our final interpretations.

Validity of our study is the second area to consider. Internal validity concerns whether

researchers actually observe what they think they are observing. Issues that arise include process and change, observer effects, and selection. For observer effects, we ensured that the categories of questions in our protocols were meaningful to the participants. For example, we asked principals about their perceptions in terms of what they learned in the PSP, how they attempted to integrate what they learned in their buildings, and reactions of their school-based staff to these initiatives. To promote and include how participants experienced reality within our data, we allowed our questioning to adjust according to how participants responded. For example, if a participant wanted to share more about a specific question, we allowed them to fully express their thoughts before moving on. We also adjusted our questions and terminology based on what the participants stated. For example, we did not push further into what the principals' district initiatives were unless participants were willing to share. Furthermore, we implemented the same interview protocol for each type of participant to ensure we elicited similar information. Selection is of particular concern for the internal validity of our study, as we relied on participants to volunteer to interview, and therefore, our sample was not randomly selected. Because it was not a random selection, we cannot be certain that our findings are representative of all principals in PSP. For example, we may have only interviewed those who were passionate about PSP and its programming. Next, spurious conclusions are also of concern. We interpreted our data based on interviews, observations, and documents, but there may have been other data that were not collected. Although our results and discussion paint a picture of how we interpreted PSP, rival explanations for our results need to be considered. To strengthen our interpretations,

we relied on the most plausible explanations for our themes, as supported by the triangulation of data collected and the literature review.

Lastly, external validity is about the degree to which the components of the study are sufficiently described and defined so that other researchers can utilize our results as a basis of comparison for other studies (i.e. generalizability). Because of the limits arising from our participant selection and the specific constructs we implemented in our protocols, we cannot state that our study is generalizable to all similar principal support programs; however, it could serve as the basis for future studies that take place in rural districts that also have a need for principal professional development.

Quantitative. The major disadvantage of our quantitative sampling method was the bias that may be inherent in non-probability sampling. Since we selected participants through convenience sampling through partnering with Elgin leadership, our subject pool was not representative of the entire population of PSP principals and their school-based staff. For example, we did not want to include principals in their first year of PSP in our surveying, and therefore, these principals' and their school-based staff's perceptions are missing. However, we had issues with our survey potentially being taken by those only in their 1st year of PSP. Specifically, while we were able to remove responses from principals who self-identified as being in their first year of PSP in our survey, we were not able to identify school-based staff who responded whose principals may have been in their first year of the program. As far as our comparison group, we only surveyed those with whom Elgin had a professional relationship. Principals outside of Elgin's network were not captured even though they

might have had important perspectives that differed from our participants. Furthermore, these non-PSP principals operate in the same county as PSP principals, so there is the possibility of the exposure effect. Non-PSP principals could be aware of the PSP and its programming, thus influencing how they responded to the survey. The non-PSP stakeholders also had slightly lower rates of Free/Reduced Lunch as well as lower rates of being in small towns or villages than the PSP group. Ultimately, we lose the ability to generalize our results outside the population

we surveyed because of the non-probability techniques used to gather participants. Additionally, while our study may offer insight about the perceptions of the PSP and principals' mindsets and practices, it cannot be used to suggest a causal relationship. Without an experimental design that included a random sample, suggesting a causal relationship is not possible.

Findings

Question 1: What is the impact of the PSP on principal mindsets and practices related to school climate and culture, instructional leadership, and organizational management?

As noted earlier, Elgin focused its learning during the first two years of the PSP on three content areas: school climate and culture, instructional leadership, and organizational

management. Therefore, to answer our first question, we orient our findings around these areas (see Table 12). For each content area, we first provide an overview of its definition and then describe the specific practices Elgin emphasized. We then conclude with themes that emerged with regards to the impact of the program within that content area.

Table 13: Overview of Themes for Question 1

School Climate and Culture	<ol style="list-style-type: none"> 1) Principals perceive school climate and culture as an asset 2) Principals rely on varied and non-standardized processes to evaluate school climate and culture
Instructional Leadership	<ol style="list-style-type: none"> 3) PSP coaches describe a shift in principals from managers to instructional leaders <ol style="list-style-type: none"> a. Principals are more aware of methods to examine and utilize data, but implementation varies b. Principals are more visible in classrooms, but processes to provide feedback vary 4) Principals discuss shared leadership mindsets and practices
Organizational Management	<ol style="list-style-type: none"> 5) Principals struggle to implement time management practices

School Climate and Culture

School culture emphasizes the values that are reflected in the common behaviors inside the building (Stolp, 1995), whereas school climate refers to the perceptions of students, teachers, and parents of the school's leadership of the building's environment (Lindahl, 2001). Principals are tasked with improving the environment in their schools, and a significant emphasis exists on building relationships with all stakeholders (Sergiovanni, 2000). Additionally, principals' actions toward building positive school

climate and culture can be divided into broader concepts, including establishing the school's vision and mission, building relationships, supporting student learning, relationships with the school community, and the school building itself (Atkinson & Pilgreen, 2011; Drago & Severson, 2012; Gruenert, 2005).

Elgin structured its programming on school climate and culture based on *Culturize: Every Student. Every Day. Whatever It Takes.* (2017) by Jimmy Casas. During monthly PSP training, principals developed culture plans,

which were inspired by Casas's four principles of positive school culture: Champion for All Students, Expect Excellence, Merchant of Hope, and Carry the Banner. The first principle, "Champion for All Students" begins with acknowledgement that "kids *can*" (Casas, 2017, p. 17). The second principle, "Expect Excellence" refers to the belief that "all kids, regardless of race, socioeconomic class, ethnicity, sexual orientation, perceived ability, attitude, etc., should be held to the highest standards of learning when it comes to their academics and/or their behavior" (Casas, 2017, p. 18). The third principle, "Merchant of Hope," reflects the idea that "every child deserves the opportunity to be a part of something great," and the fourth, "Carry the Banner," means that all students, staff, and parents are "responsible for contributing a positive voice" (Casas, 2017, p. 18). Inspired by these principles, principals worked during training to develop mission and vision statements, their 'why' for serving as educators, and promoting a growth mindset in their buildings.

Finding 1: Principals perceive school climate and culture as an asset

A common thread emerged among the PSP principals who were interviewed in terms of perceptions of their school's climate and culture. Nearly all principals believed that their current school climate and culture were bright spots in their schools. Principals did not distinguish between climate and culture when describing their schools' environment, but rather spoke about them as a collective feeling upon entering the school and in relationships among the faculty. In response to the question, "How would you describe your school's culture or climate?," principals did not refer specifically to either climate or culture but offered a range of positive reactions from simply "it's good," "family," and "warm,

caring, and close-knit" to "definitely improving. A couple of years ago our school climate and culture was not good." Some principals were confident that school climate and culture had been strong for a long time, while others noted that this has been a work in progress requiring changes in how they approached this work. For example, one principal shared that he now plays music over the intercom throughout the day, something he learned from a PSP training. Other principals described how they shared their 'why' with their staff, which generated discussions about school climate and culture among faculty.

It is important to note that some principals only mentioned their own perceptions of school climate and culture, whereas others spoke to perceptions of stakeholders, such as teachers, students, and parents. For example, one principal commented that "We have great school culture. I think that the Elgin program solidified and reinforced the beliefs that I had about school culture." This principal went on to share how Elgin provided statistics and research, as well as networking opportunities, in terms of learning about school climate and culture. Other principals reported on how "parents feel free to come in[to the school]," "Staff really and truly cares about each and every student," and how they have "Great community support.," which highlights how these principals incorporate the views of stakeholders - parents, staff, and community - into their assessment of the school environment. Despite the overwhelming reports of positive school climate and culture, one principal hesitated before replying: "For the most part we work well together, trust each other, have each other's backs. There are a few naysayers; they don't play well with others. [It's] one of the hardest issues to

address and to do what’s right for kids.” Overall, principals felt confident that their school climate and culture were heading in a positive direction.

However, the evidence principals offered to support that school climate and culture as an asset varied, and in some cases, no supporting evidence was shared. This is important to highlight, as simply reporting that there is a positive climate or culture does not necessarily mean one exists. One coach commented on the different perceptions of school climate and culture, noting that one school seemed “friendly, it just wasn’t one of academic excellence or focused on high achievement.” Therefore, it is also important to note that the descriptions given earlier regarding school climate being “warm” or “friendly” do not capture whether or not PSP learning related to Casas’ principles were fully implemented.

Survey data from PSP principals yielded a similar finding, in that principals rated themselves the highest in the area of school climate and culture (see Table 13). During the survey, principals were asked to evaluate their practices on the PSP relevant content areas (Strongly Disagree, Disagree, Agree, Strongly Agree) coded from 1 to 4 respectively. The confidence intervals and means of their scaled

responses to school climate and culture, instructional leadership, and organizational management are displayed in Table 13 below. Sample questions from the school climate and culture section of the survey included the following: 1) Teachers have a clear understanding of the school’s mission, 2) We do a great job of promoting our mission, both internally and externally, 3) The principal believes that all students can learn, 4) Teachers get the support they need from the principal, 5) Everyone here puts students first, 6) We are providing a safe, healthy, and effective learning environment for our students, 7) Teachers are here because they want to be, 8) Teachers’ feedback is encouraged and valued, 9) We have a strong relationship with our community, and 10) Parent engagement is a priority here. (See Appendix A for a complete list of survey questions). Confidence interval analysis (Table 13) demonstrates that principals rated themselves as performing higher in achieving varying aspects of school climate and culture than they perceive themselves achieving in instructional leadership and organizational management. We know this because the confidence interval is highest for school climate and culture and does not overlap with either instructional leadership or organizational management.

Table 14: PSP Principals Summary (n = 32)

Variable	Mean	95% Confidence Interval	
School Climate and Culture	3.24	3.12	3.37
Instructional Leadership	2.58	2.45	2.72
Organizational Management	2.90	2.78	3.04

This theme holds true when grouping PSP principals by the state in which they work and lead. Further evaluation of principals' data was conducted to determine if there were

variances within groups. However, there were no statistically significant differences between subgroup populations.

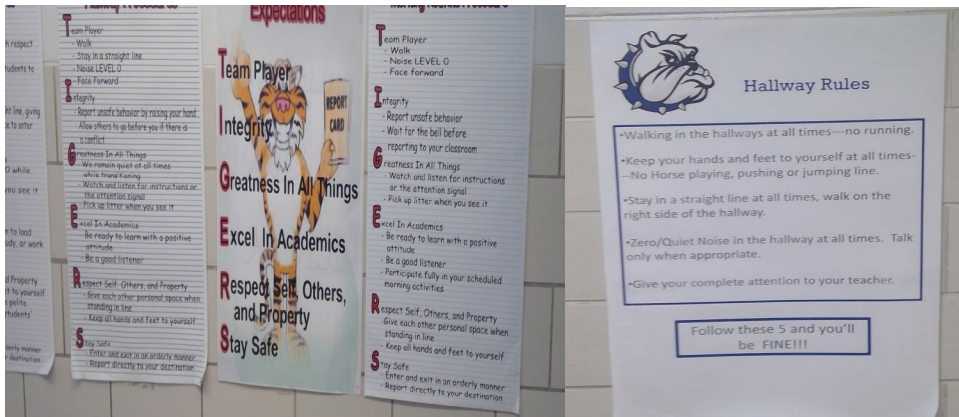
Table 15: PSP Principals Summary by State (n = 32)

Group	Observations	Mean	F-Score
School Climate and Culture			
Kentucky	19	3.27	0.82
Tennessee	11	3.15	
Virginia	2	3.46	
Instructional Leadership			
Kentucky	19	2.61	0.33
Tennessee	11	2.57	
Virginia	2	2.39	
Organizational Management			
Kentucky	19	2.97	0.74
Tennessee	11	2.81	
Virginia	2	2.91	

The strength in school climate and culture was also evident when we conducted school visits. Each school principal we visited knew the names of all students in their schools. One principal walked into classrooms and led cheers with the students as they shouted out

about the pride they had for their school. Moreover, hallway posters emphasized school environment expectations (see Figures 8 and 9). Figure 10 also revealed evidence of promoting a growth mindset.

Figures 8 and 9



Schools post their expectations in the hallways

Both of these photos, taken from two different sites (schools A and B), demonstrate the school leadership's vision for culture and student expectations at their respective schools.

Figure 10



A school displays what a growth mindset looks like

The growth mindset bulletin board is an example of instructional leadership at school A. Growth mindset is a component of how students engage with academic content and is necessary for a strong data-driven culture both for students and staff alike

Finding 2: Principals rely on varied informal measures to evaluate school climate and culture

Although PSP principals reported a positive school climate and culture as an asset, they all had different methods of providing

evidence of this. Data collection widely varied, from “it’s just a feeling” to conducting “multiple surveys a year, including staff and parents.”

Some principals relied on survey data to help them determine the current environment

in the school. One principal shared how he “surveys teachers, staff, parents, and stakeholders,” while another stated his school conducts “surveys with the teachers.” A third principal described how he conducts multiple surveys a year with both staff and parents, and another principal collects data on school climate and culture for an audit now required in Kentucky. Only one principal specifically mentioned collecting information from students, sharing how they “give middle and high school students a chance to do a course evaluation and use that as a tool for themselves.” In all of the examples of surveying, no principal described a particular survey instrument or how it was developed. Principals also did not discuss how regularly data were collected, nor how data were analyzed, and who took part in data analysis.

Other data that principals utilized to evaluate school climate and culture included student discipline and referral data, student attendance rates, social media postings (e.g. Facebook), visitor feedback, teacher observations, and Professional Learning Communities (PLCs). Two principals commented how their evidence was just a ‘feeling’, with one stating how “it was more the feeling that the teachers and the faculty, staff, all of them, how they came to work, how they communicated with another.” One principal summed the importance of sharing the story about your building environment: “Elgin, they talked about: you got to tell your story, nobody else is, or somebody else will.” One PSP district official reflected on a similar way of evaluating her principals’ school environment: “There is a feeling, and it is hard to describe.”

PSP coaches also described how they evaluated the climate and culture in their principals’ schools. One stated that “First, I listen to what the principal is saying about the

school, the staff, the community, the culture, so I get a feel for where he or she believes they are.” Many coaches, like principals, relied on the feeling they got when they entered the school to evaluate the environment. One coach noted “you know it when you walk into the building,” while another mimicked “you can really feel it when you go into a building.” A third coach stated, “When you get in [the building], it’s pretty obvious if the students and staff feel comfortable.” The idea of the *feeling* of the school building resonated with both principals and coaches. Similar to how principals described the ways they assess climate and culture, coaches also did not mention a formal process to do this: “You can walk into a school and within the first ten minutes you can pretty much pick up on culture and climate; whether you have a toxic environment or a happy place.” School climate and culture were perceived as an asset for PSP principals, and principals, coaches, and district officials offered varying degrees of evidence of this finding. Many relied on the feeling they had upon entering a building, while some incorporated surveys and other forms of data as well.

The theme that principals view school climate and culture as an unmeasured asset may also have been suggested in survey data. As demonstrated in Table 14, when examining the data on the school climate and culture and organizational management scales, there is no statistically significant difference in means between PSP principals and their school-based staff. However, it is worth noting that PSP principals rated themselves higher in every category. This may indicate that school climate and culture are only a perceived asset that principals are not measuring, given that there were differences in survey findings between the two groups. However, there was only a statistically significant difference in perception

of instructional leadership at a p-value of 0.02. The data show that the mean for principals' perception was higher than the mean of their school-based staff, implying that principals felt

they were doing more to support instructional leadership than is perceived by their staff.

Table 16: PSP Principals versus PSP School-based Staff

Group	Observations	Mean	Standard Error
School Climate and Culture			
Principals	32	3.24	0.06
School-based Staff	87	3.17	0.06
Instructional Leadership			
Principals	32	3.31*	0.07
School-based Staff	87	3.08	0.06
Organizational Management			
Principals	32	3.30	0.07
School-based Staff	87	3.25	0.06
<i>*The difference in the means is statistically significant at a p-value of 0.05 with the mean for the PSP participants being higher</i>			

Instructional Leadership

While interview and survey data suggested that school climate and culture was a perceived asset among principals, PSP stakeholders described a shift from principals as “building managers” to “instructional leaders.” Murphy (1988) defined instructional leadership as “the class of leadership functions that support classroom teaching and student learning.” Moreover, Andrew and Soder (1987) organized the practices of instructional leadership into four essential areas: resource provider, instructional resource, communicator, and visible presence in the

school. In addition, informal evaluation practices, such as drop-ins and walkthroughs, have also become a popular identifier of instructional leadership (Grissom, Loeb, & Master, 2013). Whitaker (2010) noted how drop-ins allow the principal to learn with students, observe and publicize good teaching, and model that he or she cares about learning. Studies also point to the importance of an instructional leader who leads collaboratively or collectively (Lambert, 2002; Murphy, 2016; Wieczorek & Manard, 2018), and this shared leadership has grown to

become a component of strong instructional leadership.

To conceptualize this for the PSP, training asked principals to consider their answers to three key questions regarding instruction at their school:

- 1) Is everyone working hard every day? (Instructional Expectations)
- 2) Is everyone teaching well and using effective strategies? (Coaching for Improvement)
- 3) Is everyone teaching to the appropriate grade level? (Rigor and standards)

Additionally, Elgin focused on utilizing data, such as benchmark data (e.g. MAP) or state standardized test data (e.g. KPREP), to help drive instruction in the school. The PSP taught strategies for utilizing data more effectively and efficiently. Lastly, there was an additional focus on principal visibility. Training on visibility practices included the type of observation and purpose (pop-in, walkthrough, and formal observation), providing feedback to improve instruction, and facilitating post-observation conferences.

Finding 3: PSP coaches describe a shift in principals from managers to instructional leaders

During interviews with PSP coaches (we interviewed five out of six of the PSP coaches), they described a shift from PSP principals as “managers” to “instructional leaders.” One coach described how one principal “shifted from looking at the principalship to managing to the instructional leadership part. He realized that he needed to be viewed as the instructional leader.” This coach clearly captured the pattern of change that occurred

in some principals in the program. Principals learned from the PSP about the importance of being an instructional leader and adopted a new set of strategies, practices, and mindsets around using data and being visible in classrooms. Data and visibility were the focus of instructional leadership during the PSP monthly training that coaches led.

As one coach noted, “for most of my schools, the principals are good managers.” Initially, principals were more aware that there needed to be a shift from simply being good managers. The PSP helped principals learn that they must become instructional leaders in their buildings as well. A coach noted that principals are “more focused on what is important to them and being instructional leaders” because of the PSP. Another coach described that this was the “biggest change that I see. [Principals] were becoming more tuned in to being the instructional leader, not just the manager.” This is significant, as one coach discussed, because it is a significant shift in principals’ mindset: “If that principal was a manager of the building, it is very easy to fall into the trap; it is very easy to be a manager.” The PSP helped refine how principals viewed their role while providing strategies to do so, including how to track and analyze student data and how to facilitate classroom observations.

Coaches described how although there has been a shift in mindset towards being an instructional leader, there is still work to do: “We’re not where we want to be but having a lot more conversations with principals about student learning, what good teaching looks like.” A second coach echoed by stating “I’m not going to say the culture was bad, everyone got along, but it wasn’t a culture of educational excellence or high expectations.” Becoming an instructional leader is a process, and the PSP is helping principals make

progress towards this. A district official comments on this shift they have seen in principals: “The most beneficial thing [because of the PSP] we have seen is the growth in our principals. Looking at where they were before to where they are today, they are dramatically different; they do different jobs.” The shift from manager to instructional leader is further explored in the following themes where principals learned to utilize data and be more visible.

Finding 3a: Principals are more aware of methods to examine and utilize data, but implementation varies

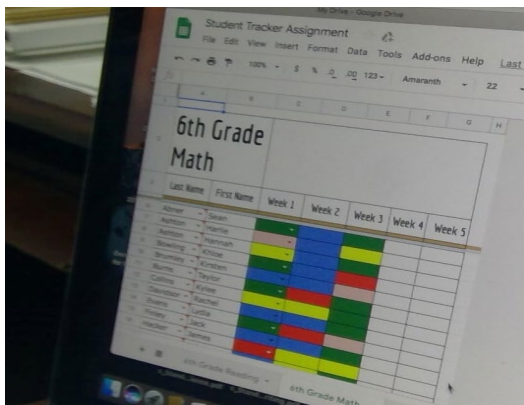
Principals articulated how their use of data had changed because of the PSP, with regard to what data were analyzed, how often data were analyzed, the tools used to analyze data, and even the questions they asked about their data. One principal noted, “Greg showed us a different way to look at it, and it is easier than the way I had mastered it.” Principals often referenced how the PSP, including the monthly meetings and individual coaching, made them more aware of how data usage

could be expanded. One principal shared how “I have always thought of myself as a data person, but there’s so much more. After Greg put something up, I don’t know squat about data; something very simple that I thought would be impossible.” Some principals did not know how limited their knowledge of data utilization actually was:

“We always looked at data. I was already looking at data and the teachers were, too. But one thing that changed was looking at student work: bringing in student work samples and looking at the rigor of the tasks; Elgin took it to the next level.”

Principals went from ‘surface-level’ use of data to utilizing data to help with student grouping, more focused conferences with teachers, teaching teachers to track data, and making data visual (see Figures 11 and 12). Principals were also provided tools and templates for reviewing MAP and state test data. By using data better, a principal commented how she does “not just collect it,” but uses it to “set better goals, shared goals,” as well as “teaching them [teachers] how to break it down into smaller or more measurable goals.”

Figure 11



A principal’s organization of data

This screenshot of a principal’s computer at school A demonstrates one practice around data-driven instruction. Not only was this school leader tracking student mastery of work as reported by teachers, but the leader was also examining work samples for each student on a weekly basis. While this can be a time intensive responsibility, taking ownership for this highlights internalization of a key component of PSP - instructional leadership focused on data.

Figure 12



A school setting data-based goals

This photograph of goals at school C demonstrates the principal's practice of focusing on student-based goals. The goals are centered on specific academic areas, including types of text, rigor, and student mastery. These goals also demonstrate some of the instructional leadership and organizational management strategies school leaders learned from the PSP.

A new principal shared how it was challenging to begin using data. He stated how "data was the hardest to take on as a first year of principal. Going from a school that didn't look at it was tough to overcome, and it's been a journey." However, even experienced principals found that they were learning to use data more effectively: "Just looking more in-depth I think when I took this job; this is my 6th year as an admin. The way that data has been used from principal to principal has been so different... deeper way of using it, tracking it, everything I told you is based on what I learned [from the PSP]." One principal explained his journey in utilizing data and the challenges that a principal has to overcome:

"We have started to have a look at data a lot more and differently than we have in the past in the previous principals. We, um, I try to take a lot of what we talk about in the Principal Support Program and bring it back to teachers. We didn't talk about it before. The teachers are starting to look at it. When we first talked about it, there are some people that got their feelings hurt because their scores were not what they liked, but it is not about their feelings; it is about the students, it is about if they want to do better they need to do better. I have not gotten to a point where I am fully comfortable with it, so they probably are not comfortable either."

PSP coaches also noted that principals incorporate data differently because of PSP. One coach stated how "some of mine [principals] are much better instructional leaders than they were before because they weren't even using the data." Another described how her principals have learned "how to become a data driven culture" in their schools. As one coach reflected, there has been a shift in reviewing data earlier instead of waiting to "get the state testing. That's an autopsy, they're already dead to find out what killed them." One district official noted:

"Dramatic changes were made 9 or 10 years ago with the Elgin Foundation that gave us more data. We focused on the data, test scores; we can talk about standards of learning scores, MAP scores, or stakeholder surveys. We use those to create those for our schools."

However, this official also commented how there has not been recent PSP programming for data that has been useful for their district. Another district official made the following comment:

"[My principals] have become data gurus. They all have data rooms where they work with their staff from benchmark data to map data to SLO data to absent data, and they look at that and track where they are, what students need, and where they need to go, and come up with a plan how to do it."

Finding 3b: Principals are more visible in classrooms, but processes to provide feedback vary

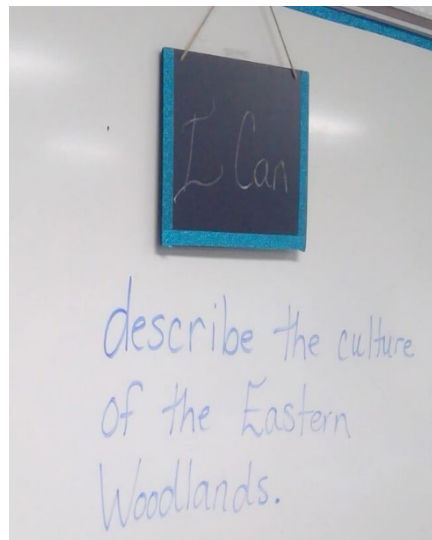
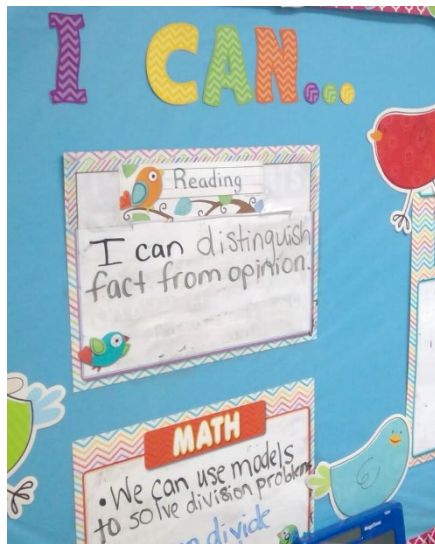
Principals noted the importance of being more visible in the school and in teachers' classrooms, claiming that "being as visible as possible is the main objective." This change in practice for one principal led to a change in teacher perception: "Teachers see me more as an instructional leader". Some principals commented on how their perception of what an instructional leader looks like has changed because of the PSP:

"I thought I was an instructional leader because I love data, but going into classrooms and seeing those drop-ins, when I meet with teachers I come in and drop in on their lunch

or planning and go down, visit whatever and have instructional conversations because I love grammar and reading...I thought I was an instructional leader."

Others credit the PSP in helping them recognize the research behind classroom observations. While one principal simply stated that "I visit my classrooms more," another described how "through the Elgin Foundation, they really highlighted and gave research behind going through regularly and not waiting half a year." Principals changed their daily practices because of the PSP, as one principal now "starts each day by visiting classrooms" to "see what [he] can do to help teachers grow."

Figure 13



Teachers post ICAN statements in the classroom

The photographs above at schools A and B demonstrate that there has been norming around teachers posting and discussing daily objectives with students. Objective-driven instruction, in student-friendly language, is also demonstrative of instructional leadership at schools.

While teacher observations are taking place more consistently, principals have different

approaches to provide teachers with feedback. One principal will "open up an

email” that “is started before the observation,” while another principal will wait until the observation to “write [feedback] down and tell the teacher later.”

A third principal captured the purpose of classroom observations as connected to school-wide goals: “We are talking with teachers, going back to the scoreboard, and then we establish this vision and culture of excellence and where we want to go compared to where we are. Then we make sure we are doing the things in the classroom.” Although all principals described how they conducted more observations because of the PSP, they engaged in various strategies to provide teachers with meaningful feedback.

As evidenced earlier, survey data suggested that PSP principals perceived instructional leadership to be their weakest area (see Table 15 above). In fact, there was a statistically significant difference between PSP principals and their school-based staff on

questions mutually answered about the efficacy of instructional leadership on schools (see Table 17 above). Survey items on instructional leadership include the following: 1) Teachers have a clear path to career growth, 2) The principal’s feedback is important for teacher development, 3) The principal uses data efficiently and effectively to guide their decisions, 4) Teachers have time to collaborate with their colleagues, and 5) The principal plays an active role in teachers’ development. *See Appendix A for a complete list of survey questions.*

However, when disaggregating the instructional leadership survey questions to look specifically at visibility and data practices, we observe that PSP principal means are higher (see Table 18). For the visibility variable, this refers to survey questions that pertain to principals being in the classroom. For the data variable, this refers specifically to survey questions that pertain to how data are utilized.

Table 17: PSP Principals’ Summary (n = 32)

Variable	Mean	95% Confidence Interval	
Instructional Leadership	2.58	2.45	2.72
Visibility	3.21	3.07	3.35
Data	3.49	3.32	3.66

The differences among instructional leadership, visibility, and data practices could be interpreted as findings that reinforce how PSP content covered specific instructional leadership practices (i.e. visibility and data).

We know this because the 95% confidence interval range is higher for visibility and data, and their ranges do not overlap with instructional leadership.

Finding 4: Principals discuss shared leadership mindsets and practices

PSP principals provided a variety of responses in terms of both their mindsets and practices regarding shared leadership. Some shared that they already had school teams in place prior to the PSP. For example, one principal described that she has a leadership team that develops the mission and vision of the school. Others noted that they have different types of teams for different purposes. One principal described multiple teams, including a leadership team (composed of teachers, an academic coach, and administrator) and a monetary team (composed of parents); the principal also noted that students were involved in leadership. Another principal mentioned three separate school teams, including a safety team, a site-based council (composed of elected teachers and parents for policies, protocols, and hiring), and a leadership team for instructional work in the classroom. Another principal described grade level teams where “teachers are more in control” than administration. One principal shared about a less formal team, stating “I don’t have a leadership team, but I do have a team that I go to that I trust because they know what is best for kids.” These descriptions provide evidence of the variation across school-based teams in terms of quantity, purpose, composition, and structure.

Other principals discussed the changes in their shared leadership mindsets and practices because of the PSP. For example, one principal shared that his thinking on leadership had changed with regards to his teachers, stating, “You have to trust them to do it. I always thought if you didn’t have your hands on it, it was not going to get done.” Others confirmed that the implementation of shared leadership practices was a result of the PSP, although

again there was variation in their descriptions. One principal simply reported that he had created a leadership team to improve school climate and culture, while another shared that creating teacher leaders was a result of the Principal Support Program.

Several coaches also confirmed that their principals had made changes with regards to shared leadership. Two coaches discussed principals who had created leadership teams, although again their description and purpose varied. One told a story about a principal who chose to include teachers in the hiring process while another told a story about a principal who created different teams so that “everybody had a place in leadership.” Another coach commented that the shared leadership change was in the principal’s mindset, as opposed to practice, noting they had seen a change in the principal’s “belief” of “working as a team.”

The variation in shared leadership practices may be a result of our study’s timing. During initial coach conversations and review of PSP agendas from year 1 and 2, shared leadership was not the focus. However, coaches noted that the focus for the third year of the PSP was John Hattie’s work on “collective efficacy,” or the “collective belief of teachers in their ability to positively affect students.” One coach discussed this focus with regards to student achievement, citing research that collective teacher efficacy was important due to its effect size on student achievement. Given that interviews took place during the third year of the PSP, this may explain why principals discussed shared leadership mindsets and practices, and why there was great variation in their answers .

Organizational Management

Despite the fact that PSP stakeholders described a shift from PSP principals as

managers to instructional leaders, principals also shared that they still struggled when it comes to management, particularly with regards to managing their time. Organizational management practices refer to the tasks associated with distributing and managing resources efficiently and effectively (Bryk et al., 2010; Cuban, 1988; Grissom & Loeb, 2011; Hallinger, 2005). In the business of schooling, these resources include information, money, facilities, personnel, and time (Cuban, 1988; Urick, 2016). With regard to time and personnel, recent literature has explored the intertwinement of organizational management and instructional leadership practices. First, visibility practices (in which principals visit classrooms to monitor and give feedback on instruction) impacts where and how principals spend their time. Second, other studies have noted the relationship between these practices with regards to a principal's ability to recruit, retain, and train effective educators (Beteille, Kalogrides, & Loeb, 2009).

During the first two years of training, Elgin emphasized practices on how to manage personnel and time for instructional purposes. In regards to personnel practices, PSP content covered hiring practices (hiring for disposition, effective hiring, and the legalities of hiring) as well as structures for grouping teachers to manage feedback. Another focus was scheduling practices, including scheduling strategies to meet the needs of all students (such as the implementation of Response to Intervention [RTI]), ways to start and end the year strong, and creating timely goals for school improvement plans.

However, there was a particular PSP emphasis on principals managing *their* time throughout the school day. During training, PSP coaches highlighted "principal time" as a valuable resource and that there was a need to maximize it. Training included time

management strategies, opportunities for principals to share after implementing time management strategies, and supplemental time management strategies offered optionally at the end of one training. One strategy asked principals to think about the essential features of a great school, how these features fit into their daily routine, and then to re-evaluate their day. This practice, in which principals consider how they spend their time and what they view as important, was commonly referred to as "the Big Rocks and Little Pebbles." Ultimately, principals were encouraged to create a daily schedule to make sure that they are spending time on their "Big Rocks" and as opposed to "Little Pebbles."

Finding 5: Principals still struggle to manage their time

While some PSP principals mentioned they have changed the way that they manage their time (in terms of creating a daily schedule, prioritizing the "Big Rocks," and increasing their visibility in classrooms), many still find it challenging to manage their day. In fact, when asked how they manage their time, the most common word that principals used was *struggle*. Coaches too, confirmed this struggle, noting that when it comes to management practices, "a lot of principals feel overwhelmed." PSP principals discussed the varied tasks that monopolize their time (e.g. student concerns, parent conversations, transportation issues, phone calls, meetings, etc.), but the most common thread was that PSP principals are spending time "being visible" in hallways and classrooms. Several principals mentioned that PSP had changed how they spend their time in terms of visibility or by spending time on what is considered important, both of which were encouraged during PSP training. For example, one principal noted that PSP helped her "get her

administrative role defined.” Another principal expounded on the impact of defining her administrative role, stating that she lists her “three big rocks” that are most important, and when people come to talk to her about things unrelated to her rocks (like a basketball concern), she refocuses and ends the conversation.

These findings provide additional support for the earlier noted finding -- a shift from principals as “managers” to “instructional leaders,” but there was also evidence that suggested that an unintended consequence of the shift was the principals’ struggle to manage their time. A district official provided additional insight into how this shift would impact a principal’s time stating “it’s not just managing a building, it’s managing a staff that goes into student learning.” Therefore, some principals were experiencing a shift that required them to think about a way to balance old managerial tasks with new, additional instructional tasks. A coach commented on the need for balance noting, “unfortunately, there are a lot of things that they [principals] have to do that don’t have an impact on student achievement and student learning.” Another coach expressed a similar observation, in that principals can get “bogged down with the day-to-day management.” These comments highlight that while principals may have shifted their practices to be “instructional leaders,” it did not mean that they were no longer responsible for managerial related tasks.

Consequently, PSP principals were still responsible for managing their building but also now completing instructional leadership related tasks--despite the fact that they still have the same number of hours in their day. One principal specifically reported that in terms of providing feedback to teachers that

“it goes back to time management...I have to get better at that [feedback] when I have 50 things to do...” Another principal shared her struggle to fit all tasks into her day confessing, “You are there from 5:00 in the morning to 8:00 at night and you still have things to do... it’s hard.” This struggle may be a by-product of her context, because she is the only full-time administrator in her building. For this principal, her assistant principal also has another role half-time. PSP coaches confirmed this phenomenon, revealing that it was not uncommon for PSP principals to be the only administrators in their building.

Principals also emphasized the difference between how they *planned* to spend their time versus how they *actually* spend their time due to issues that arise throughout the day. One principal mentioned that even if he has a plan, “it can go out the window.” PSP coaches echoed this battle, stating that it is important for principals to “not get caught up in putting out fires all day.” Another principal described this struggle in that she has the “feeling of being pulled in every direction.” The continued struggle for principals to manage their time is noteworthy, given evidence of the symbiotic relationship between organizational management and instructional leadership practices. One PSP coach referenced the relationship, arguing “you really have to manage your time well to be an instructional leader.” Another coach made the same argument, stating “sometimes the management and instructional leadership piece melt together...you can’t be a good instructional leader if you can’t manage.” Given this relationship between instructional leadership and organizational management practices, principals’ struggles to manage their time could impact their transition from manager to instructional leader.

Question #2: How do the results from PSP principals compare to non-PSP principals in similarly situated schools?

For question two, we sought to understand the impact of the PSP by comparing data from PSP and non-PSP stakeholders in similar contexts. As discussed in the methods section, the non-PSP schools are similar because the demographics of the

schools receiving other services from Elgin are similar to those who are participating in the PSP. We discovered a pattern of mixed-messages about impact when we analyzed survey and interview data across these two comparative school groups. This pattern may be explained by themes emerging from implementation and awareness of school leadership practices (see Table 19).

Table 18: Overview of Themes

Comparative Analysis	<p>6) <i>An impact paradox explained by</i></p> <ul style="list-style-type: none"> a. <i>The implementation gap</i> b. <i>The push-back gap</i> c. <i>The awareness gap</i>
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Finding 6: An impact paradox

Notably, the survey data demonstrate that principal perceptions of school climate and culture, instructional leadership, and organizational management are higher amongst those who *did not* participate in PSP in comparison to those who did (See Table 23 below). This pattern held true even when

examining groups of questions related to the instructional practices where principals, district officials, and coaches had described changes (see question 1, finding 3 regarding changes in PSP principals’ visibility and data practices).

Table 19: Perceptions of PSP Principals versus Non-PSP Principals

	Mean for PSP Principals (n=32)	Mean for Non-PSP Principals (n=33)	T-Value
Main Categories			
School Climate and Culture	3.24	3.50*	2.95
Instructional Leadership	2.60	2.76*	2.18
Organizational Management	2.90	3.10*	2.43
Sub-Categories			

Practices	3.31	3.50*	2.33
Mindsets	2.76	3.00*	3.23
Visibility	3.22	3.40*	2.00
Data	3.49	3.70*	1.84
<i>*The difference in the means is statistically significant at a p-value of 0.05 with the mean for non-PSP principals being higher</i>			

When comparing data from school-based staff from both PSP and non-PSP schools, the same theme emerged. The means for non-PSP school-based staff were higher than the

means for PSP school-based staff, but the only difference that has statistical significance is instructional leadership (See Table 24).

Table 20: PSP School-based Staff versus Non-PSP School-based Staff

	Mean for PSP School-based Staff (n=87)	Mean for Non-PSP School-based Staff (n=32)	T-Value
Main Categories			
School Climate and Culture	3.17	3.29	1.12
Instructional Leadership	3.08	3.29*	1.72
Organizational Management	3.25	3.39	1.34
Sub-Categories			
Practices	3.19	3.33	1.30
Mindsets	3.15	3.30	1.28
Instructional Visibility	3.30	3.44	1.27
Data	3.38	3.52	1.30
<i>*The difference in the means is statistically significant at a p-value of 0.05 with the mean for non-PSP school-based staff being higher</i>			

Survey differences between PSP and non-PSP stakeholders may reflect true differences among the groups, or may be a result of our

sampling methods (see Limitations). However, these differences may also be explained by themes that emerged during interviews.

The implementation gap. In leadership, there is a difference between knowing *what* the best practices are and *how* to implement them in your context. During interviews, we asked PSP stakeholders about challenges PSP principals face to implement the learning that occurs during training; implementation presented itself as a challenge. One coach commented explicitly on this gap, sharing that what PSP principals find challenging is the “how.” He shared, PSP principals “get a sense of what needs to happen... the idea will sometimes get lost because they don’t have a plan for implementation. ‘I can’t do it right now but I will do it next year’.” Another coach made a similar comment, sharing:

“You go and you get this new learning and then you go back and you are all enthused and motivated, and you think I am going to try it and you walk into your environment and... and life takes over. [It’s] very easy to slip back into what you have done before.”

Some PSP principals confirmed this experience. As we noted earlier, PSP principals struggle to manage their time (see question 1, finding 4). When asked about the challenges in implementing PSP learning, multiple principals identified time as an issue. One principal reported that the hardest thing is to pick or prioritize which practice you want to implement. Coaches also commented on how context, in which some principals are the only leader in their buildings, can exacerbate the implementation gap. She shared:

“When you are all alone, and working in a leadership silo, you don’t have a side partner... you don’t have anyone to talk to... or about your ideas to change something... you don’t have that support to do that.”

Thus, while district officials and coaches provided evidence of change and learning due to the PSP, PSP school-based staff may not be

able to validate it because the learning has yet to be implemented. Or, in the words of one coach, “goals without a plan are a wish.” However, it is also worth noting that when we attempted to disaggregate survey data to distinguish between the “what” and the “how” of the PSP, we again did not see a favorable difference towards the PSP principal group. We grouped survey questions that spoke to principals mindsets (i.e. their values and beliefs) and their practices (i.e. actions) and still observed that non-PSP principals and their school-based staff yielded higher averages (see Table 20 and Table 21).

The push-back gap. While some stakeholders noted that implementation itself presented the biggest challenge to implementing PSP learning, the majority of PSP principals cited “buy-in” from staff as a challenge. When describing this challenge, PSP principals used words such as “hesitation,” “reserve,” and “push-back” to describe some of their staff’s reaction to implementing learning from the PSP. When presenting PSP learning to their staff, one principal shared how he confronts the staff who want to do things “the old way,” while another shared a story about excitingly bringing back PSP learning and hearing “crickets” from her staff. Principals explained their staff’s reaction in terms of time (“not everyone wants extra stuff on their plate”), as well as just a general reaction to change (“teachers feel you are throwing something new at them”). A district official, when asked what they perceive to be the biggest challenge PSP principals face during implementation, reported a similar sentiment, stating, “nobody likes change” and also cited buy-in as a challenge to implementation. Another district official suggested, “if you want to implement what you see, you gotta pick your superstars” as a strategy for implementation.

These findings suggest that even if PSP principals have implemented practices, school-based staff may be resistant to acknowledging the changes positively. These findings, coupled with the fact that principals struggle with the “how,” could also indicate that principals may struggle specifically with implementing learning, or that their staff found their implementation ineffective or inefficient. This frequently cited “push-back” against change could also be another caveat to why PSP principals are not fully implementing learning. Another district official explained how a push-back gap could impact the implementation gap. He noted, “it’s implementation and being afraid or not, to make a change.” Thus, staff distaste for change may also prevent or caution principals from implementing their learning. In summary, the fact that staff buy-in was the most often cited challenge to implementation by principals may help explain the differences observed between PSP and non-PSP school-based staff survey data.

The awareness gap. Overall, the survey findings for PSP and non-PSP stakeholders create a paradox when coupled with interview findings. In particular, district officials, who work with PSP and non-PSP principals, cited differences between the two groups; specifically, there are favorable differences towards PSP principals (see question 3, finding 1). As noted in our Limitations section, we do not have data from non-PSP stakeholders or PSP school-based staff surrounding their views of what good school leadership looks like. Consequently, we are limited in our interpretation of these survey differences. One district official, who noted a difference between the PSP and non-PSP principals he worked with, commented on this circumstance, stating “you don’t know what you don’t know.” This akin to a phenomenon

described by Kruger and Dunning (1999): “People tend to hold overly favorable views of their abilities in many social and intellectual domains...this overestimation occurs, in part, because people who are unskilled in these domains suffer a dual burden: Not only do these people reach erroneous conclusions and make unfortunate choices, but their incompetence robs them of the metacognitive ability to realize it” (p. 1121). Therefore, while there may be true differences between these groups, interview data caution the interpretation of our survey findings in that non-PSP principals and their staff may be unaware of the different strategies and improvements that could be made in their school’s climate and culture, instructional leadership, and organizational management.

Question 3: What components of the PSP are beneficial for principal development?

Similar to how we framed our findings for question one, we oriented our understanding of the PSP’s benefit by the four components of the PSP: professional development, networking, coaching, and learning plans. We begin by reviewing what we know about principal development from the extant research literature and a review of the components of the PSP. We then report the findings that emerged regarding the PSP components (see Table 22). *For a complete review of the literature, see Appendix F.*

Professional development. Previous principal development literature highlights various types of principal development, although the purpose of the support varies. Wahlstorm and York-Barr (2011) argued that the two key ingredients for principal development were “structure” and “nurture.” Authors found that leaders in high-performing districts had access to support in which

expectations are clearly communicated, learning experiences provided align with expectations, monitoring systems evaluated principal's follow-through, and additional support was provided based on specific principals' needs. Another study, which examined principal-pipeline initiatives in urban school districts, also noted the importance of "structure" (in that support was aligned to leadership standards) as well as "nurture" (in that aspiring principals received on-the-job training) (Gates, Baird, Master, & Chávez-Herrerías, 2019).

PSP principals attend professional development during monthly and yearly training. During yearly training, *all* PSP principals convene and hear programming updates, listen to guest speakers, and discuss content with other principals from across the region. Yearly training takes place twice a year in various locations in the Elgin region for 1 to 2 days. During half-day or full-day monthly training, principals are led by their coach and meet in separate cohorts based on their state. PSP coaches collaborate to plan the monthly meetings together (they practice what they preach by identifying their "Big Rocks" at the start of each year), and content for the training is consistent across states (with the exception of information regarding state assessments). When asked how content for training was chosen, one coach commented that they consider principals' expressed needs with research practices, while another coach confirmed that they are led by one coach who oversees all academic programming.

During monthly training, principals hear from guest speakers, engage in book studies, listen to presentations led by PSP coaches, and also have the opportunity to listen to presentations from each other on implementation of best practices in their schools. Time is also allocated for principals to

reflect on their learning, discuss content with other principals, and make plans to implement learning from PSP in their school. Analysis of the agendas revealed that content for monthly training can include multiple topics and that overtime, some of these topics are revisited more than others. Differentiation sometimes occurs at the end of training, in which principals are given the option to stay longer for training on an additional topic.

Networking. The research literature suggests that the rural principal role can be particularly isolating. In response, Elgin created a program intentionally designed to promote connection and collaboration in a cohort model (Wieczorek & Manard, 2018). The cohort model would allow an opportunity for principals to learn through each other, or what Smylie et al. (2020) described as "learning vicariously through others." As noted earlier, principals have opportunities to discuss and share best practices during monthly meetings -- both informally in small groups and formally when a PSP principal gives a presentation on best practices. Principals also shared that PSP networking has led to productive conversations about best practices and visits to each others' schools to witness the best practices in action.

Coaching. Niece argued that to be an instructional leader, a principal must function within a network of other principals and also have a mentor (1983). Smylie, Murphy, and Louis (2020) offered a similar sentiment, noting the importance of school leaders learning vicariously through others. Authors argued that the network was important for principals to create a caring school culture and climate.

PSP principals receive a visit from their coach at their school once per month. Coaches noted that every coaching session looks different to meet the specific needs of the

principal. However, we found a high degree of variation across these coaching sessions. Some coaches mentioned that data are examined during sessions, but other coaches listed more specific activities that occurred during sessions, such as reviewing the principal’s learning plan or discussing learning from a former training. Some coaches also said that they spend sessions simply talking to principals. However, all coaches mentioned that classroom or school walk-throughs occurred during coaching sessions.

Learning Plans. While literature explores various types of principal development, studies also indicate different goals and corresponding assessment measures. For example, some principal development is promoted to improve student achievement and others are promoted for principal self-care (Wahlstrom & York-Barr, 2011; Smylie, Murphy, & Louis, 2020). Research notes the difference between having knowledge of effective principal practices (“the what”) and carrying out these practices (“the how”), or

what is known as the “implementation gap” (Wahlstrom & York-Barr, 2011). Recent scholarship also notes that development requires “strengthening leaders’ understanding of who they are and who they want to be” (Goleman, Boyatzis, & McKee, 2013; Smylie et al., 2020). Thus, measuring principal development includes considering what is important for development, including mindsets and practices, as well as if what is learned is implemented in context.

PSP coaches work with principals to develop learning plans for the year. These learning plans are centered on two goals that principals identify for the coming school year. Coaches also use the learning plan at the end of the year to complete a rubric to score principals based on state test scores (proficiency and growth), completion of and engagement in the PSP (with regard to professional development, coaching, and completing a learning plan), and whether district officials have seen growth.

Table 21: Overview of Question 3 Themes

Principal development	<i>7) The PSP fulfills a regional leadership development need</i>
	<i>8) Positive impact is shaped by mindset, not years of experience</i> <i>a. A willing mindset</i> <i>b. Years of experience and change</i>
	<i>9) Learning with and through others is perceived as most useful versus siloed, unstructured supports</i> <i>a. Coach</i> <i>b. Network</i> <i>c. Opportunities to improve structure</i>

Finding 7: The PSP fulfills a regional leadership development need

PSP principals, district officials, and coaches noted the need for this type of programming for principal development within their region. None of the principals or coaches mentioned other supports for current principal development, even after prompting. Some recalled programming for aspiring principals, but noted that these programs were not designed for principals already in the role. Principals and coaches confirmed that there were district level meetings for principals, but explained that leadership development was not the focus. One coach described the focus of these meetings as “compliance” and “reporting,” as opposed to leader development. Another coach described these meetings as a time when principals are told to “do this, do that, do this, do that,” which was similar to a principal who said district meetings were focused on telling principals what to do as opposed to how to do it. The consensus from principals, coaches, and most district officials was that if PSP did not exist, these supports would not exist. One principal commented on the lack of support prior to PSP, reflecting on her first year as a principal:

“When I was hired to be a principal, they handed me the keys and then nobody told me what to do... they just said “you are the principal,” and I sat here in my office that summer and thought about what I had to do. I think most of what I learned--how to be a principal and what a principal does--through the Principal Support Program.”

One district official shared that this was a historical reality, and that in this leader’s 15 years as a principal, there was never a program like the PSP. Another district official noted that these PSP supports, while aligned with district goals, are supports that their district cannot

afford. When considering the regional impact of PSP, one principal concluded: “Elgin has helped change our district.”

District officials confirmed that PSP had led to changes in principal leadership, and in some instances, in *district* leadership. When asked about the changes that PSP principals had made because of PSP, district officials consistently mentioned practices related to data and visibility. One district official commented on the growth of their PSP principals, stating that “they are dramatically different” because they now “do different jobs.” Specifically, this district official echoed the earlier finding that principals have shifted from being “building managers” to “academic leaders.” Other district officials framed the PSP impact when comparing the PSP principals to the non-PSP principals they served. When asked if there was a difference between the two, one remarked: “there’s a definite difference” while another responded vaguely--but confidently-- “1000% yes.” The district official expounded on this vague difference with a story about a teacher who shared she had “the best pre-conference ever” with a PSP principal. The district official asserted that this experience demonstrated the extended reach of the PSP impact, explaining: “When teachers buy-in, or see an impact, it is not just hearing from principals but also hearing from teachers...our goal is to not only see this [impact] with principals but teachers as well.” Another district official, who cited Elgin’s impact based on how his PSP principals changed their data practices as well as the impact of prior reading assistance supports, claimed: “Our kids are reading now because of Elgin.” While these findings confirmed the need for rural support geared toward meeting the instructional leadership needs of rural principals, one coach provided rationale for the program in simpler terms: “No principal

should be alone.” Thus overall, the PSP met a variety of regional needs when measured by helpfulness for principals or impact based on practices.

Finding 8: Positive impact is shaped by mindset, not years of experience

A willing mindset. When commenting on the helpfulness of the PSP, both district officials and coaches highlighted the importance of a principal’s willingness to engage in development and implement new practices. One district official argued that PSP principals were open-minded to learning because they are willing to participate in the PSP. The same district official compared principals who volunteered to be part of the PSP to one who was “resistant” to change and did not choose to engage in PSP programming:

“We had one principal that chose not to participate, and he is a veteran and nearing retirement and he did not participate. He

seems to be very negative about things, about change, per se, where the other principals have embraced it.”

This indicated that there may be mindset differences between principals who volunteered to be part of the PSP versus those who had been told by their district that they were required to participate. Our survey data set includes six principals out of 32 who did not volunteer to participate in the PSP. When examining the difference in means between principals who volunteered compared to those who did not, there is a statistically significant difference in means for the organizational management scale as shown in Table 21 below. This demonstrates that while organizational management did not have the lowest overall means, principals who were required to participate in the PSP had the lowest perception of their efficacy within that scale.

Table 22: PSP Principals Volunteering for the Program (n = 32)

Group	Observations	Mean	Standard Error
School Climate and Culture			
Volunteer Principals	26	3.25	0.07
Non-Volunteer Principals	6	3.21	0.13
Instructional Leadership			
Volunteer Principals	26	2.61	0.06
Non-Volunteer Principals	6	2.46	0.22
Organizational Management			
Volunteer Principals	26	2.96*	0.06
Non-Volunteer Principals	6	2.69	0.16

**The difference in the means is statistically significant at a p-value of 0.05 with the mean for PSP principals who volunteered being higher*

This difference between volunteer and non-volunteer principals may be important, given additional findings about the importance of mindsets. While PSP coaches did not make distinctions between principals who had *volunteered* to be part of the program and those who were *required* to participate, they made similar arguments about the need to be open-minded to learn new practices. One coach mentioned that principals need to be “bought in or invested” while another coach, when reflecting on the changes she had observed with her principals commented, “there’s a real sense of growth for those that are willing to grow.” One principal confirmed the differences in willingness to learn among her cohort, sharing: It is difficult when you have the nay-sayers. You can be an awesome-izer or an awful-izer in school culture, and I would say that to the other principals.

While confirming differences in principals’ willingness to engage, this principal also highlighted that an unwilling mindset could negatively impact her experience during training, which is important to note given how valuable the cohort and network experience is to PSP principals (see finding 3). While multiple coaches expressed that they had witnessed growth among all principals they worked with, others argued that for the PSP to be beneficial, principals not only need a willing mindset but also a desire to follow-through. One coach commented, “some people are really focused and highly motivated and do it. Some people need a little oversight and encouragement.” This suggested that a willing mindset was not just important for learning new practices, but actually implementing them. These findings suggest that a willingness to learn impacted the decision to start the program, engage during the program, and implement strategies after the program.

Experience level and change. Interviews with all stakeholders suggested that with regard to the perceived usefulness of the PSP, principal experience level was not a determining factor. Principals with various levels of experiences commented that the PSP was beneficial, particularly with regards to the network created by the cohort model and the coach (see finding 3). To demonstrate opportunity for growth at all levels of principal experience, a newer principal described that during training he “was soaking up everything like a sponge,” while a veteran principal commented, “I thought I was good before, but [the PSP] upped it to the next level.” One district official noted that she was hesitant about whether the PSP would be beneficial, especially because training was a far drive away for her principals. However, she shared that her novice principals and veteran principals were “equally excited” to engage in PSP programming. PSP coaches also shared that experience level played less of a role than mindset when reflecting on how beneficial the PSP was for principals. However, coaches did share that newer principals had more managerial type questions and concerns.

While overall experience level did not determine whether or not the PSP was beneficial, an interesting finding emerged with regard to experience level and a willing mindset to change. Specifically, the change from building manager to instructional leader was referenced. One district official commented:

“I think the biggest thing with anything with professional development that they had to understand... that their role is a lot different than it was 20 years ago... they are not just the manager but the academic leader.”

This resistance to this change was noted by two other district officials, one who shared that some principals' mindsets are "well I have always done it this way" so "they're maybe not as open." Another put it simply, framing the willingness to change not based on prior experience, but based on age, stating: "The older you get, it's harder to change." A novice principal, who we mentioned earlier, described principals' mindsets as "awesomizers" or "awful-izers" during PSP training, and also witnessed that principals "who were the most experienced" were the ones who were "least receptive."

Despite the fact that coaches communicated that there was always room for improvement, they, too, suggested that there was a resistance among veteran principals to change. One coach, when describing her work with veteran principals, noted that it was "refreshing when you have a principal that is willing to up their level." The use of the word "refreshing" suggests that it was uncommon for a veteran principal to want to improve their practices. This was reflected in another statement she made, in that some principals she works with are "more set in their ways." Another coach provided a similar sentiment in regards to veteran principals' willingness to change, specifically with regards to the shift from manager to instructional leader. He reported that a couple of the principals he works with are "still content with being the manager, but they are older principals." However, one coach provided an outlier to this phenomenon, telling a story about a veteran principal who responded the opposite to change. She commented, "I had one principal that had some 40 years of experience, and he looked so forward to our visits...he was so open to new ideas." This coach's story suggests that overall, years of experience do not determine whether or not the PSP is

beneficial. For some veteran principals, their experience level appears to impact how they perceive the usefulness of the PSP.

Finding 9: Learning with and through others is perceived as most useful versus siloed, unstructured supports

The PSP Coach. Among the components of the PSP (professional development, networking, coaching, and learning plans), principals reported that opportunities to learn with and through others were most useful. A majority of PSP principals and district officials commented that coaching sessions were the most beneficial. Coaches provided insight to this perception, stating that the coaching session allows for individualized support, and that it helps with the implementation of practices learned during professional development. Other coaches felt sessions were beneficial because their role was as a *supporter as opposed to a supervisor*. One district official described the role of the coach similarly, stating that coach support was seen as "non-threatening." When commenting on the helpfulness of the coach, the district official described the role in terms of both support and impact, stating: "principals are feeling the most supported and getting the most out of it." Consequently, the coaching component was viewed as both supportive and effective.

PSP coaches and district officials also provided an additional rationale for the perceived usefulness of coaching, confirming again and again that the role and reality of a rural principalship is isolating. One PSP coach remarked, "Rural principals are so lonely... even if they don't know it." Multiple coaches echoed this sentiment, stating that rural principals feel "isolated" or "lonely," especially when considering again that it is not uncommon for principals to be the only administrator in their building. One coach

reported that fewer than half of her principals have a full-time assistant principal, while another stated that 1 in 12 of her principals had a full-time assistant. Another PSP coach predicted that PSP principals find the coach to be a beneficial support because of the isolation, sharing “I don’t have data to back it up. Just a general feeling that, at least for the principals that I work with, they seem to enjoy having someone outside their district to just talk to.” Other district officials commented on the size of their community with regards to the helpfulness of the coach. Two district officials told stories about a principal being well liked in his community and the PSP assisting with having difficult conversations with teachers to consider what is best for kids. A coach commented on the pressure small communities create, noting: “I just think in small areas if anything happens that is out of the norm, it is automatically in the paper, and on the TV, and social media, so you really have to be proactive... not stir up the negative comments.” Thus, the coach may also be particularly beneficial as a buffer in this social context due to the small size of these rural communities.

The PSP Network. Second only to coaching, other principals and district officials reported that they perceived the PSP cohort to be the most beneficial. One district official described the usefulness of the cohort model, stating, “it was really amazing in the short amount of time to see principals have contact and a network.” A principal shared that she appreciated her expanded network because of yearly training, as she now had the ability to reach outside the county and within for support.

PSP principals, coaches, and district officials commented on the helpfulness of this support in terms of providing an opportunity to share ideas or problem-solve. A district

official noted the difference between a physical network versus social media networks. This difference was evident in a story told by a PSP principal in which they were able to visit another PSP school to see the structures and systems behind a scheduling system. The principal referenced a positive change in her school’s test scores and then gave all credit to the principal she had visited. As opposed to simply learning about a best practice, networking during PSP training provided principals with a time and space to discuss practices and witness the practice in real time in a real context.

Opportunities to improve structure. While none of the PSP stakeholders described a component as *unhelpful*, a few stakeholders provided conflicting and sometimes critical feedback regarding the pace of training. For example, one individual commented that the program moved too quickly, or tried to cover too much content in too little time. He worried that this could lead to principals feeling overwhelmed and would impact implementation because principals would not have a complete understanding of the concept before attempting to put the idea into practice. One principal had lived through this concern, noting that it impacted implementation because this leader worried about introducing a practice to teachers without fully understanding it. In contrast, another individual noted that they felt like PSP training was too repetitive, or that information was not beneficial because it had already been covered. He continued that the flow of information was unstructured. Again, while almost every stakeholder we talked to argued that the PSP was beneficial, feedback regarding the pace of training -- that it was sometimes too fast and sometimes too slow -- suggested that areas of improvement could

provide additional structure or opportunities for differentiation.

Conclusion

Findings suggest that PSP principals perceive that school climate and culture are an asset in their buildings, though principals have varying ways to measure them. Coaches and district officials describe a change in principals from building managers to instructional leaders, specifically in regards to their data, visibility, and shared leadership practices. While principals have thought differently about how best to spend their time and have shifted their time to instructional tasks, they still struggle to manage their time. Given the

changes in PSP practices evidenced from question one findings, survey data created a conflicting message about the PSP's impact in that non-PSP stakeholders perceive themselves higher in all content areas. Interview data suggest that this may be due to a gap between PSP learning and implementation, hesitation from school-based staff to change, or gap in awareness from non-PSP stakeholders about new practices. Lastly, our findings indicate that there is a perceived regional need for the PSP for principals of all experience levels, particularly for networking and coaching. We also note that a willing mindset may be important for PSP impact.

Discussion

School Climate and Culture

As noted in the literature, school climate and culture are critical to the development of an effective school (Donaldson, 2006). Our interview and survey data provide evidence that school climate and culture are perceived as an asset across the schools in Kentucky, Tennessee, and Virginia. Principals, both PSP and non-PSP, perceive their schools to have positive school climate and culture, and based on the quantitative analysis, their school-based staff agree with them. A positive school climate, one in which students and staff know each other well and the staff expresses care for students' well-being, intellectual growth, and educational success, is a key element in the learning process for adolescents (Quint, 2006). Moreover, a positive school culture could be a central catalyst in fostering student engagement (Bryk et al., 2010). This is particularly true for students from working class and lower socioeconomic status families (Felner et al., 2007; Rumberger, 2011), which reflects the population served by Elgin.

Bryk et al. (2010) established how the effects of a school with a "caring environment on achievement are best understood in relation to academic challenge—high expectations, rigorous pedagogy, intellectual demand, and accountability. It is the mutually reinforcing combination of...*pastoral care* and support with *academic press* that makes the greatest positive difference" (as cited in Smylie, Murphy, & Louis, 2020, p. 12). It is evident that a school's climate and culture greatly impact student achievement and engagement, and principals directly contribute to the trajectory of the school's environment. PSP principals still have space to grow in establishing their climate and culture. As two PSP coaches noted, although many

school environments were friendly and positive, there was not an emphasis on high academic expectations.

Further, we discussed that positive school climate and culture cannot exist without deep relationships that demonstrate principals and teachers care about the students (Smylie, Murphy, & Louis, 2020). Principals shared in interviews that school climate and culture was an asset, which was also supported by survey data analysis as well as in-person site visits. Given the *rural context* of these schools and need for varying leadership styles (Weathers, 2011; Wahlstrom et al., 2010; Wieczorek & Manard, 2018), building school pride is a component that is necessary, as there is not an environment of significant choice in where students go to school. Sipple and Brent noted the strengths that rural schools typically have in building relationships (2015). Hence, it is important to emphasize that our findings indicate that regardless of state, county, or school, school climate and culture were reported and perceived as strong by the stakeholders in our report.

From interviews with principals, district officials, and coaches, it became clear that there was not a standard protocol for principals to follow in order to evaluate school climate and culture. Some relied on *informal measures*, such as how they felt when they entered the building, while others employed surveys to collect data from stakeholders. In addition, regardless of their method, principals, district officials, and coaches *did not articulate* who all was involved in evaluating their school's climate and culture (e.g. the principal alone, the principal and teacher leaders, etc.). Furthermore, none of the interview participants mentioned that they were following a set of standards to

ensure the quality of their school climate and culture. All PSP principals were aware of the importance of school climate and culture and believed their schools were doing well on this indicator, but there was no plan on how they could continually assess the environment and make informed decisions on how to improve their efforts at the building-level.

As Drago-Severson's (2012) discussed, in order to improve school climate, principals focused on demonstrating respect for their teachers, involved them in decision making, and invited them to shape their school's mission. Additionally, Drago-Stevenson found that collaborative, teacher leadership was influential to a school's environment. PSP principals discussed their beliefs and utilization of shared leadership practices, such as site-based councils and teacher leaders, and principals believed that shared leadership was important when making school-wide decisions. The practice of shared leadership is not only beneficial for school climate and culture, but it also plays a role in the principal's instructional leadership skills. Additionally, As Sahin (2011) described, a school's environment is perceived positively when the principal demonstrates strong instructional leadership skills, which connects the importance of instructional leadership to school climate and culture.

Instructional Leadership

As demonstrated in the literature, the definition of an instructional leader varies and has been constantly evolving; however, the importance of instructional leadership has not changed (Andrew & Soder, 1987). Another study found that novice *rural principals cited instructional leadership as the most challenging aspect of their work*, specifically with regards to practices related to evaluating instruction, promoting change, improving teachers' instruction, implementation of

research-based practices, and meeting students' needs (Alvy & Coladarci, 1985). Therefore, the focus on instructional leadership in the PSP is the correct one; principals reported in our project that they were more aware of the importance of examining and utilizing data, as well as increasing their visibility in classrooms and providing teachers with feedback. Despite these changes in principals' mindsets and practices, we still see the lowest scores in instructional leadership for PSP principals and school-based staff. There was also a statistically significant difference between PSP principals and non-PSP principals on the visibility of instructional leadership practices on schools, with higher perceptions for non-PSP principals. Although we would expect to see the opposite correlation as a result of the learning of the PSP, we can reflect on the reasoning for this outcome. PSP principals may have rated their performance lower on instructional leadership because of their participation in the PSP in part due to awareness and implementation gaps (Wahlstrom & York-Barr, 2011) . PSP principals may now be more aware of what quality instructional leadership should look like but have yet to fully implement new practices. Therefore, after learning the complexities of instructional leadership from the PSP, they rated themselves lower.

Furthermore, principals are now creating and sharing instructional and data goals with staff. We would hope to see less variance in perceptions of instructional leadership between PSP principals and their school-based staff because principals are sharing a unified vision. This could be why there is not a statistically significant difference between PSP principals and their school-based staff on the instructional leadership scale. Based on the school visits conducted in-person, we saw

strong evidence of using data to drive instruction, including data rooms and online tracking systems that align goals to current student performance. Some principals began establishing these methods to systematically collect data because of the PSP. Further, we saw expectations set clearly for students during site visits, as well as objectives clearly displayed in classrooms with aligned lessons and strong implementation of the Reading Mastery program. All of these are indicators of strong instructional leadership (Ginsberg & Murphy, 2002; Protheroe, 2009).

As Elgin has the ultimate goal of increasing student performance outcomes, it is important to note how Grissom, Loeb, and Master (2013) found that simply spending time on instructional tasks did not predict student achievement growth. However, instructional practices of coaching, evaluation, and educational programming did predict positive achievement gains. Authors discovered that time spent on informal walkthroughs negatively predicted student growth and discussed that this may be because the walkthrough process was not part of a broader improvement strategy. Therefore, authors highlighted the importance of the type and quality of instructional leadership activities as opposed to just time spent on them.

Lastly, Horng and Loeb (2010) called for a new understanding of instructional leadership that not only focused on visibility practices (e.g. observations), but also included vital organizational management practices, such as staffing their schools with high quality teachers and supplying resources. Authors stated that while instructional leadership is critical for school improvement, growth in student and school-wide outcomes come more from organizational management for instructional improvement, such as staffing

and resources, as opposed to focusing too narrowly on principal observations or coaching.

Organizational Management

As noted earlier, organizational management practices refer to a category of tasks associated with how principals manage resources—including information, money, facilities, personnel, and time (Cuban, 1988; Urlick, 2016). With regards to these resources, the PSP focused on practices related to how to manage personnel and time (specifically in terms of school-wide schedules and how principals manage *their* time daily). PSP principals were asked to consider how they spent their time and work to better structure their time to focus on their “Big Rocks,” or what was viewed as important. Consequently, while principals shared that they spend their time on a variety of tasks, coaches and principals both stated that PSP principals have shifted how and where they spend their time by being more present in classrooms. This shift not only demonstrates that PSP principals spend their time differently when compared to their past, but also when compared to another study’s results of how principals spend their time (Horng, Klasik, & Loeb, 2010). Coaches commented on this transition specifically with regards to veteran principals, who they noted were often more comfortable and content spending time on what they have always done: management. Horng et al. (2010) also found that principals whom they studied spent most of their time on administrative and organizational management tasks, not in classrooms. These findings suggest that the PSP has shifted how principals spend their time when compared to their previous practices and when compared to how principals have historically focused their time.

However, previous studies have cautioned principals shifting their focus and

time on instructional tasks (Grissom & Lobb, 2011; Horng et al., 2010). After using observational data to examine how principals manage and spend their time, Horng et al. (2010) also found a positive relationship between time spent on organizational management activities and school outcomes (including student achievement measures, assessments of school culture measures according to school-based staff, and assessments of school climate measures according to parents). In contrast, the authors did not find a relationship between time spent on instructional activities and student performance and that there was a negative relationship with teacher and parent assessments (Horng et al., 2010). Horng et al. (2010) concluded that these findings did not suggest that instructional leadership practices were not important, but that organizational management is a critical component of school leadership and related to instructional leadership.

Another study reached a similar conclusion when they found that out of all skill-based categories for principalship, "Organization Management Skills" was the only one that predicted positive student achievement (Grissom & Loeb, 2011). This finding is particularly relevant, considering that PSP principals cited that they struggle to manage their time due to the quantity of tasks they are required to complete, the unexpected tasks that arise during the day that thwart their plans, and the fact that some principals do not have another full-time administrator for support. The struggle for novice rural principals to manage is one that is well cited and was confirmed by PSP coaches, who noted that novice PSP principals tend to have more managerial type questions (Wieczorek & Manard, 2018). However, when it came to managing their time, the struggle was

consistent for principals across experience levels.

The continued struggle for principals to manage their time, coupled with evidence that PSP principals have shifted from "managers" to "instructional leaders," is noteworthy given the symbiotic relationship between organizational management and instructional leadership practices (Grissom & Loeb, 2011; Horng et al., 2010; Sebastian, Allensworth, Wiedermann, Hochbein, & Cunningham, 2019). In fact, Sebastian et al. (2019) found that when principals rated themselves on each category, they found that zero principals viewed themselves as strong in one category and weak in another. It is interesting to note how PSP principals rated themselves, with statistical significance, as performing highest in school climate and culture, second in organizational management, and third in instructional leadership, which can be viewed in the confidence interval analysis (see Table 15). PSP coaches commented on this relationship and acknowledged that effective instructional leadership practices were contingent on a principal's ability to manage their time. Thus, principals' struggle to manage their time could impact their transition from manager to instructional leader. Additionally, spending more time in the classroom (or increasing visibility) does not automatically yield a positive impact; visibility practices must be high quality and connected to a larger and collective school vision on instruction (Ginsberg & Murphy, 2002; Grissom, Loeb, & Master 2013, Protheroe, 2009). Lastly, as we noted earlier, spending time on management practices has been correlated with positive outcomes, including those that extend to school climate measures. Thus, a possible unintended consequence of PSP principals shifting their time on organizational management practices to

instructional leadership practices may be a negative impact on school culture and climate.

Principal Development

Our interview data confirm the previous notion that rural principals feel isolated; there is a need for school leader development in rural settings (Wieczorek & Manard, 2018). The fact that PSP coaches described a shift of PSP principals as “managers” to “instructional leaders” suggests that, alike with previous studies, rural principals may struggle without support in instructional leadership areas (Alvy & Coldarci, 1985; Wieczorek & Manard, 2018).

While recent literature on rural school leadership has cited the needs of novice principals, our findings suggest that access to leadership development may be beneficial for all principals at different levels of learning (Alvy & Coladarci, 1985; Cowie & Crawford, 2008; Nelson et al., 2008; Wieczorek & Manard, 2018). Specifically, we found that years of experience appeared to matter less when evaluating the perceived usefulness of principal development programming, while a *willingness to learn* appeared more important. This is critical because principals and coaches described how the PSP was their only source for principal development in their area, aside from professional development for aspiring principals. Therefore, while Wieczorek and Manard (2018) advocated for a context-driven preparation program for novice rural principals that would address managerial and instructional leadership needs, our findings suggest that there is a need for this type of support for rural principals of all experience levels.

While research on rural school context has identified a need for principal preparation, most literature on the impact of principal development is focused on principals in urban

settings. Extant literature on principal development advocates for different types (professional development, mentors, on-the-job training, etc.) for various outcomes. Some studies have advocated for support that allows principals to learn with and through others (Ashton & Duncan, 2012; Niece, 1983; Smylie et al., 2020). Niece (1983) argued that access to a principal network and mentor was important to embody the role of an instructional leader while Smylie et al. (2020) argued that learning through others was important for school culture and climate and principal self-care.

Interview data suggest that PSP components that allowed principals to learn through others (networking and coaching) were perceived as the most beneficial. This finding is consistent with findings from Ashton and Duncan (2012), who proposed a contextually relevant toolkit for novice rural principals and identified finding a supportive mentor as one of the eight leadership practices key to rural principal success. The fact that PSP principals identified the network and coach as the most beneficial components of the program may also be evidence of the importance of “support” in principal development, which was one of the key ingredients that Wahlstrom and York-Barr (2011) identified for high engagement in principal development. Interestingly, interview data also highlighted that training, specifically that it was too fast or too slow, may be an indication that the other ingredient the authors identified, “structure,” could be improved when it comes to PSP training (Wahlstrom & York-Barr, 2011).

When assessing the impact of a principal development program it is important to note that there is a difference between a program being “helpful” and “effective.” When considering measures for the effectiveness of

the PSP, Elgin used a rubric that examined the completion and engagement of the PSP data, principal growth data, and student achievement data. However, principal development has been also promoted for school climate and culture as well as supporting principals' self-care (Smylie et al., 2020). It is also important to note the difference between having knowledge of effective principal practices and carrying out these practices effectively, which Wahlstrom & York-Barr (2011). This difference has been referred to as "the implementation gap," or what Ibarra describes as the difference between "knowing what to do" and "actually doing it" (Wahlstrom & York-Barr, 2011;

Ibarra, 2015, p. 13). Survey and interview data on PSP impact presented a paradox; in that principals, district officials, and coaches reported positive changes in PSP principals yet survey data found differences between the two groups in favor of non-PSP principals. When considering this difference with data from school-based staff, it is possible that although PSP principals have acquired knowledge through the PSP, they are still in the process of learning how to implement this knowledge. This is further indicated by interview data, in which PSP principals cited staff buy-in as the number one challenge to implementation of PSP learning.

Conclusion

Our evaluation explored the early impact of Elgin's Principal Support Program. Specifically, our capstone team investigated how the PSP impacted the mindsets and practices of principals in the areas of school climate and culture, instructional leadership, and organizational management. To accomplish this, we gathered data from PSP principals, district officials, and coaches through interviews, as well as survey data from both PSP and non-PSP principals and their school-based staff. Data analysis revealed several themes. First, principals perceive school climate and culture as an asset in their schools, and their school-based staff agreed. However, principals did not identify standardized processes to evaluate their school climate and culture. Second, PSP coaches described a shift from principals as *managers* to principals as *instructional leaders*. As instructional leaders, principals were more aware of methods to examine and utilize data, but their implementation of using data varied. Principals were also more visible in classrooms -- to observe teachers -- but their processes to provide feedback varied. Principals also highlighted changes in their mindsets and practices regarding shared leadership in their schools; however, principals still struggled to implement time management practices, something that coaches also noted. Lastly, coaches found that the impact of the PSP was influenced by

principals' mindset, not their years of experience.

These findings must be further contextualized with quantitative analysis. Non-PSP principals rated themselves higher than PSP principals in all three areas of school climate and culture, instructional leadership, and organizational management. This could be the result of PSP principals being more aware of what work they need to do to achieve higher qualities of school climate and culture, instructional leadership, and organizational management; subsequently, PSP principals rated themselves lower than non-PSP principals who are unaware. There also could be push-back from PSP school-based staff who are hesitant about new, additional initiatives in their schools. Lastly, PSP principals may not have the skills to fully implement learning.

Ultimately, the capstone team found the PSP fulfilled a need of leadership development for rural principals. These principals are often isolated and have severely limited access to professional development and networking that occur on a far more frequent, systematic basis in larger school districts. The PSP offers support through professional development, mentoring, networking, and learning plans, and additional structural supports would help sustain continuous improvement of the PSP while allowing for easier progress monitoring of program outcomes.

Recommendations

1) Create a differentiated curriculum for principals centered on principal learning objectives aligned to standards of practice.

The PSP is inclusive of all principals regardless of background, and many principals have chosen to return for their third year. As the program continues to grow, it will be important to ensure that principals have the opportunity to learn new content, skills, or strategies at every training to assist their growth. Currently, all principals receive the same content regardless of how many years they have been in the program. Because the program is still evolving, there is an opportunity to develop specific learning objectives for principals. These objectives would outline what the PSP hopes every principal will accomplish by being part of the program. Therefore, our recommendation is that Elgin create learning objectives for each standard of practice. For the purposes of this evaluation, the first three standards of practice are school climate and culture, instructional leadership, and organizational management.

The National Policy Board for Educational Administration has developed Professional Standards for Educational Leaders (NPBEA, 2015). NPBEA is supported by many national organizations that support principals, including the Council for the Accreditation of Educator Preparation (CAEP), the National

Association of Elementary School Principals (NAESP), and the National Association of Secondary School Principals (NASSP). NPBEA's standards outline major objectives for principals to learn that could be adopted or incorporated in the PSP as benchmarks of proficiency. Furthermore, to provide differentiated learning for principals, particularly for those who are in their third year of the program, Elgin should focus on creating a curriculum for their more proficient practitioners, such as selecting standards to teach that are geared towards more advanced principals accompanied by specific training, book studies, guest speakers, etc.

To help facilitate this differentiated learning, Elgin could also benefit from establishing an online database of their material that principals could access from home. This could be a Google account where Elgin houses documents from their training sessions, monthly meetings, videotaped sessions from speakers, and other resources. It may also be helpful to create online modules of previous sessions for principals entering their first year in the PSP to help them catch up with the material that was previously taught.

2) Establish program structures to increase accountability.

Based on our project analyses, we believe the creation and use of tracking systems as a part of the PSP will allow for further formative evaluation. First, given the transitional nature of leadership roles, it is important to keep a strong count of all of the individuals who have participated in the program and the content

they have received as the program continues to grow.

Second, in order to measure progress and implementation of learning, there could be a beginning of year and end of year survey for all participants (Appendix C). This would create the ability to measure individual growth on

mindsets and practices, a system that does not currently exist. Further, given that the PSP is currently designed as a continuing program, these surveys could allow for assessments demonstrating when principals have mastered specific content, allowing them to opt out of particular sessions in the future. In order to

3) Support school-based leadership teams with PSP programming.

Given that PSP principals cited struggles with time management coupled with the fact that an instructional leader embodies a mindset of shared leadership, we recommend extending leadership development to school-based staff members who comprise the school's leadership teams. This includes professional development for educators to build leadership skills as well as professional development specifically focused on building effective school-based teams.

Given that some rural principals find themselves isolated in the administrator role, as they do not have an instructional coach or assistant principal, providing teachers with skills and training to share leadership may reduce feelings of isolation and address time management constraints. However, it is not uncommon for teachers to be assigned leadership roles and be unprepared for them. Therefore, before assigning educators' roles, it is important to provide educators with tools to be effective leaders within a shared leadership framework.

4) Standardize the process of how school climate and culture are evaluated.

As noted in the discussion section, PSP principals and coaches believed their schools exhibited positive school climate and culture, and their school-based staff agreed. To support continuous improvement, our second recommendation is to implement a tool to help routinely evaluate school climate and culture in a standardized method, as well as identify a school-based team to help analyze

support this recommendation, we created a template for a tracker as well as a Google survey that can be edited to reflect the lessons that are taught (Appendix D).

In addition to supporting teachers to develop leadership skill sets, we also see long-term training during the summer as an opportunity to build effective leadership teams. The Teaching Trust (see Appendix E) uses this method by focusing on development with teams of assistant principals, instructional coaches, and district officials. This model may be adjusted to creating professional development on building effective leadership teams that includes educators for principals without these administrative supports. The text, *The Power of Teaching Teams*, also provides a framework and practical methods for developing effective teaching teams centered on five criteria: leadership, task focus, collaborative climate, structure and process, and personal accountability. Additional frameworks also exist surrounding developing effective instructional teacher leadership teams (Austin, Anderson-Davis, Graham, & White, 2018; Stricker, 2019).

the data collected and make recommendations for the school. The National School Climate Center offers a tool to evaluate school climate called the *Comprehensive School Climate Inventory (CSCI)* based on a set of standards. The CSCI is a "nationally-recognized school climate survey that provides an in-depth profile of your school community's particular strengths, as well as areas for

improvement” (NSCC, 2020). The National School Climate Center details how schools can efficiently assess student, parent/guardian, and school personnel perceptions to collect the data needed for decision-making. The CSCI assesses thirteen dimensions of a healthy school climate in five broad categories: Safety, Teaching and Learning, Interpersonal Relationships, Social Media, Institutional Environment, as well as two distinct dimensions for school-based staff only (NSCC, 2020). Other potential tools include the following:

- ED School Climate Surveys (EDSCLS, 2019):
<https://safesupportivelearning.ed.gov/edscls/administration>
- School Climate Measure (Zullig et al., 2015):
<https://www.ncbi.nlm.nih.gov/pubmed/25642931>
- Authoritative School Climate Survey (Cornell, 2014)
<https://curry.virginia.edu/authoritativ>

5) Develop a shared protocol for providing instructional feedback designed in collaboration with teachers.

While qualitative evidence demonstrates that PSP principals are more visible in the classrooms, we see an opportunity for principals to push instructional leadership capacity by developing a shared school-wide feedback protocol. Multiple studies that we reviewed highlighted the importance of creating a collaborative culture surrounding instruction. Specifically, Grissom et al. (2011) noted that the quality of instructional activities was more important than time spent on them while Ginsberg and Murphy described the importance of gaining a shared understanding on the purpose of walkthroughs.

[e-school-climatesurvey-and-school-climate-bullying-survey](#)

In addition to selecting a measurement tool to assess climate and culture, the National Association of School Psychologists outlines a process of collecting and analyzing the data: 1) identify your team, 2) identify the intended goal of data collection, 3) select valid and reliable measurement(s) needed to address your goal, 4) comprehensive surveys provide an assessment of school climate across several domains, 5) brief school climate measures provide an overall snapshot of climate and can provide useful data with multiple administrations over time, 6) identify how to use school climate data alongside other indicators of school success, Include multiple groups, 7) create a schedule for data collection, and 8) create a plan to analyze and use the data, and 9) create a plan for sharing data (NASP, 2019). These steps, further outlined in NASP’s document, will help principals systematically collect and analyze data in a collaborative, shared leadership approach.

Therefore, we recommend providing principals with a process for establishing a collaborative culture focused on instruction by developing a shared informal feedback protocol. While many resources exist to establish a protocol for informal feedback, the first step requires school leaders to establish enabling conditions for success, including conversations about the current status of instruction and the purpose of informal feedback. Schools can then work together to create a protocol based on the specific needs of the school or adopt an already created protocol:

- The New Teacher Project (TNTP)
<https://tntp.org/teacher-talent-toolbox/view/observation-and-feedback>
- Victoria State Government
https://www.education.vic.gov.au/Documents/school/teachers/teachingresources/practice/Peer_observation_feedback_and_reflection_guide_for_principals_school.pdf

The Elgin Children's Foundation's Principal Support Program fulfills a need of leadership development for rural principals in Kentucky, Tennessee, and Virginia, as these principals often have severely limited access to professional development and networking. The recommendations from the capstone team would provide additional structural support to help sustain continuous improvement of the PSP while allowing for easier progress monitoring of program outcomes.

Appendices

Appendix A: Quantitative Survey Items

The following questions were asked of all survey respondents on a scale of 1 to 4 from Strongly Disagree, Disagree, Agree, Strongly Agree. A Cronbach's Alpha scale was then created for each of the categories below:

School Climate and Culture

- Teachers have a clear understanding of the school's vision
- Teachers have a clear understanding of my school's mission
- Our vision inspires teachers to do their best
- Our mission inspires teachers to do their best
- We do a great job of promoting our vision, both internally and externally
- We do a great job of promoting our mission, both internally and externally
- We are all working towards the same goal
- The principal believes that all students can learn.
- Teachers get the support they need from the principal
- Teachers are adequately prepared to make decisions on the fly
- The principal encourages risk-taking and innovation
- The principal is proactive in problem solving
- Everyone here puts students first
- We are providing a safe, healthy, and effective learning environment for our students
- We are doing a great job of providing a "whole child" education
- Our students have access to the basic resources they need in our classrooms
- Instructional strategy is a collaborative endeavor here
- Teachers have a clear understanding of how their performance is measured
- Teachers are here because they want to be
- Teachers have a clear understanding of the ways they can serve as an advocate and champion for our school
- Teachers' feedback is encouraged and valued
- We have a strong relationship with our community
- Parent engagement is a priority here

- Our school does a great job promoting our successes
- Transparency is a core value of our school

Instructional Leadership

- Teachers have a clear path to career growth
- The principal's feedback is important for teacher development
- The principal uses data efficiently and effectively to guide their decisions. - Data
- Teachers have time to collaborate with their colleagues
- The principal plays an active role in teachers' development

Organization Management

- The principal ensures that teachers work according to the school's educational goals.
- The principal observes instruction in classrooms.
- The principal uses student performance results to develop the school's educational goals.
- The principal guides teachers using reflective questioning to improve their teaching.
- The principal monitors students' work.
- When a teacher has problems in his/her classroom, the principal takes initiative to discuss matters.
- The principal informs teachers about possibilities for updating their knowledge and skills.
- The principal checks to see whether classroom activities are in keeping with our educational goals.
- The principal takes standardized testing results into account in decisions regarding curriculum development.
- The principal ensures that there is clarity concerning the responsibility for coordinating the curriculum.

The following questions were asked of all survey respondents who indicated they were the school principal with responses on a scale of 1 to 4 from Strongly Disagree to Strongly Agree. A Cronbach's Alpha scale was created for all principal questions within each bucket:

School Climate and Culture (Principal Only)

- An important part of my job is to present new ideas to the parents in a convincing way.
- An important part of my job is to create an orderly atmosphere in the school.
- I define goals to be accomplished by the staff of this school

Instructional Leadership (Principal Only)

- An important part of my job is to ensure instructional approaches are explained to new teachers, and that more experienced teachers are using these approaches.
- A main part of my job is to ensure that the teaching skills of the staff are always improving.
- A valuable use of my time is giving feedback on lesson planning.
- Using test scores of students to evaluate a teacher's performance devalues the teacher's professional judgment.

Organizational Management (Principal Only)

- Giving teachers too much freedom to choose their own instructional techniques can lead to poor teaching.
- An important part of my job is to ensure that teachers are held accountable for the attainment of the school's goals.
- It is important for the school that I see to it that everyone sticks to the rules.
- In this school, we work on goals and/or a school development plan.
- An important part of my job is to resolve problems in a timely manner
- I have no way of knowing whether teachers are performing well in their teaching duties.
- I stimulate a task-oriented atmosphere in this school.

The following demographic questions were asked of all survey respondents.

- Is the principal in your building part of the Elgin Foundation's Principal Support Program?
- Are you Hispanic or Latino/a?
- What is your preferred gender identity?
- Please indicate your race: (Check all that apply)
- Including this year, how many years have you served in your current professional role? Include years at different school sites.
- Including this year, how many years have you been an education professional? Include years at different school sites.
- In which state is your school located?
- Which of the following best describes the community in which this school is located?
On average, what is the percentage of free and reduced lunch students at your school?
- Is this your first year working in your current building?

Appendix B: Qualitative Interview Protocols

Interview Protocols

Sample Introduction

My name is _____, and I am a Vanderbilt graduate student. We are very grateful that you are taking the time to talk with us today so we can learn from you about your experiences with the Principal Support Program. We also wanted to let you know that we guarantee anonymity. We would like to record our conversation today to make sure we capture all of our learning. Would that be okay?

We have planned this interview to last no longer than one hour. If at any time you feel uncomfortable and wish not to answer or to end the interview, you have the right to not respond or end the interview. Before we begin, do you have any questions?

PSP Principal Protocol

Ice Breaker

- How long have you been a principal at this school?
- How many years have you been a principal?
- How did you get involved with the PSP?
- How long have you been involved with the PSP?

School Climate and Culture

- Can you describe your school's mission?
- What are your goals for the 2019-2020 school year?
- How would you describe your school's culture or climate?
- What evidence do you look for to evaluate your school's culture or climate?
- Can you describe how decision making occurs at your school and who is involved?
- Can you describe some specific changes you made to improve school climate based on your experience in the PSP?
- Can you describe a particular PSP learning experience and how it impacted your school's culture or climate?
- From what we have learned about the PSP, there is a lot of learning focused on articulating "your why." Can you talk more about this practice?
- Would you be willing to share "your why" for your school leadership?

Organizational Management

- Can you describe how you manage your time from day to day?
- Can you discuss your process and some of the decisions you make when your Master Schedule? (i.e. determine teacher teams, teacher assignments, allocating time for learning)
- Thinking about scheduling and time management, are there any specific practices you changed because of the PSP?
- When thinking about how you start and end the school year, are there any specific practices you changed because of the PSP?
- Do you have non-negotiables for the school year? If so, what are they?
- [if applicable] How were your non-negotiables determined? Were any of these non-negotiables specifically from your participation in the PSP?
- How beneficial are the non-negotiables in your daily work?

Instructional Leadership

- What are some ways that you use data during your daily work?
- Thinking about the ways you use data, have any of these practices changed based on learning from the PSP?
- How do you provide teachers with feedback? (e.g. reflective questioning)
- What are specific ways you are working to improve student achievement?
- Can you describe an example or a situation in which you feel the PSP programming prepared you to serve as an instructional leader? (e.g. “leading from the classroom”)

Process

- What was the most helpful thing you learned during the PSP?
- What components of the PSP did you find most helpful? Cohort model? Coaching? Long term training?
- What training or knowledge do you wish you had gained during the PSP?
- How realistic was your program preparation program to you in becoming an effective principal?
- What challenges do you face when implementing your learning from the PSP?
- Is there anything else that you wish I would have asked about the PSP that you want to share with me?

PSP Coach Protocol

Ice Breaker

- What work did you engage in before becoming part of the Principal Support Program?
- How did you become involved in the Elgin Principal Support Program?

School Climate and Culture

- Over the course of the past two years, what learning did principals engage in regarding improving school climate and culture?
- As a coach, what do you look for when gauging school climate and culture?
- When considering school culture and climate, what changes have you observed in participating principals over the course of the past two years?
- Can you give an example of a specific positive change a principal made to improve school climate or culture?

Organizational Management

- What are some specific management practices that were discussed during the first two years of the program?
- What evidence do you gather when assessing principals' management practices?
- Can you give an example of when you observed a specific change in a principal's management practice?

Instructional Leadership

- We know the early focus of the PSP was improving a principal's instructional leadership. What specific practices were discussed during the first two years of the program to improve this?
- Can you share some specific feedback or observation practices that were discussed during the long-term trainings?
- When considering principal's use of data, what were some of the learning takeaways that you hoped principals would develop during training?
- What instructional practices did you share in regards to improving student achievement?

Process

- What typically occurs during a coaching session?
- What is the coach's role in the design of long-term training?

- What are some challenges that you observe principals face when working to implement learning from the PSP?
- Are there any other changes in principal practices that you have observed and you would like to share?

District Official Protocol

Ice Breaker

- What is your current position?
- Can you describe your involvement with the Principal Support Program (PSP)?

School Climate and Culture

- When you enter a school, can you describe some of the evidence you look for when assessing a school's climate or culture?
- Thinking about principals you work with who participate in PSP, can you describe some changes that you observed in their school's climate or culture? Can you provide any specific examples of these changes?
- Considering the changes you observed, what principal practices do you think are most aligned or the reason for these changes?
- Do the principals who you work with have a school vision? How does their school vision impact their school climate or culture?

Organizational Management

- Can you describe some principal practices that you think are important when it comes to organizational management?
- In what ways do the principals you work with establish non-negotiables?
- Since beginning PSP, what changes have you observed in the way PSP principals manage?
- Could you talk about a specific example or situation in which a change in a principal's management practice had a positive effect on the school?

Instructional Leadership

- What practices do you look for in a principal who embodies the title of an instructional leader?
- In what ways do you observe principals using data in their daily work?

- Can you describe specific efforts you have observed to close the achievement gap?
- Can you describe other specific changes you have seen in principal practices that speak to their instructional leadership?

Process

- What challenges do principals face when attempting to implement some of the practices they have learned at PSP?
- Are there specific practices that you would like the PSP to focus on to better support principals?
- What aspects of the program do you perceive to be the most beneficial to principals in the PSP?
- What differences do you notice between principals who participate in PSP and principals who do not?
- Can you tell me about district initiatives in regards to principal leadership?
- Are district initiatives aligned with the PSP?
- What professional development is offered to leaders in your district?
- Is there anything else that you would like to add that I did not ask about your experience with the PSP?

Appendix C: Sample Survey for Beginning and End of Year

Link to Access: <https://forms.gle/ff2mL7ypwc9Zvwd6>

Elgin PSP Survey Template

<You can use this template to gather beginning and end of year data from principals so you can determine growth in mindsets>

School Culture and Climate

<You can change these titles and questions below based on the topics that you are planning on covering that year>

Please indicate the level of which you agree or disagree with the following:

	Strongly Disagree	Disagree	Agree	Strongly Agree
Teachers have a clear understanding of my school's mission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Our mission inspires teachers to do their best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We do a great job of promoting our mission, both internally and externally	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We are all working towards the same goal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that all students can learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Instructional Leadership

Please indicate the level of which you agree or disagree with the following:

	Strongly Disagree	Disagree	Agree	Strongly Agree
I show teachers that they have a clear path to career growth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My feedback is important for teacher development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use data efficiently and effectively to guide my decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ensure teachers have time to collaborate with their colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I play an active role in teachers' development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Organizational Management

Please indicate the level of which you agree or disagree with the following:

	Strongly Disagree	Disagree	Agree	Strongly Agree
I ensure that teachers work according to the school's educational goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I observe instruction in classrooms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use student performance results to develop the school's educational goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I guide teachers using for reflective questioning to improve their teaching	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics

How long have you been in the PSP program?

- 0 - just started
- 1 full year
- 2 years
- 3 years

What is your preferred gender identity?

- Female
- Male
- Prefer not to say
- Non-binary/third-gender

Are you Hispanic or Latino/a?

- Yes
- No
- Prefer not to say

Appendix D: Participant Tracker

Link to Access: <https://drive.google.com/open?id=1pELjJEe0wyX1iYLoirZpZLuGehQuPzBS>

Guidelines for Use:

- 1) Use the data sheet to enter all participant data for each cohort.
- 2) Add a line item for each participant and include the year in which they participated.
- 3) Only include principals that attended for the entire year.
- 4) Refresh data on each pivot table in the summary chart to add new year information.

Note: You can also track performance data for each principal by placing their scores on established rubrics in an additional column. I provided the header for you all if you would like to use this. You could then create summary tables based on performance, state and district for each year and look at year over year principal growth.

Number of Principals Served By State Each Year in the Program					Principals in the Program for 3 Years		Principals in the Program for 2 Years		Principals in the Program for 1 Year	
State	Year	18-19	19-20	Total	Row Labels	3 Years	Row Labels	2 Years	Row Labels	1 Year
Number of Principals Served By State Each Year in the Program					Principals in the Program for 3 Years		Principals in the Program for 2 Years		Principals in the Program for 1 Year	
State	Year	18-19	19-20	Total	Row Labels	3 Years	Row Labels	2 Years	Row Labels	1 Year
17-18					- KY		- KY		- KY	
KY	20	30	34	84	Anthony Pennigton	3	Barbara Masters	2	Bobby Gibbs	1
TN	22	21	43	Barbara Warren	3	Brian Carey	2	Brian Crawford	1	
VA	11	11	4	26	Bobbi Collett	3	Catrina McDermott	2	Jonathon Defevers	1
Total	31	63	59	153	Brian Fredrick	3	Heather Gay	2	Justin Daniels	1
					Dwight Harris	3	Jennifer Wilder	2	Lisa Redmon	1
					Eric Hubbard	3	Jocelyn White	2	Marc Taylor	1
					James Gray	3	Merlene Lewis	2	Mark Collett	1
					Jason Jordan	3	Novel Bond	2	Melania Philpot	1
					Jennifer Blankenship	3	Shannon Sizemore	2	- TN	
					Jerry Combs	3	Sylvia Havicus	2	Allison Poston	1
					Keith Broughton	3	Tim Truett	2	Amy Jeffers	1
					Kendra Hooker	3	- TN		Joey St. John	1
					Michael Stubblefield	3	Bob Walden	2	Keith Shannon	1
					Nadine Couch	3	Donna Goodman	2	Kim Turber	1
					Steve Partin	3	Gretchen Thomas	2	Kristi Poore	1
					Terry Wilson	3	Jason Dotson	2	Lisa Carter	1
					Thomas Hyden	3	Kenneth Chadwell	2	Lisa Jessie	1
					Will Lefevers	3	Krissy Cobb	2	Lori Adkins	1
					- VA		Lisa Hamilton	2	Melissa Brock	1
					Joan Hart	3	Nancy Lay	2	Melissa Edwards	1
					Kim Hess	3	Scott Cash	2	Missy Fugate	1
					Ruth Tester	3	Steven Sampieri	2	Sandi Wilson	1
					Number of Principals	21	Tonja Crabtree	2	Sasan Vaden	1
							- VA		Sharon Stanley	1
							Buffie Crabtree	2	Sharon Tolliver	1
							Chaney Ashby	2	Stacy Smith	1
							Karen Brown	2	Suzanne Anders	1
							Kevin Yates	2	Tom Chadwell	1
							Melanie Lashinsky	2	Travis Bailey	1
							Susan Maupin	2	Vicki Reams	1
							Suzanne Grindstaff	2	- VA	
							Terrl Buckner	2	Melisa Goodin	1
							Number of Principals	30	Number of Principals	30

State	District	School	Principal	Principal Email	Year
KY	Knox	Lynn Camp	Anthony Pennigton	anthony.pennington@knox.kyschools.us	17-18
KY	Bell	Yellow Creek	Barbara Warren	barbara.taylor-warren@bell.kyschools.us	17-18
KY	Bell	Bell Central	Jennifer Blankenship	jennifer.blankenship@bell.kyschools.us	17-18
KY	Knox	Jessie Lay	Keith Broughton	keith.broughton@knox.kyschools.us	17-18
KY	Bell	Right Fork	Bobbi Collett	bobbi.collett@bell.kyschools.us	17-18
KY	Clay	Goose Rock	Jerry Combs	jerry.combs@clay.kyschools.us	17-18
KY	Clay	Big Creek	Nadine Couch	nadine.couch@clay.kyschools.us	17-18
KY	Knox	GR Hampton	Brian Fredrick	brian.frederick@knox.kyschools.us	17-18
KY	Clay	Paces Creek	James Gray	james.gray@clay.kyschools.us	17-18
KY	Clay	Manchester	Dwight Harris	dwight.harris@clay.kyschools.us	17-18
KY	Clay	Burning Springs	Kendra Hooker	kendra.hooker@clay.kyschools.us	17-18
KY	Knox	Central	Eric Hubbard	eric.hubbard@knox.kyschools.us	17-18
KY	Clay	Oneida	Thomas Hyden	thomas.hyden@clay.kyschools.us	17-18
KY	Knox	Girdler	Jason Jordan	jason.jordan@knox.kyschools.us	17-18
KY	Knox	Flat Lick	Steve Partin	steve.partin@knox.kyschools.us	17-18
KY	Clay	Hacker	Michael Stubblefield	michael.stubblefield@clay.kyschools.us	17-18
KY	Bell	Page	Will Lefevers	Will.Lefevers@bell.kyschools.us	17-18
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Appendix E: Teaching Trust Overview



WHAT WE DO

Teaching Trust trains, coaches, and supports school leaders to drive transformational change.

OUR AIM

To eliminate the opportunity gap so all students can achieve to the best of their potential.

Our approach is rooted in the research: strong school leadership increases student learning. We engage school leaders in professional development, going deep on foundational concepts proven to move the needle for schools. In turn, school leaders build trusting and effective school teams. Together, school teams strengthen data practices, instructional planning, and school culture to create an immediate and lasting impact for their students.

Our partnership with school leaders is ongoing. We are not just here to give training, send them off with a binder, and hope all goes well. We help carry out best practices across campuses by sitting shoulder-to-shoulder with each leader. We offer counsel, on-the-ground support, and accountability across the arc of two years. Our coaching is a living relationship.

We work with school leaders at all levels, from the teacher to the campus coach and the principal to the principal manager. We believe, and have seen firsthand, that strong, aligned leadership from the campus, to the district, to the state level is a game-changer for students.





LEADERSHIP TEAMS

Leadership Teams consists of two years of monthly professional development. Customized on-campus support by a Teaching Trust coach follows after each session. An overview of Leadership Teams Year 1 is reflected below. Leadership Teams Year 2 is the implementation of each school teams' plan for change, which is developed at the end of Year 1.

LEADERSHIP TEAMS YEAR 1

	SESSION	COACHING		SESSION	COACHING
SUMMER INTENSIVE (4 days + 1 preview day for Executive Directors and Principals)	<ul style="list-style-type: none"> - Leading with trust - Building a culture of feedback - School-wide culture practices - Weekly data meetings - Instructional planning calendars - Leading high-quality PD 		DECEMBER (1 day)	<ul style="list-style-type: none"> - Case consultancies - Instructional planning calendars 	
SEPTEMBER (2 days)	<ul style="list-style-type: none"> - Lesson alignment - Weekly data meetings 	- School-wide culture practices	JANUARY (1 day)	<ul style="list-style-type: none"> - STAAR projections - Intervention planning 	<ul style="list-style-type: none"> - Instructional planning calendars - Lesson alignment
OCTOBER (2 days)			FEBRUARY (1.5 days)	<ul style="list-style-type: none"> - Plan for change 	
NOVEMBER (2 days)	<ul style="list-style-type: none"> - Team effectiveness: conflict and commitment 	- Data Meetings	MARCH (1 day)	<ul style="list-style-type: none"> - Present plan for change - Receive feedback on plan 	<ul style="list-style-type: none"> - Plan for change

Principals, Teams, Executive Directors participate in all monthly sessions

Executive Directors attend a minimum of one coaching visit per cycle (every 6-8 weeks)



"I thought I was good at systems and routines – Teaching Trust takes it to another level."

2019 Leadership Teams Participant

"I appreciate being held accountable for the work. Having a coach helps me make sure I complete the tasks I have set for myself and the leadership team."

2017 Leadership Teams Participant

@TeachingTrust | teachingtrust.org

1349 Empire Central Dr #400, Dallas, Texas 75247

Appendix F: Literature Review

School Leadership

Research highlights the importance of the school principal's role in K-12 education (Beteille, Kalogrides, & Loeb, 2009; Bryk, 2010; Grissom & Loeb, 2011; Horng & Loeb, 2010; Hitt & Tucker, 2016; Murphy, 2016; Whitaker, 1997). Bryk (2010), who studied hundreds of elementary schools in Chicago over a fifteen-year period, identified five essential components to improve schooling and concluded that school leadership was the component necessary for the other four to drive change. Similarly, Wahlstrom, Louis, Leithwood, and Anderson (2010), who used a national sample of schools to study factors that impact student learning, found that aside from classroom instruction, leadership emerged as the most important school-related factor to contribute to what students learn.

While researchers agree that school leadership matters, there has been less consensus surrounding the specific best practices of principalship. Beck and Murphy (1992), who reviewed literature on principalship, concluded that while there was much data about the activities, traits, and demands of principals, there was little understanding on the concept of good principalship. Our review affirmed that the conceptualization of best principal practices has been fluid and shaped by external influences (Murphy, 1994; Murphy, 2016).

Prior to the 1980s, the principal's role was conceived to be a leader who was managerial or transactional (Hallinger & Murphy, 1985; Sebastian et al., 2019; Urick, 2016). However, external forces in the 1980s, particularly reform, created a new focus surrounding the idea of principal as an instructional leader and later, a transformational leader (Murphy 1988; Leithwood & Poplin, 1992). Horng and Loeb (2010) specified that an early shift from a managerial focus to an instructional leader was driven by the "effective schools movement" and was later revisited because of a push for accountability on student performance (p. 66). During early school reform, a managerial leadership style was critiqued because associated practices were viewed as "too far removed" from the true business of schools: student outcomes (Edmonds, 1979; Urick, 2016, p. 154). In comparison, a transformational leader was originally described not based on tasks, but in the principal's ability to innovate, motivate, and inspire in an effort to address failing schools (Beteille, Kalogrides, & Loeb, 2009; Sebastian et al., 2018; Urick, 2016). Later, this leadership style was conceptualized with the Nature of School Leadership (NSL) survey, with the associated tasks of setting direction, improving the instructional program, redesigning the organization, and developing personnel (Urick, 2016). Instructional leadership practices were cited as similar, but overall concerned specifically with supporting a school's instructional program and creating a positive, learning-focused culture (Beteille, Kalogrides, & Loeb, 2009, p. 3; Urick, 2016). While originally instructional leadership was viewed as a top-down approach, leadership styles have evolved to celebrate collaboration through distributed, shared, and collective leadership (Wahlstrom et al., 2010). While aforementioned literature cited the importance of leadership, studies also highlighted the importance of the principal working together, alongside multiple stakeholders in and outside of the school, to lead.

Overtime, best principal practices have been identified with frameworks such as Murphy's (2016) "Building Material for School Improvement" and studies that reviewed school leadership literature to identify domains of principal practices (Hitt & Tucker, 2016). For the purpose of this review, we focus on three domains of principal practice: school climate and culture, instructional leadership, and organizational management. We acknowledge, however, that research suggested that while it is possible to categorize principal practices, the relationship between school leadership and student outcomes is complex and indirect, practices can be difficult to operationalize, and these practices often overlap domains (Urlick & Bowers, 2014; Bartell, 1990).

Principal Practices in Context This review also explores how principals learn about and implement practices, and how context can impact both access to and implementing of practices. The majority of principals become licensed through a principal preparation program, typically as a graduate student in a school of education. These programs provide the foundations of the principalship, often incorporating both theoretical knowledge and hands-on experiences, such as an internship. Although many principal preparations programs may hold the same accreditation (e.g. NCATE or CAEP), it is also important to ground our understanding of principal development within the context in which principals lead (Goldring et. al., 2009; Bryk, 2010; Murphy, 2016; Wahlstrom & York-Barr, 2011; Wieczorek & Manard; 2018). Context can support or inhibit the implementation or sustainability of practices of school improvement, including leadership, and can also help explain differences in outcome measures (Goldring et al., 2009; Bryk, 2010). Other studies also found that leadership styles can also differ based on or because of context (Weathers, 2011; Wahlstrom et al., 2010; Wieczorek & Manard, 2018). Wahlstrom, Louis, Leithwood, and Anderson (2010) noted that when examining shared and instructional leadership, the following contextual factors had a significant impact: poverty and diversity, location and urbanicity, poverty and district size, and school level. When considered school leadership development in rural settings, there are gaps in literature that explore programming (professional training, district support, coaching, cohort models, etc.) in rural contexts compared to urban contexts.

School Climate and Culture

Although both school climate and culture contribute to the overall environment, they refer to different aspects: "Culture traditionally refers to norms, values, and beliefs that exist and can be very difficult to change or measure, while climate refers to perceived environmental factors that impact behavior" (Drago-Severson, 2012, p. 6). More specifically, school culture emphasizes the values that are reflected in the common behaviors inside the building (Stolp, 1995), whereas school climate refers to the perceptions of students, teachers, and parents of the school's leadership of the building's environment (Lindahl, 2001). School climate and culture contribute to the overall school environment, and both faculty and students believe their school is successful when the principal creates an environment that is conducive to success (MacNeil, Prater, & Busch, 2009). Principals are tasked to respond to the culture in their schools, and a significant emphasis exists on building relationships with all stakeholders (Sergiovanni, 2000). Additionally, principals must attend to the factors that impact the school's climate to maximize student outcomes (Leithwood & Sun, 2012; Bruggencate, Luyten, Scheerens, & Slegers, 2012). Drago-

Severson (2012) discussed how school climate is more “amenable to influence and change” (p. 6), and prioritizing positive changes in school climate could lead to improved school culture overtime.

Effective schools demonstrate positive school climate and culture (Donaldson, 2006). A positive school climate, one in which students and staff know each other well and the staff expresses care for students’ well-being, intellectual growth, and educational success, is a key element in the learning process for adolescents (Quint, 2006). Moreover, Voight, Austin, and Hanson (2013) stated how a “positive school climate has been associated with better student academic achievement, graduation, and behavioral outcomes, and has been the focus of several recent initiatives for school reform” (p. 1). In comparison, a positive school culture could be a central catalyst in fostering student engagement (Bryk et al., 2010). This is particularly true for students from working class and lower socioeconomic status families (Felner et al., 2007; Rumberger, 2011). Similarly to school climate, a “school culture that prioritizes relationships can significantly mediate academic engagement” (Rodríguez, 2008, p. 768). As Howard (2001) shared, students see “teachers’ willingness to care and their ability to bond with students as essential ingredients of a positive school climate” (as cited in Smylie, Murphy, & Louis, 2020, p.11). The idea of caring encompasses school climate and culture as well. Bryk et al. (2010) established how the effects of a school with a “caring environment on achievement are best understood in relation to academic challenge—high expectations, rigorous pedagogy, intellectual demand, and accountability. It is the mutually reinforcing combination of what Hallinger and Murphy (1985) long ago called *pastoral care* and support with *academic press* that makes the greatest positive difference” (as cited in Smylie, Murphy, & Louis, 2020, p. 12). It is evident that a school’s climate and culture greatly impact student achievement and engagement, and principals directly contribute to the trajectory of the school’s environment.

Principals’ actions toward building positive school climate and culture can be divided into broader concepts, including establishing the school’s vision and mission, building relationships, supporting student learning, community, and the school building itself (Atkinson & Pilgreen, 2011; Drago & Severson, 2012; Gruenert, 2005). A leader’s “actions are critical in bringing vision to life and to keep it healthy” as well as to “foster the commitment of others, nurture needed workplace trust, and steer improvement work” (Murphy, 2016, p. 25). Moreover, several school conditions allow for principals to exercise their influence, including through purposes and goals, school structure and social networks, personnel, and organizational culture (Hallinger & Heck, 2000; Leithwood & Janzi, 2000). Drago-Severson (2012) specifically highlighted the factors of collaborative leadership, teacher collaboration, and shared purpose as influential to the school environment. Hopson and Lawson (2011) stated how “creating a positive school climate requires data-informed decision making, such that data about students’ needs and organizational factors are used in improvement planning to create the conditions for academic success” (p. 106). Furthermore, Smylie, Murphy, and Louis (2020) discussed how “the stronger the caring in school leaders’ relationships with students, the more successful the efforts to cultivate schools as caring communities, and the more effective school leaders are in fostering caring beyond the school in families and community—the more likely caring’s benefits to students will accrue” (p. 36-37). Although specific conditions and actions are necessary to improve the school environment, principals’ leadership style also plays a significant role.

As previously noted, effective principals have now shifted towards a transformational leadership style. Bonnici (2011) shared how positive outcomes depend on the school environment, which is a direct result of the principal's leadership style. A school's environment is perceived positively when the principal demonstrates strong instructional leadership skills, as well as a belief in teachers' ability to succeed (Sahin, 2011). One value that enhances the school environment is distributed leadership, as "successful school leaders delegate tasks to appropriate personnel," as well as have an understanding that the "benefits of empowering staff members far outweighs the problems caused by occasional lapses in the judgment of those so empowered" (p. 56). Drago-Severson's (2012) findings showed that in order to improve school climate, principals focused on demonstrating respect for their teachers, involved them in decision making, and invited them to shape their school's mission. Although principals exert much influence on the school's environment, their impact on student outcomes is less direct. The extant literature supports how the direct influence teachers have on student outcomes is a result of the principal's direct influence on teachers; therefore, principals have an indirect influence on their impact on school effectiveness and student achievement (Hallinger & Heck, 2000; Leithwood & Janzi, 2000; Marzano, Waters & McNulty, 2005).

It is important to emphasize that principals only have an indirect impact on student achievement and engagement. However, although principals may only have a moderate effect on these outcomes, they have a significant impact on school conditions (Leithwood & Janzi, 2000), and student achievement is directly related to the school's climate and culture (Gruenert, 2005; Lindahl, 2001). Caring is a part of that framework, as caring is at the "heart of developing and implementing academic programs, of instructional leadership, of providing services for particular groups of students, and of allocating resources to support teaching and learning" (Smylie, Murphy, & Louis, p. 34). Specifically, "school leaders that shape their cultures to become more collaborative should reap the benefits of greater teacher performance and satisfaction and greater student performance (Gruenert, 2005, p. 43). When schools narrow their focus to student achievement in terms of test scores, rather than school culture, student outcomes may suffer (Gruenert, 2005). Gruener (2005) also noted that "school culture and student achievement are not divergent issues for school leaders to consider...school leaders need to define the two as complementary, reciprocal, and convergent in nature" (p. 50). Ultimately, principals must attend to developing positive school climate and culture in order to create an environment most conducive to student achievement and engagement.

Instructional Leadership

Similar to our understanding of the principal practices that comprise good school leadership, the practices of instructional leadership have evolved and at times, been undefined. Murphy (1988) defined instructional leadership as "the class of leadership functions that support classroom teaching and student learning." Horng and Loeb (2010) noted that while there was consensus that instructional leadership was important, there has been "less consensus on what instructional leadership actually is" (p. 66). Bartell (1990), who analyzed the leadership practices of principals categorized as "outstanding" found that while all leaders were familiar with the term

instructional leadership, their definitions varied. The author also concluded that instructional leadership is complex and difficult to both define and operationalize.

Andrew and Soder (1987) organized the practices of instructional leadership and identified four areas: resource provider, instructional resource, communicator, and visible presence in the school. In recent literature, informal evaluation practices, such as drop-ins and walkthroughs have become a popular identifier of instructional leadership (Grissom, Loeb, & Master, 2013). Whitaker expanded on the area of the principal being visible through “drop-in” supervision, or the practice of informal teacher observations lasting ten to fifteen minutes and concluding with teacher feedback (1997, p. 156). Whitaker (2010) also noted these drop-ins allow the principal to learn with students, observe and publicize good teaching, and model that he or she cares about learning. Ginsberg and Murphy (2002) noted another visibility practice or the idea of “walkthroughs,” which were described as “frequent, short, unscheduled visits” that can “foster focused, reflective, and collaborative adult learning” (p. 120). Ginsberg and Murphy explained that these visits were shorter than a drop-in, “averaging no longer than five minutes in each classroom”(p. 121). However, while these visits may seem random, Ginsberg and Murphy noted that teachers and administrators should develop a walkthrough protocol - with a set of observation questions - to gain shared consensus on the school’s approach and purpose of walkthroughs; principals should follow-up with simple informational and supportive feedback as opposed to an evaluation. This walkthrough process creates a collaborative culture between teachers and administrators because it gives them an opportunity to “discuss the whys and hows of teaching,” and ultimately “develop a shared language of teaching” (Ginsberg & Murphy, 2002, p. 122; Protheroe, 2009).

Grissom, Loeb, and Master (2013) found that simply spending time on instructional tasks did not predict student achievement growth. However, instructional practices of coaching, evaluation, and educational programming predicted positive achievement gains. While Grissom et al. (2013) discovered that time spent on informal walkthroughs negatively predicted student growth, the researchers noted that this may be because qualitative data suggested that the walkthrough process was not part of a broader improvement strategy. Grissom et al. (2013) concluded that their findings highlighted the importance of the type and quality of instructional leadership activities as opposed to just examining time spent on them.

Urlick (2016), when describing an instructional leader, also noted that three domains appear: defining a school mission, managing the instructional program, and developing the school learning climate. Horng and Loeb (2010) called for a new understanding of instructional leadership that not only focused on visibility practices of daily learning, but it also included organizational management practices vital for learning, such as staffing their school with high quality educators and supplying necessary resources and support for learning. Authors also stated that while instructional leadership is critical for school improvement, “growth in valued school outcomes comes more from organizational management for instructional improvement,” such as staffing and supporting personnel to create a positive learning environment, as opposed to “focusing too narrowly on their own contributions to classroom instruction” through observations or coaching (Horng & Loeb, 2010, p. 69).

Robinson, Lloyd, and Rowe (2008) noted similar findings when they examined the differences in the dimensions of instructional leadership and transformational leadership on student outcomes. When compared to transformational leadership (which they note is comparatively more focused on the relationships between leaders and followers), instructional leadership had a greater focus on student outcomes (Robinson et al., 2008). Compared to transformational leadership, the authors argued that “planning, coordinating, and evaluating teaching and the curriculum lies at the heart of instructional leadership” (p. 667). When examining specific domains of leadership that most impacted student outcomes, “promoting and participating in teacher learning and development” was most strongly associated. However, similar to previously noted studies, the authors cautioned a tradeoff between a school leader’s instructional leadership and organizational management focus, stating that “for some schools, a focus on orderliness, safety, and civility, may be an essential stage before leaders can give more attention to the curriculum and teacher professional learning” (p. 668). Overall, Robinson et al. (2008) discovered that “the more leaders focus on their relationships, their work, and their learning on the core business of teaching and learning, the greater the influence on student outcomes” (p. 636). Given that we know principals indirectly impact student outcomes, the authors called for more understanding of how leadership influences “the teaching practices that matter” or effective instructional strategies (Murphy, 2006; Robinson et al., 2008, p. 669).

When conceptualizing an instructional leader, studies have also pointed to the importance of an instructional leader that leads collaboratively or collectively (Lambert, 2002; Murphy, 2016; Wieczorek & Manard, 2018). Highlighting the importance of shared leadership as part of instructional leadership, Lambert (2002) stated that “Instructional leadership must be a shared, community undertaking. Leadership is the professional work of everyone in the school” (p. 37). To identify how building leadership capacity in staff members helps in school improvement efforts, Lambert shared how “educators and policymakers alike seek a framework for instructional leadership that will produce sustainable school improvement. The development of leadership capacity can provide such a framework” (p. 38). In this instance, leadership capacity is defined as “broad-based, skillful participation in the work of leadership” (p. 38). Murphy (2016), who noted that “in good schools the administrators are leading the learning” provided a similar approach in promoting communities of practice, where shared leadership is central to school improvement.

Organizational Management

Recently, studies have highlighted the importance of organizational management skills when considering the work of school leaders (Horng, Klasik, & Loeb, 2010; Grissom & Loeb, 2011; Sebastian et al., 2019). Urick (2016) synthesized understanding of a transactional or managerial leader as one who employed rewards to influence stakeholders and is defined by the task of distributing and managing resources, such as budgets, facilities, personnel, and time (Bryk et al., 2010; Cuban, 1988; Grissom & Loeb, 2011; Hallinger, 2005). Specifically, a managerial school leader’s practices were focused on planning and sharing information and sustaining organization through scheduling, budgeting, maintaining the building, and meetings (Cuban, 1988; Urick, 2016). Given the shift described earlier to promote principals as an instructional or

transformational leader, recent neglect has been given to the organizational management practices for principalship (Berkovich, 2016; Hallinger, 2005; Grissom & Loeb, 2011; Sebastian et al., 2019). Sebastian et al. (2019) made the argument that this neglect was driven by the construct of “transformational leadership,” which can be viewed as the antidote to “transactional leadership” or more traditional management skills (Leithwood & Poplin, 1992). However, recent studies (see below) have highlighted the importance of a school leader’s organizational management practices. While these managerial practices may be categorizable in literature, as noted earlier, instructional leadership and organizational management practices can operate in sync.

Hornig, Klasik, and Loeb (2010), who used observational data to examine the relationship between how high school principals manage their time and school achievement outcomes, found a positive relationship between time spent on organization management activities and student performance. In contrast, they did not find a relationship between time spent on instructional activities and student performance. Grissom and Loeb (2011) described similar findings when examining principal perceptions of their practices (categorized in the domains of Instruction Management, Internal Relations, Organization Management, Administration, and External Relations) and student achievement. The authors found that out of all five skill-based categories, “Organization Management Skills” was the only one that predicted student achievement growth (Grissom & Lobb, 2011). However, both aforementioned studies noted that their findings should not imply that instructional leadership practices are not important. Instead, they suggested that organizational management is a critical component of school leadership and related to instructional leadership.

Sebastian et al. (2019) later contributed to these conclusions to examine what has been thought to be a complementary relationship between instructional leadership and organizational management skills using principal perception data and student achievement data. Sebastian et al. (2019) discovered multiple pieces of evidence of this relationship, including a correlation between instructional leadership and organizational management measures and that no principals viewed themselves as weak in one category and strong in the other. These findings suggested that there is a relationship between organizational management practices and instructional leadership practices, and that this relationship may be symbiotic.

A specific example of this relationship is demonstrated in a study that examined how school leaders recruit and retain effective educators, which requires both skills in organizational management and instructional leadership. Beteille, Kalogrides, and Loeb (2009) found that principals considered “effective” attracted, hired, and retained high quality teachers and also were able to improve educators faster than non-effective principals. Beteille et al. (2009) concluded that their findings demonstrate the importance of organizational management skills, specifically personnel management skills. This study provided a specific example of how organizational management and instructional leadership practices are not easily operationalized, can be complementary, and work together to impact learning.

School Leader Development

As the principal's role has evolved, Olson (2007) described how principal preparation programs have changed their approach from producing effective managers to preparing principals who can drive schools toward increased student achievement. Additionally, Fry, O'Neill, and Bottoms (2006) discussed how "many states adopted or adapted licensure and accreditation policies based on the standards for school administrators developed by the Interstate School Leaders Licensure Consortium in 1996 (and revised in 2008), and several have established alternative pathways to administrative licensure in order to attract talented leaders from within and outside of education" (as cited in Davis & Darling-Hammond, 2012, p. 27). In addition, Davis and Darling-Hammond (2012) highlighted how efforts to "study, revise, and improve principal preparation programs have paralleled the standards movement" (p.27), and preparations programs started to structure themselves based on theories of adult and experiential learning, "placing greater emphasis on hands-on internship experiences, thematically integrated curricula, problem-based instruction, and closer partnerships with school districts" (p. 27). Many education programs across the country now hold accreditation from the Council for the Accreditation of Educator Preparation (CAEP), including those for principal preparation. The five main standards of CAEP are 1) content and pedagogical knowledge, 2) clinical partnerships and practice, 3) candidate quality, recruitment, and selectivity, 4) program impact, and 5) provider quality assurance and continuous improvement (CAEP, 2020). While the focus of programs vary, the majority of principals will graduate from an accredited preparation program.

In addition to principal preparation programming, principals also can develop leadership mindsets, practices, or tools for implementation during professional development or on-the-job-coaching. Wahlstrom and York-Barr (2011) found that professional learning can create "energy and enthusiasm for improving practices that build efficacy and result in improved outcomes, not only for students, but for professionals as well" (p. 32). To support professional development for adult learners, Wahlstrom and York-Barr argued that the key ingredients to high engagement are "structure" and "nurture" (p. 32). Wahlstrom et al. (2010) found that this type of support was evident for leaders in high performing districts, where expectations for principal leadership were clearly communicated, learning experiences were provided in line with expectations, monitoring systems evaluated principal's follow-through, and additional support was provided if principals needed it (2010). Wahlstrom et al. also noted that it was very rare for leaders to have support outside of their school district (2010).

Gates, Baird, Master, and Chavez-Herrerias (2019), who examined principal pipeline initiatives at six large urban school districts found that for aspiring leaders, support aligned to leadership standards that included on-the-job training was effective in increasing outcomes for students once those principals were selectively placed in schools. There are also documented differences in the type of professional development based on school leadership experience. Novice principals, for example, have cited "trial and error" in reflection of their professional experiences as their most important learning while others noted that novice principals often need additional support (Hornig & Loeb, 2010; Wieczorek & Manard, 2018).

While Wahlstrom et al. (2010) argued that principals cannot do their work alone and need support, Niece (1983) made the early argument that principals are unable to truly embody the title of instructional leadership if they do not have access to professional development. Niece stated that instructional leaders are “people oriented and interactional,” “function within a network of other principals (local, state, and national),” and “had administrative practitioners who had acted as mentors” (1983). Smylie et al. (2020), who provided insight on how to create caring schools, also noted the importance of school leaders learning “vicariously through the experience of others” (p. 143). To establish caring school cultures, they also note the importance of self-care for school leadership (Smylie et al., 2020). Smylie et al. (2020) also cited Donaldson (2006) (who examined the importance of relationships to create caring cultures) who argued “principals’ self-care is anchored in recognition that they are not alone in this work (p. 146). Therefore, while Smylie et al. (2020) noted that “principals work alone, albeit in crowds,” (p. 145) collectively research highlighted the importance of connectedness for school leadership in terms of self-care to promote a caring culture, principal development, and to model and behold the title of instructional leader.

Researchers also noted the difference between having knowledge of effective principal practices (“the what”) and carrying out these practices (“the how”) in their daily work (Wahlstrom & York-Barr, 2011). This difference has been referred to as “the implementation gap.” However, other researchers have highlighted the importance of a school leader’s values (Bartell, 1990; Hallinger, 2010). Bartell (1990) cautioned early on about measuring practices, and specifically instructional leadership practices, because they are difficult to operationalize. Bartell noted that a “task approach,” in which analysis consisted of checking a list of what a principal does, ignored contextual and organizational factors that impact school leadership, as well as failed to examine the beliefs, values, and meanings that principals attach to their behavior (1990). Thus, Bartell would argue that time spent in classrooms as a measure of visibility does not tell us about a school leader’s “commitment and values,” which Bartell argued is important, as “what principals believe about the tasks they perform gives meaning to the tasks that render them effective” (1990, p. 118). Thus, Bartell (1990) noted that when examining school leadership practices, one must also evaluate “the quality of the reasoning that goes into decisions” and “the end result of the decisions themselves” (p. 119). Recent scholarship on leadership in general has made similar points, noting that development requires “strengthening leaders’ understanding of who they are and who they want to be” (Goleman, Boyatzis, & McKee, 2013; Smylie et al., 2020).

School Leader Development in the Rural Context Given the documented importance of context for school leadership, studies also point to the unique leadership development needs of rural school principals. Wieczorek and Manard described these needs for rural principals who lead within “tight social communities” where they hold multiple roles with “unique responsibilities” in the school and community (2018, p. 1). Wieczorek and Manard summarized challenges that both rural communities and principals in this context face from previous literature. These included “changing demographics, poverty, economic changes and strain, educational accountability, school consolidation, and younger citizens population shifts to more urban or suburban areas” and “geographic isolation, teacher recruitment and retention, district consolidation, low levels of academic expectations and motivation, and lower levels of staffed teaching and administrative positions and organizational capacity” respectfully (Wieczorek &

Manard, 2018, p. 3). Burton, Brown, and Johnson (2013), however, cautioned the use of previous contextual findings that mistaken rural school communities as homogenous and “as a problem to overcome rather than setting to understand” (p. 8). Similarly, Sipple and Brent noted the strengths of rural schools (in terms of school culture and relationship building), but also found that rural schools struggled to staff schools with high quality teachers (2015). Therefore, while it is important to consider context when examining rural school leadership it is important to acknowledge both concerns and celebrations of context.

While research noted that novice principals have different needs in all contexts, studies have pointed to the unique challenges of novice, rural principals (Alvy & Coladarci, 1985; Cowie & Crawford, 2008; Nelson et al., 2008; Wieczorek & Manard, 2018). For example, some studies found that rural, novice principals were prepared for managerial aspects of their new role but faced school climate and culture challenges in regards to building relationships (including professional ones), sustaining a positive culture, and meeting students’ needs given limited resources (Cowie & Crawford, 2008; Nelson, de la Colina, & Boone, 2008). Another study found that novice rural principals cited instructional leadership as the most challenging aspect of their work, specifically with regards to practices related to “evaluating instruction, promoting change, improving teachers instruction, implementation of research based practices, and meeting students needs” (Alvy & Coladarci, 1985). Wieczorek and Manard (2018), who studied six principals in rural settings in the Midwest United States provided insight into why rural principals may struggle with instructional leadership aspects of their work. The researchers found that novice principals struggled not only with being visible in classrooms, but that they felt pressure to be visible within their greater school community. Additionally, novice rural principals felt it was important to first focus on relationships and earn trust. However, principals felt burdened by economic, resource, and efficiency restraints to meet instructional needs and balance multiple roles (including the role of principal and district official), which created issues related to managing time and feeling isolated (Wieczorek & Manard, 2018). This isolation was exacerbated by the inability to connect with other school leaders within small districts and also because they were the only administrators at their school.

Given the importance of context and specific needs in rural settings, scholars have also provided recommendations for principal preparation and development within rural spaces (Ashton & Duncan, 2012, Wieczorek & Manard, 2018). Ashton and Duncan (2012) proposed a contextually relevant toolkit for novice rural principals and identified eight leadership practices that were key to success: taking time to build rapport, establish key relationships, getting to know the community at large, finding a supportive mentor, and developing resilience and coping strategies. Similarly, Wieczorek and Manard (2018) advocated for a context-driven preparation pipeline for principals that would address the many managerial and leadership responsibilities of rural principals.

References

- Alvy, H.B., & Coladarci, T. (1985). Problems of the novice principal. *Journal of Research in Rural Education, 3*, 39-47.
- Andrew, R., & Soder, R. (1987). Principal leadership and student behavior. *Educational Leadership, 6*, 9-11.
- Appalachian Regional Commission. (2020). County Economic Status and Distressed Areas in Appalachia - Appalachian Regional Commission. Retrieved March 8, 2020, from https://www.arc.gov/appalachian_region/
- Ashton, B., & Duncan, H. (2012). A Beginning Rural Principal's Toolkit: A Guide for Success. *Rural Educator, 34*(1), 13.
- Atkinson, T. N., & Pilgreen, T. (2011). Adopting the transformational leadership perspective in a complex research environment. *Research Management Review, 18*(1), 42-63.
- Bartell, C. A. (1990). Outstanding Secondary Principals Reflect on Instructional Leadership. *The High School Journal, 73*(2), 118-128.
- Beteille, T., Kalogrides, D., & Loeb, S. (2009). Effective Schools: Managing the Recruitment, Development, and Retention of High-Quality Teachers. Working Paper 37. *National Center for Analysis of Longitudinal Data in Education Research*.
- Bonnici, C. A. (2011). Creating a leadership style. *Principal Leadership, 11*(5), 54-57.
- Bruggencate, G., Luyten, H., Scheerens, J., & Slegers, P. (2012). Modeling the influence of school leaders on students' achievement: How can school leaders make a difference?. *Educational Administration Quarterly, 48*(4).
- Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago, IL: University of Chicago Press.
- Bureau of Economic Analysis. (2019, Summer). Personal Income by County, Metro, and Other Areas | U.S. Bureau of Economic Analysis (BEA). Retrieved March 8, 2020, from <https://www.bea.gov/data/>
- Burton, M., Brown, K., & Johnson, A. (2013). Storylines about rural teachers in the United States: A narrative analysis of the literature. *Journal of Research in Rural Education, 28*(12), 1-18.
- Casas, J. (2017). *Culturize: Every Student. Every Day. Whatever It Takes*. Dave Burgess Consulting, Inc.
- Cormack, M., Vest, J.M., Wong, N. (2016). *Breaking the cycle. A study of the Elgin Children's Foundation effort to promote early literacy in Appalachia*. Peabody College, Vanderbilt University.
- Cornell, D. (2014). *Overview of the Authoritative School Climate Survey*. Charlottesville, VA: Curry School of Education, University of Virginia.

- Council for the Accreditation of Educator Preparation (2020). *Standards*. Retrieved from <http://www.ncate.org/standards/introduction>
- Cowie, M., & Crawford, M. (2008). "Being" a new principal in Scotland. *Journal of Educational Administration, 46*, 676-689.
- Cuban, L. (1988). The managerial imperative and the practice leadership in schools. *SUNY Series in Educational Leadership*.
- Davis, S. H., & Darling-Hammond, L. (2012). Innovative principal preparation programs: What works and how we know. *Planning and Changing, 43*(1-2), 25-45.
- Donaldson, G. A., Jr. (2006). *Cultivating leadership in schools: Connecting people, purpose, and practice*. New York, NY: Teachers College Press.
- Drago-Severson, E. (2012). New opportunities for principal leadership: shaping school climates for enhanced teacher development. *Teachers College Record, 114*(3).
- ED School Climate Surveys (EDSCS, 2019). National center on safe supportive learning environments. Washington, DC: 2019 American Institutes for Research.
- Elgin Children's Foundation. (2017). SESC/Elgin Principal Support Program (PSP) [PowerPoint slides].
- Felner, R., Seitsinger, A., Brand, S., Burns, A., & Bolton, N. (2007). Creating small learning communities: Lessons from the project on high-performing learning communities about "what works" in creating productive, developmentally enhancing, learning contexts. *Educational Psychologist, 42*, 209-221.
- Gates, S., Baird, M., Master, B., & Chávez-Herrerías, E. (2019). *Principal Pipelines: A Feasible, Affordable, and Effective Way for Districts to Improve Schools*.
- Ginsberg, M. B., & Murphy, D. (2002). How walkthroughs open doors. *Educational Leadership, 59*(8), 34-36.
- Goleman, D., Boyatzis, R., & McKee, A. (2013). *Primal leadership: Unleashing the power of emotional intelligence*. Boston, MA: Harvard Business Review Press.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989) "Toward a Conceptual Framework for Mixed-method Evaluation Designs". *Educational Evaluation and Policy Analysis, 11*(3), 255-274.
- Grissom, J. A., & Loeb, S. (2011). Triangulating principal effectiveness: How perspectives of parents, teachers, and assistant principals identify the central importance of managerial skills. *American Educational Research Journal, 48*(5), 1091-1123.
- Grissom, J. A., & Loeb Ben Master, S. (2013). *Effective Instructional Time Use for School Leaders: Longitudinal Evidence from Observations of Principals*. Heck.
- Gruenert, S. (2005). Correlations of collaborative school cultures with student achievement. *NASSP Bulletin, 89*43-55.

- Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and policy in schools*, 4(3), 221-239.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, 49, 125-142.
- Hallinger, P., & Heck, R. (2000). Exploring the principal's contribution to school effectiveness, 1980-1995. Washington, DC: Institute for Educational Leadership.
- Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *Elementary School Journal*, 86(2), 217-247.
- Hamilton, L. S., Engberg, J., Steiner, E.D, Nelson, C.A., and Yuan, K. (2012). *Improving School Leadership Through Support, Evaluation, and Incentives: The Pittsburgh Principal Incentive Program*. Santa Monica, CA: RAND Corporation, 2012.
- Hitt, D. H., & Tucker, P. D. (2016). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research*, 86(2), 531-569.
- Hopson, L., & Lawson, H. (2011). Social workers' leadership for positive school climates via data-informed planning and decision-making. *Children & Schools*, 33(2), 106-18.
- Hornig, E. L., Klasik, D., & Loeb, S. (2010). Principal's time use and school effectiveness. *American Journal of Education*, 116(4), 491-523.
- Hornig, E., & Loeb, S. (2010). New Thinking About Instructional Leadership. *Kappan Magazine*, 92(3), 66-69.
- Howard, T. C. (2001). Telling their side of the story: African-American students' perceptions of culturally relevant teaching. *Urban Review*, 33(2), 131-149.
- Ibarra, H. (2015). *Act like a leader, think like a leader*. Brighton, MA: Harvard Business Review Press.
- Kentucky Department of Education. (2020). K-12 data. Retrieved from <https://education.ky.gov/districts/tech/Pages/K-12-Data.aspx>
- Kruger, J. & Dunning, D. (1999). "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments." *Journal of Personality And Social Psychology*, 77(6), 1121-1134.
- Lambert, L. (2002). A framework for shared leadership. *Educational Leadership*, 59(8), 37-40.
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, 38(2), 112-129.

- Leithwood, K. & Sun, J. (2012, August 1). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research. *Educational Administration Quarterly [Serial online]*, 48(3), 387-423.
- Lindahl, R.A. (2001). The crucial role of assessing the school's climate in planning school improvement. *Educational Planning*, 20(1), 16-30.
- Louis, K.S., Leithwood, K., Wahlstorm, K., Anderson, S., Michlin, M., Mascall, B., et al. (2010). *Learning from leadership: Investigating the links to improved student learning. Final report of research*. St. Paul, MN: Center for Applied Research and Educational Improvement, University of Minnesota & Toronto: Ontario Institute for Studies in Education at the University of Toronto.
- Marzano, R. J., Waters, T., & McNulty, B. S. (2005). *School leadership that works: Form research to results*. Alexandria, VA & Aurora, CO: Association for Supervision and Curriculum Development, Mid-continent Research for Education and Learning.
- Murphy, J. (1988). Methodological, measurement, and conceptual problems in the study of instructional leadership. *Educational Evaluation and Policy Analysis*, 10(2), 117-139.
- Murphy, J. F. (2016). *Professional standards for educational leaders: The empirical, moral, and experiential foundations*. Thousand Oaks, CA: SAGE Publications.
- National Association of School Psychologists. (2019). *Guidance for measuring and using school climate data [Brief]*. Bethesda, MD: National Association of School Psychologists.
- National Policy Board for Educational Administration (2015). *Professional Standards for Educational Leaders 2015*. Reston, VA: Author.
- National School Climate Center (2020). *Measuring School Climate (CSCI)*. Retrieved from <https://www.schoolclimate.org/services/measuring-school-climate-csci>
- Nelson, S.W., de la Colina, M.G., & Boone, M.D. (2008). Lifeworld or systemworld: what guides novice principals? *Journal of Educational Administration*, 46, 690-701.
- Niece, R. D. (1993). The principal as instructional leader: Past influences and current resources. *NASSP Bulletin*, 77(553), 12-18.
- Olson, L. (2007). Getting serious about preparation. *Education Week*, 27(3), S3-S5.
- Pannell, S., Peltier-Glaze, B., Haynes, I., Davis, D., & Skelton, C. (2015). Evaluating the Effectiveness of Traditional and Alternative Principal Preparation Programs. *Journal of Organizational and Educational Leadership*, 1(2), 1-30.
- Patton, M. Q. (2015). *Qualitative Evaluation and Research Methods*. Thousand Oaks, CA: Sage.
- Poverty USA. (2019). *Maps & Data | Poverty USA*. Retrieved March 8, 2020, from <https://www.povertyusa.org/data/2018>

- Protheroe, N. (2009). *Using Classroom Walkthroughs to Improve Instruction*. Retrieved from <https://qcc.wikispaces>.
- Quint, J. (2006). *Meeting five critical challenges of high school reform: Lessons from research on three reform models*. New York, NY: Manpower Demonstration Research Corporation.
- Robinson, V. M., Lloyd, C. A., & Rowe, K. J. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational administration quarterly*, 44(5), 635-674.
- Rodriguez, L. (2008). Teachers know you can do more: Understanding how school cultures of success affect urban high school students. *Educational Policy*, 22, 758–780.
- Rumberger, R. (2011). *Dropping out: Why students drop out of high school and what can be done about it*. Cambridge, MA: Harvard University Press.
- Sahin, S. (2011). The relationship between instructional leadership style and school culture (Izmir Case). *Educational Sciences: Theory and practice*, 11(4), 1920- 1927.
- Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., & Cunningham, M. (2019). Principal leadership and school performance: An examination of instructional leadership and organizational management. *Leadership and Policy in Schools*, 1-23.
- Sergiovanni, T. J. (2000). *The lifeworld of leadership: Creating culture, community, and personal meaning in our schools*. The Jossey-Bass Education Series.
- Sipple, J.W., Brent, B.O. (2015). Challenges in rural school settings. In H. F. Ladd & M. E. Goertz (Eds.), *Handbook of research in education finance and policy* (2nd ed., pp. 607-622). New York, NY: Routledge.
- Smylie, M., Murphy, J., and Louis, K. S. (2020). *Caring School Leadership*. Thousand Oaks, CA: Corwin Press, Inc.
- Stolp, S. (1995). *Stories, symbols, values & the leader's role*. Eugene, OR: ERIC Clearinghouse on Educational Management.
- Taber, K. S. (2017, June 7). The Use of Cronbach’s Alpha When Developing and Reporting Research Instruments in Science Education. Retrieved March 10, 2020, from <https://link.springer.com>
- Tennessee Department of Education. (2020). State report card. Retrieved from <https://www.tn.gov/education/data/report-card.html>
- Urick, A. (2016). Examining U.S. principal perception of multiple leadership styles used to practice shared instructional leadership. *Journal of Educational Administration*, 54(2), 152-172.
- Urick, A., & Bowers, A. J. (2014). The impact of principal perception on student academic climate and achievement in high school: how does it measure up?. *Journal of School Leadership*, 24(2), 386-414.

U.S. Bureau of Labor Statistics. (2019). Databases, Tables & Calculators by Subject. Retrieved March 8, 2020, from <https://www.bls.gov/data/>

Virginia Department of Education. (2020). Statistics and reports. Retrieved from http://www.doe.virginia.gov/statistics_reports/index.shtml

Voight, A., Austin, G., & Hanson, T. (2013). A climate for academic success: How school climate distinguishes schools that are beating the achievement odds (Report Summary). San Francisco: WestEd.

Wahlstrom, K.L., Louis, K.S., Leithwood, K., and Anderson, S.E. (2010). *Learning from leadership: Investigating the links to improved student learning. Final report of research*. St. Paul, MN: Center for Applied Research and Educational Improvement, University of Minnesota & Toronto: Ontario Institute for Studies in Education at the University of Toronto.

Wahlstrom, K.L. & York-Barr, J. (2011). Support and structures make the difference for educators and students. *The Learning Professional*, 32(4), 22-32.

Weathers, J. M. (2011). Teacher community in urban elementary schools: The role of leadership and bureaucratic accountability. *Education Policy Analysis Archives/Archivos Analíticos de Políticas Educativas*, 19, 1-42.

Whitaker, B. (1997). Instructional Leadership and Principal Visibility. *The Clearing House*, 70(3), 155–156.

Wieczorek, D. & Manard, C. (2018). Instructional leadership challenges and practices of novice principals in rural schools. *Journal of Research in Rural Education*, 34(2), 1-17.

Zullig, K. J., Collins, R., Ghani, N., Hunter, A. A., Patton, J. M., Huebner, E. S., & Zhang, J. (2015). Preliminary development of a revised version of the School Climate Measure. *Psychological Assessment*, 27, 1072- 1081.