The WERA Educational Journal

Volume 12, Number 1   Autumn 2019

CONTENTS

Note from the Editor

This issue begins with a preview of the upcoming WERA/OSPI annual conference. It has papers related to rural school leaders' learning improvement, student teaching challenges and opportunities from the school district perspective, and reflections on the development of a preservice teacher mentor program. This issue also includes a book review of the title, *W. E. B. Du Bois's Data Portraits: Visualizing Black America*. It is my honor to serve as WEJ editor, and I hope that you enjoy this issue of WEJ!

I want to take a moment to thank the new WEJ Editorial Board: Bill Ash, Kristin Pratt, Andy Boyd, Shannon Calderone, Kristin Pratt, and LaWonda Smith. With the help of these dedicated individuals we were able to develop a new process for manuscript submissions, reviews, and issue publication. I would also like to thank WEJ's new copyeditor, Wendy Oleson, for her meticulous work preparing this issue for publication, and WERA President Hilary Loeb and the WERA Board for their support and encouragement.

We are seeking submissions for the Spring 2020 issue of the *WERA Educational Journal*. The *WEJ* is a collection of academic papers, professional reports, book reviews, and other articles and summaries of general significance and interest to the Northwest education research and practitioner community. **We encourage WERA/OSPI presenters to consider preparing a manuscript for the Spring 2020 issue of WEJ.**

Topics in the *WEJ* cover a wide range of areas of educational research and related disciplines. These include but are not limited to issues related to the topics listed below.

- Early childhood education
- Curriculum and instruction
- State and national standards
- Professional development
- Special populations (e.g., gifted, ELLs, students with disabilities)
- Assessments and their relationship with other variables
- Early warning indicators
- Social and emotional issues
- School and district effectiveness
- Teacher and principal evaluation
- Education finance and policy
- Educational technology
- Educational leadership

We encourage the submission of condensed versions of dissertations and theses that are reader-friendly. Papers for the Spring 2020 issue are due February 1, 2020. For information about the *WEJ* and its submissions, see the Submission Guidelines posted on the WERA website. If you have questions about the process or about possible submissions, email WEJeditor@gmail.com.

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35th Annual WERA/OSPI Annual Conference: Seize This Opportunity to Meet and Learn from a Colleague You Haven't Met Yet!

Brian Gabele

2019 marks the 35th year that Washington's best educators, administrators and researchers have convened to generously share their ideas, perspectives, and tools at the WERA/OSPI Annual Conference. This is all for one purpose: to improve the lives of our next generation of Washingtonians by enhancing their educational experiences in our public schools.

This year's theme focuses on learning from research and practical experience to help close opportunity gaps between subgroups of students from a wide range of backgrounds who have been historically underserved. Of the approximately 107 workshops/sessions to be held over the next three days, more than half explicitly address ideas on how to close opportunity gaps and boost opportunities among diverse communities such as:

- Students from families with wide ranges of opportunity, resources, and cultural and linguistic backgrounds
- Native English speakers and English Language Learners
- Those who learn unconventionally and those who learn conventionally
- Students of different cultural and racial backgrounds

We even have pre-K sessions that address opportunity gaps before children enter the K-12 system!
Whatever your professional context, you will find relevant experts and innovators within WERA's pool of presenters and plenty of opportunity to advance your understanding of critical issues. Think of conference presenters and attendees as your colleagues; these colleagues will serve as your allies in our mission to increase equity, broaden perspectives, and mitigate opportunity gaps in our state.
Welcome to your WERA family. Enjoy the conference!

About the Author

Brian Gabele is Director of Assessment and Program Evaluation, Clover Park School District and a WERA board member.

Shared Policy Priorities for Learning Improvement:
Perspectives of Rural School Leaders

Wesley Henry

Learning improvement practices within rural schools are an under-researched sector of the school improvement field. This poses a formidable challenge for rural administrators, as rural schools receive less attention and fewer resources than their urban and suburban peers. At the same time, rural communities are becoming increasingly diverse and economically stratified. This study investigates the learning-improvement efforts of rural administrators in Washington state whose schools are experiencing success in student achievement and presents the educational leaders' policy priorities for legislators and policymakers in Olympia, Washington's state capital.

Despite their diversity of local industries, rural communities across the United States have faced persistent economic challenges during the last 75 years (Budge, 2006; Showalter, Klein, Johnson, & Hartman, 2017). As a result, students' schooling is adversely impacted where communities in poverty lead to schools in poverty (Bouck, 2004). Within rural communities wide-spread economic hardship has continued; these communities are also rapidly becoming more diverse, with minority populations representing 83% of growth between 2000 and 2010 (Johnson, 2012). The resulting dynamic presents rural educators with the challenge of providing students with an excellent education in an increasingly complex landscape.

The majority of education research, particularly equity-focused research, emphasizes urban contexts (Corbett, 2007). Yet, there are more than 8.9 million rural students in the United States; this is more than the total number of students in New York, Los Angeles, Chicago and the next 75 largest districts combined (Showalter et al., 2017). It is therefore essential to better understand how rural administrators characterize the policy challenges they experience and the ways in which increased support and adjustments to statewide policy could bolster learning improvement within their schools and districts.

Washington state has some of the most diverse rural districts in the country. For example, Washington's rural students are 33.5% minority and 9.8% are English Learners, making Washington's percentage of English Learners fourth highest in the country (Showalter et al., 2017). Additionally, according to Showalter et al., 56.3% of Washington's rural students are eligible for free or reduced priced lunches compared to the statewide average of approximately 43% (Washington State Office of the Superintendent of Public Instruction, 2018). While these are challenges that local schools and districts must address, broader state education agencies (SEAs) and state legislatures have gained power and political influence, rendering the role of the state crucial in meeting the needs of students in all schools (Kirst & Wirt, 2009).

Conceptual Framework

The conceptual framework for this study is drawn primarily from two literatures. First, to understand the instructional core of schools and districts, this study draws upon tenets of the leadership for learning framework. In addition, to investigate the ways in which local resources

are aligned to support instruction, this study draws upon resource identification and allocation literature.

To understand the learning improvement efforts taking place in participating schools and districts and the ways in which these efforts connect to administrators' long-term improvement agendas, this study draws upon the *Leadership for Learning* framework. This framework emphasizes (a) ensuring a focus on learning; (b) building professional communities that value learning; (c) engaging external environments that matter for learning; (d) acting strategically and sharing leadership to achieve learning goals; and (e) creating coherence and helping stakeholders understand how efforts are coherently linked (Knapp, Honig, Plecki, Portin, & Copland, 2014). As Knapp and colleagues stress, learning-focused leadership assumes that leaders require support while also providing support to others.

A key component of ensuring coherent learning-focused leadership within schools and districts is the process through which resources are aligned to learning-improvement goals. This is a multidimensional process involving specific goals and the allocation of fiscal and non-fiscal resources (such as money, staff, time, physical resources, families, and the community) to achieve those goals (Pan, Rudo, Schneider, & Smith-Hansen, 2003). Structuring time, staff, and programs to emphasize collective learning improvement priorities is a key component of school leadership work (Plecki, Alejano, Knapp, & Lochmiller, 2006). Leaders looking to enact a sustainable learning improvement agenda often view the distribution of resources as investing in that agenda over the long-term (Knapp et al., 2014). This study invited administrators to reflect on their learning-focused leadership work, the resources available to them to support these efforts, and the ways policy entities at the state level support or confound their learning improvement agendas.

State and local policy contexts influence actions that support leadership for learning (Knapp et al., 2014). Rural administrators must often juggle priorities to meet state and federal mandates while navigating local traditions (Alsbury & Whitaker, 2015; Howley, Pendarvis, & Woodrum, 2005). The power of state-level influence has continued to increase, particularly since No Child Left Behind, and the capacity of state legislatures and agencies to intercede in local schools is stronger than ever before (Kirst & Wirt, 2009). However, declining rural populations and local economies have diminished the influence of rural communities in public policy arenas (Nachtigal, 1995), and dominant culture does not value the rural experience (Budge, 2006). As a result, policymakers are often unaware of the realities of rural schooling, including the important role schools play in rural communities (Morton & Harmon, 2011). Considering the lack of rural education research and the decline of rural perspectives represented in education policy discourse, *this study was conducted to better understand what state-level education policy priorities successful rural administrators identify and how these priorities connect to their local school and district improvement agendas.*

Methodology

To identify a purposeful sample population of rural schools in Washington state, three of the state's nine educational service districts (ESDs) were selected to represent the state's diverse geography and local economies on both sides of the Cascade Mountain range. Next, schools

within these regions, designated as 'rural' by the National Center for Education Statistics were isolated using 2010 census locale codes (United States Department of Education, 2014). Finally, to identify school and district sites as candidates for a sample population, Washington State Achievement Index scores for each rural school in the three ESDs were analyzed. The Achievement Index is a composite of statewide standardized test scores, student growth in reading and math, and, for high schools, college and career readiness standards. Scores across the 2010-2011, 2011-2012, 2012-2013, and 2013-2014 academic years were analyzed for schools with a general upward trend. Jimerson (2005) notes the volatility of school ratings based on scores in small and rural schools, due to the potential impact of one or two scores on averages, so this study identified an overall upward trend as an indicator of general improvement.

Data for this study consisted of semi-structured interviews with seven principals, six superintendents, and one superintendent/principal, covering a total of eight schools across seven districts (ESD I: three schools in three districts; ESD II: two schools in two districts; ESD III: three schools in two districts). Study sites represented a range of elementary and secondary schools and also provided a range of diverse populations (from 17% to 96% nonwhite) and socioeconomic statuses (from 32% to 78% eligible for free or reduced-price lunches). In addition, 16 ESD leaders were interviewed, including the superintendents, assistant superintendents, and content specialists for each of the three regional offices. Interviews were conducted during the late 2014-2015 and early 2015-2016 school years. The majority of interviews took place in-person, and interview transcripts were analyzed using open and axial coding (Strauss & Corbin, 1998).

Semi-structured interviews covered administrators' learning improvement agendas, the individual communities' goals for students, and the challenges in meeting the expectations of communities and external stakeholders (e.g., state mandates). As conversations concluded, each administrator was asked what they would like legislators and policymakers in Olympia to consider regarding support for their school improvement work. The findings section represents a compilation of the strongest shared themes in administrators' responses. While this study represents the opinions of a community of individual practitioners, this is not a study that seeks to articulate an overarching rural education policy agenda, nor is this intended to claim a policy agenda for all rural administrators in Washington state. Agenda-setting is an active process (Kirst & Wirt, 2009), and this study supports that process by providing the shared experiences of educators working in a spectrum of Washington's rural communities. Indeed, engaging administrators from a variety of rural contexts was a critical strategy for increasing generalizability to other rural contexts (Stake, 2000).

Findings

Compliance Workloads

Administrators in rural districts perform many duties that would be spread across multiple positions in larger districts (Jones & Howley, 2009; Renihan & Noonan, 2012). These duties include interpreting, implementing, and reporting for all state and federally mandated requirements. Nearly each participant expressed frustration by acknowledging that state agencies were under a lot of pressure and emphasizing that the pressure was simply being pushed "down"

to districts. As one superintendent summarized, "Olympia irritates me." A principal from the same district continued, "the heads of [the state education agency] departments don't communicate with one another at all. The head of every department believes that their work is the most important work." In their experience, "we get 6 or 8 things every day from random departments requesting this be done now because nobody's talking." In many small districts, the central office is composed of the superintendent and perhaps modest administrative support, so principals and superintendents are processing all district-level information. Even in districts with a handful of central office employees, superintendents stressed that they struggled to keep pace with fulfilling the same requirements as larger districts which have more robust and specialized staff rosters. To that end, all participants were keen to offer that they are eager for more streamlined dissemination of information to districts and streamlined reporting procedures.

Principals, superintendents, and ESD administrators all spoke about unfunded mandates and, in particular, what they view as the "over regulation" of schools. Principals and superintendents emphasized that keeping up with compliance gets in the way of being in classrooms with teachers and students. As a superintendent stated, compliance efforts take "focus off of deeper, maybe more meaningful, work." While this is not likely an opinion exclusive to rural administrators, these administrators articulated feeling pulled away from meaningful learning-focused school improvement work. While speaking about efforts to protect teachers' time by buffering outside demands, a principal asked, "Who is being a filter for us?" The small and rural nature of these districts requires administrators to be creative and flexible in fulfilling their multiple roles, and, in turn, they are eager for more flexibility and support from stakeholders in Olympia to ensure that they are fulfilling their external obligations and providing students with an excellent education.

Developing Professional Capacity

In addition to hiring the best possible candidates to teach in their schools, rural administrators emphasized the importance of professional development for their teachers, and their own professional learning, as central to providing students with high quality education. This research was conducted as the state was introducing new teacher evaluation models and during Common Core State Standards implementation. These developments required much training for both teachers and administrators and highlighted the importance of the ESDs as conduits for professional learning, particularly for districts that do not have a large central office staff, teachers on special assignment, or content coaches.

Local administrators indicated that ESD support was instrumental in providing compliance-related trainings, such as training for evaluations, and they also emphasized that training from ESD content specialists was key to realizing their learning improvement agendas. However, despite the importance of their partnerships with their ESDs, the majority of administrators expressed that their teachers needed more support. For example, some schools are several hours by car from their ESD office, and in the most remote sites, there are no substitutes to provide coverage for teachers who are willing to travel to the ESD. When possible, administrators sought to bring ESD content specialists to their district, but to do this, they also must compensate the ESD for staff travel time. While superintendents and principals were grateful for ESD trainings, facilitating the kind of job-embedded support that studies suggest most improves teachers'

professional practice (e.g., Supovitz, 2006) requires a significant financial investment from local districts if it is even possible for these schools.

ESD content specialists and administrators across the three regions recognized that many of their districts could not afford extensive contracts and noted the other ways they work to support their colleagues. For example, ESD administrators discussed actively seeking grants to drive resources to small districts, facilitating connections between districts with similar needs or priorities, and, in some cases, providing as much as they could for districts free of charge. In these ways, ESDs worked to stretch the two-or-three free days that are available to all districts.

Participants were clear in their call for targeted supports that would expand professional learning and facilitate professional collaboration. ESD administrators emphasized that increased funding for providing professional development and coaching would allow them to shift away from a fee-for-service model and to deepen existing partnerships with local districts. Principals and superintendents emphasized that increased funding for professional learning would allow them to systematically tackle priorities in their schools. Finally, principals of the most remote schools indicated that targeted support for remote schools, such as funds supporting ESD staff travel to schools and teacher travel to summer professional development seminars, would help close significant professional learning gaps.

Rural Realities

Finally, participants expressed their desire for their colleagues in Olympia to be more aware of and responsive to the realities facing rural schools. Across these rural schools, superintendents and principals discussed their efforts to recruit, retain, and build the capacity of great teachers by investing in human capital. In doing so, many principals and superintendents devoted significant energy to locating promising teachers. Some focused on growing their local base of teachers by encouraging paraprofessionals and community members to pursue teaching credentials, while one high school principal discussed their efforts to conduct national searches when vacancies arose, with the desire to court teachers from rural areas in other states.

Administrators also seek to recruit those new to rural areas by helping new hires find housing and highlighting the overall benefits of working in a small, tightknit community. Benefits include building "deep and lasting" relationships with families, working in schools that serve as "the heart of the community," and engaging with students throughout their schooling. Though, as a principal pointed out, "you have to keep people long enough … for them to begin to feel that." Retaining rural educators is often a challenge (Morton & Harmon, 2011), and rural educator salaries are often not competitive with those offered to their more metropolitan peers (Nichols, 2004). Participants from across regions, including five local administrators and five ESD administrators, expressed frustration at their districts' inability to offer competitive salaries that successfully recruit and retain the best teachers. As an ESD assistant superintendent lamented, "it's just terrible inequity that where the poverty and remoteness is the greatest, the likelihood that those teachers are remaining for any length of time is small." At the time of the interviews, Washington had a standardized base allocation for teacher salaries, and local districts funded additional pay, known as time, responsibility, and incentive (TRI) pay through property tax levies. This created salary inequity in rural regions. For example, one district included in the

study paid for two days of TRI pay, while a larger district less than 30 miles away, compensated teachers for over 20 days of TRI pay. New teacher compensation support is part of the state's response to the state Supreme Court's 2012 McCleary Decision to hold the state accountable for fully funding public education. This increased support is anticipated to close such salary gaps, and districts are expected to experience the full effects of the new teacher salary support during the 2019-2020 school year (Vela, 2018).

More equitable salary supports do not address other challenges experienced by these rural schools. For example, administrators from four local districts reported challenges with recruiting highly qualified teachers and called for more flexibility in determining the highly-qualified status of teachers. Several ESD participants joined the local administrators in their call for opening up more creative pathways to teacher certification and, in particular, for making additional secondary endorsements for current teachers far less burdensome to obtain.

Certification challenges were the most widespread example of administrators' frustrations with specific decisions made in the state capital. Additional examples ranged from inadequate transportation funding to the location of special services, with most administrators emphasizing that the state education agency, in particular, was making progress in providing them with helpful resources. Yet, as one principal noted, "you can't webinar everything," and administrators from each region lamented their distance from key policymakers. Many participants were active in statewide professional associations and several had hosted elected and appointed policymakers in their schools; despite these engagement efforts, administrators challenged what they viewed as a general lack of rural representation in legislative and policymaking circles in Olympia. Administrators were eager for targeted supports for rural school improvement at the state level, such as a clearinghouse for promising strategies for rural districts and rural serving ESDs, and a greater rural lens through which legislative and policy bodies considered initiatives.

Discussion and Conclusion

Each administrator described the challenges they faced when identifying and allocating fiscal and non-fiscal resources (staff, time, physical resources, and the community) to support learning-focused leadership in their work contexts (Pan et al. 2003). Most significant among the challenges listed was the ability to devote time to the web of compliance-related activities required by the state. As a principal summarized, time and energy are "probably our two most precious resources." Additionally, a superintendent reported that he thought it was necessary to hire an assistant superintendent to help with compliance measures but wouldn't pursue creating a position because the community wouldn't understand the degree to which these efforts occupied his time. Similarly, the ability of administrators to support the professional learning of their colleagues and themselves is a key component of learning-focused leadership (Knapp et al. 2014), but due to time constraints, fiscal constraints and, in some cases, lack of certificated substitute staff, these leaders struggled to provide sustainable and coherent professional growth opportunities for educators.

Participants discussed how far removed they felt policymakers and legislators were from schools, especially rural schools. A principal articulated the challenge for rural school leaders by

explaining that they have to be "more knowledgeable" and "fight harder for resources" than their urban and suburban peers. Multiple administrators, many of whom had previously worked in urban or suburban communities, perceived a societal bias against rural communities, a mindset pervasive in Washington. To close the gap between rural schools and Olympia, an ESD administrator with significant experience working in diverse, high-poverty rural schools offered, "I think that all legislators need to go out and actually hang out in a rural school … to really see what challenges are present." This, they hoped, would challenge the assumptions made at "[the state education agency] or at the legislature … about broken systems."

Recent scholarship (e.g., Zuckerman, Wilcox, Schiller, & Durand, 2018) has explored the ability of rural schools to adapt to disruptive, externally-mandated policy innovations by locating the ideal intersection between place-based educational efforts (e.g., Budge, 2006) and standardized reforms. This approach to understanding the ways in which rural schools can successfully respond to new policy innovations helped these schools adapt to a frequently changing educational policy landscape. As evidenced by ESD partnerships with districts in implementing new teacher evaluation models, rural districts met such challenges and greatly benefited when this work was shared and given targeted support. Yet, as noted by the participants in this study, given the challenges of keeping pace with the many duties required of rural administrators, duties that would be spread across multiple roles in larger districts, additional flexibility and targeted supports would bolster rural administrators' ability to locally-implement future mandated policy innovations.

The administrators emphasized that policymakers may begin to recognize the creativity that goes into rural school leadership by developing a greater awareness of the challenges and successes occurring in rural schools. Ultimately, administrators advocated for some flexibility for meeting statewide mandates and targeted supports. In particular, the schools included in this study craved resources to bolster competitive recruitment and retention of teachers in their schools, many of which are high-need. Administrators were also eager for targeted supports that would enhance educators' professional capital through streamlined certification and secondary endorsement pathways and through targeted funds making sustained professional learning accessible. A number of participants were keen to point out that more money rarely solves all problems; nevertheless, it was evident that highly-targeted funds combined with a moderate amount of creative flexibility were desired for the improvement of student learning.

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About the Author

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Challenges and Opportunities in Student Teaching: A School District's Perspective

Dan Goldhaber, Cyrus Grout, Kim Harmon, Roddy Theobald

A growing literature investigates the importance of student teaching placements for teacher candidate development, but an important perspective that is largely missing from the existing literature is that of the school districts that host student teachers. In this paper, we describe the student teaching process from the perspective of Spokane Public Schools (SPS), highlighting the challenges associated with the student teacher placement process and several initiatives SPS has undertaken to improve student teaching experiences for teacher candidates.

Teachers can have profound effects on students. This is intuitively obvious, but it is also buttressed by a large amount of empirical research demonstrating teachers' influence on academic achievement and longer-term life outcomes, such as college-going behavior and labor market earnings.[1] Although evidence indicates that teachers tend to become more skilled with additional experience, particularly early in their careers (Rivkin et al., 2005; Rockoff, 2004), much of a teacher's ability appears to be predicted by their initial effectiveness when they enter the profession.[2] This points to the importance of understanding the processes affecting the preservice development of teacher candidates. An important component of traditional (college- and university-based) preservice teacher training, and the focus of this paper, is the student teaching process.

Student teaching is widely regarded by teachers, teacher education practitioners, and researchers as the key formative experience that preservice teachers have before entering the teacher labor market (Anderson & Stillman, 2013). Numerous qualitative studies document the importance of cooperating teachers and student teaching placements for teacher candidate development (e.g., Ganser, 2002; Graham, 2006; Zeichner, 2009; National Research Council, 2010; Clarke et al., 2014). The quantitative studies that connect student teaching experiences to teachers' in-service outcomes show that various aspects of those experiences do seem to matter. For example, Boyd et al. (2009) found that the degree of oversight exercised by teacher education programs (TEPs) over field experiences is positively associated with teacher value added during the first year of service.[3] Ronfeldt (2012, 2015) found that placing student teachers in higher functioning schools leads to better outcomes for those student teachers who enter the teaching profession in terms of retention and student achievement. Goldhaber, Krieg, and Theobald (2017) found that teachers tend to be more effective when their school's demographics are similar to those of the school where they completed their student teaching.

Recent evidence suggests that the person who serves as the mentor, or "cooperating teacher," also matters. For example, Matsko et al. (2018) found that teacher candidates feel better prepared when their cooperating teachers received better in-service performance ratings. Ronfeldt, Matsko, Nolan, and Reininger (2018) noted a relationship between cooperating teachers' observational ratings and their student teachers' observational ratings as first-year teachers. Finally, Goldhaber, Krieg, & Theobald (2018b) and Ronfeldt, Brockman, and Campbell (2018) found that the effectiveness of cooperating teachers predicts the effectiveness of student teachers who go on to teach themselves. It is possible that these findings reflect correlational, rather than causal, relationships. More competent teacher candidates, for instance, might obtain placements

with more competent cooperating teachers. But in a recent randomized controlled trial, Ronfeldt et al. (2018) provided some evidence that these relationships are indeed causal: teacher candidates randomly assigned to higher quality cooperating teachers reported receiving more and higher quality coaching during their student teaching internships.

In sum, the reports by student teachers along with the existing evidence linking student teaching and outcomes for in-service teachers demonstrate that where and with whom student teaching occurs likely matters a great deal for the development of teacher candidate competencies. Less evidence is available regarding the relationship between *how* student teaching is conducted and in-service outcomes. Darling-Hammond (2014) discussed the practices of seven exemplary TEPs, identifying "extensive and intensely supervised clinical work—tightly integrated with coursework—that allows candidates to learn from expert practice in schools that serve diverse students" (p. 550) as being critically important to effective teacher education. However, she also acknowledged that although "developing sites where state-of-the-art practice is the norm is a critical element of strong teacher education…it has been one of the most difficult" (p. 554).

One reason it is difficult to develop high-quality student teaching experiences is that TEPs have limited control over the student teaching process. Typically, TEPs define the duration of the practicum and clinical experience and have some influence over with whom student teachers are placed (Greenberg, Pomerance, & Walsh, 2011). But TEPs are constrained by the willingness of school districts and in-service teachers to take on the responsibility of mentoring a novice teacher. In a literature review on the participation of cooperating teachers in teacher education, Clarke, Triggs, and Nielsen (2014) noted that, "University and school-based selection policies for the most part do not include robust options for choosing the best possible mentors for student teachers," and that, "Attempts to make suitable matches become logistically challenging with very large numbers of student teachers who need to be placed annually" (p. 191). To the extent that TEPs have only limited control over the *where* and *with whom* aspects of student teaching, they are likely to have even less control over the *how* aspects of student teaching.

A qualitative study from Washington State illustrates how some of these challenges play out during the student teaching placement process (St. John, Goldhaber, Krieg, & Theobald, 2018). Specifically, this study documents considerable information asymmetries between TEPs and the districts and schools in which they place student teachers. For example, many programs do not know how specific cooperating teachers are selected by districts and schools, while districts and schools often feel as though they are not provided adequate information to make thoughtful matches between candidates and cooperating teachers.

Overall, the capacity of TEPs to improve student teaching is likely to be limited without the development of new kinds of relationships with the districts and cooperating teachers that host their teacher candidates (Darling-Hammond, 2014). It is remarkable, then, that the perspective of school districts has received relatively little attention in the literature. This is a significant gap given that school districts are (1) uniquely positioned to influence what the student teaching process looks like, and (2) have an interest in teacher candidates receiving the best possible training, while limiting the costs associated with their role in providing an important piece of that training.[4]

In this paper, we describe the student teaching process from the perspective of Spokane Public Schools (SPS), highlighting the challenges associated with the student teacher placement process and several initiatives SPS has undertaken to improve student teaching experiences for teacher candidates. To our knowledge, this is the first systematic effort *by a school district* to create a more purposeful structure around student teaching and to study the effects.

The Student Teaching Process in Spokane Public Schools: Then and Now

Process Prior to SPS Reforms

In SPS, as recently as the 2013–14 school year, the student teaching process was fairly ad-hoc and generally dictated by actions initiated by TEPs. The matching of student teachers to cooperating teachers was a decentralized process that revolved around school- and teacher-level connections to TEPs. For example, a TEP field placement coordinator might contact a school principal (or other administrator) he or she had worked with in the past to arrange for cooperating teachers to host one or several student teachers at the principal's school. A student teacher's placement would be finalized by notifying central administration and by the student teacher submitting a basic application to the district and clearing a background check. At the district level, SPS did not systematically track student teacher placements, seek to influence the placement and mentorship process, or take steps to assess the performance of its cooperating teachers.

SPS's (formerly) hands-off approach to student teaching does appear to be fairly typical. As reported in St. John et al. (2018), in Washington State, districts differ in terms of whether the process is coordinated at the district level by a human resources staff member or at the school level by a principal. Each TEP contacted by the authors reported encountering both types of arrangements, indicating that district-level and school-level student teacher placement procedures are commonplace.

Drawbacks of a Decentralized Placement Process

One consequence of a decentralized placement process is that it places school principals at the center of the decision-making process. Principals are in a good position to know which teachers have the capacity to host a student teacher, both in terms of their mentoring skills and existing personal obligations. The downside is that principals are tasked with fielding calls from TEPs' field placement officers. In a district like SPS, which hosts a large number of student teachers from multiple TEPs, the administrative burden can become onerous. Prior to reforms, principals expressed their frustration to district administrators about serving as a primary point of contact to TEPs, the amount of correspondence that entailed, and lacking the time to manage student teaching placements in a satisfactory manner.

Having principals serve as the primary point of contact with TEPs also meant that SPS relied on them to serve as gatekeepers regarding the identification of suitable mentors. Because the district did not collect information on student teacher placements, it was not in a good position to assess how well its principals understood their gatekeeper role. There was a perception within SPS, however, that the gatekeeping process did not always perform well.[5] For example, the district

was aware of instances where student teachers experienced more of an assistant role in the classroom than that of a mentee. There was also a perception that in some cases, TEPs were just happy to get "a body" because it was so challenging for placement officers to identify enough teachers willing to serve as mentors in local school districts.

Under a decentralized placement process, the district also relied on principals to serve as gatekeepers regarding the number of student teachers hosted in a school. Here, too, the gatekeeping process appeared to break down in some cases. One SPS administrator expressed frustration with the fact that her child's school hosted such a large number of student teachers— so many, in fact, that her child had a student teacher in the classroom during every year of elementary school. Likewise, TEPs would not always communicate to the district which student teachers were placed in specific schools, thus leaving the district's HR department with incomplete knowledge of the staff working with students in the districts.

Reforms to the Student Teacher Placement Process

Starting in 2014–15, SPS took steps to centralize the placement process, partly in response to frustrations communicated by principals about serving as the primary point of contact for TEPs seeking placements. The district obtained lists of student teacher candidates from each TEP rather than allowing arrangements to be made directly with principals and teachers. The lists typically included suggestions or requests from TEPs for specific schools or teachers. When no placement suggestion was provided by the TEP, the district advertised the placement request to principals and teachers who fit the endorsement area and grade-level preferences of the student teacher.

The district's interest in improving student teaching grew when research on its hiring process found that, although 47% of the teachers hired by SPS had done their student teaching in the district, the predictive validity of its hiring rubrics did not perform any better for applicants who had done their student teaching in SPS (Goldhaber, Grout, & Huntington-Klein, 2017). The fact that SPS hires many of its former student teachers highlighted the importance of cultivating high-quality student teaching experiences within SPS. In addition, the lack of differential predictive validity for internal versus external student teacher applicants suggested that SPS might benefit from learning more about student teachers during their time with the district.

With these interests in mind, the district further centralized the placement process ahead of the 2016–17 school year by creating a list of teachers eligible to serve as cooperating teachers based on years of experience, demonstrated proficiency in high-leverage teaching competencies, and approval by the building principal. Cooperating teachers were recruited from this list of teachers.

Challenges Associated with Reform Implementation

In this section, we discuss the challenges faced by SPS associated with centralizing its student teacher placement process. To a large extent, these challenges were logistical. Placing student teachers requires a great deal of coordination between TEPs and school districts—entities that tend to lack any formal administrative relationship.[6] Such logistical challenges are magnified in SPS, which hosts a large number of student teachers from multiple programs and historically, has attempted to satisfy every placement request. Looking at student teacher placements in the 2015–

16 and 2016–17 school years in **Table 1**, we see that SPS hosted student teachers from more than six institutions. In 2016–17, the 188 student teachers hosted by SPS translated to roughly one student teacher for every nine classroom teachers, which is more than three times the rate of the average district in the state.7

Table 1. Student Teacher Placements in SPS by TEP, School Level

	2015–16	**2016–17**	**2017–18**
Teacher Education Program			
Eastern Washington	30	63	51
Gonzaga	54	49	36
Western Governors	2	7	17
Whitworth	45	59	50
Washington State	13	4	12
Other	4	6	11
School Level			
Elementary	103	136	105
Middle	15	9	25
High	30	43	39
Total	**148**	**188**	**177**

In its efforts to satisfy all placement requests, a perennial challenge for SPS has been simply finding enough cooperating teachers. There is little direct incentive to host a student teacher because cooperating teachers tend to receive little in the way of compensation from TEPs, and mentoring, when done properly, demands a substantial commitment of one's time and effort. Because teachers appropriately view their *own* students as their primary obligation, it is not surprising that many are reluctant to introduce a novice instructor into their classrooms. When teachers do agree to mentor a student teacher, it is often out of a sense of service to the profession and knowing that someone once did the same for them.

Coordinating the placement of student teachers has also proven to be challenging. As noted above, SPS centralized the student teacher placement process in part due to complaints from school principals weary of fielding calls from TEPs. Hence, the burden of managing the placement process has shifted to the district's central office, which now serves as a hub of communication between the TEPs' field placement officers and principals and teachers from across the district. For SPS, this role now occupies the majority of senior-level employee's time. In other words, it is costly.

There are several aspects of the student teacher placement process that exacerbate the difficulty of handling a large number of requests. One is that each TEP operates on a different schedule. Sources of schedule variation include various academic calendars (e.g., quarters vs. semesters) and various definitions of when, how long, and with whom student teacher practicums and

clinical experiences are to occur. For instance, some TEP programs require that practicums be completed with multiple cooperating teachers and the clinical experience with still a different cooperating teacher. Others require that the practicum and clinical experience be conducted with the same cooperating teacher. Depending on the program, practicums and clinical experiences may last anywhere between 6 and 12 weeks and may begin or end during either the fall, winter, or spring quarter. These factors may vary *within* TEPs, many of which operate both bachelor's and master's degree programs and accept new cohorts of students quarterly (rather than annually). This variation makes the ex-ante identification of teachers who might be willing to accept a student teacher in the coming school year more difficult because saying "yes" exposes a teacher to a wide variety of outcomes.

A second aspect that contributes to the challenge of placing student teachers is that there is no structure that has been formally agreed upon by SPS and the TEPs it works with regarding when and how placement requests will be submitted and processed. One consequence of this is that SPS receives a wide range of non-standardized placement requests. For instance, the time of year when placement requests are submitted varies across TEPs and the requests for subject areas and grade levels are often far more specific than the range of positions in which a teacher will ultimately earn an endorsement (e.g., "Grade 2" vs "Elementary Education" or "Biology" vs "Science").

More troubling, the lack of structure results in many student teacher placements falling through. For example, finding a cooperating teacher willing to host a student teacher often requires a week or more of e-mailing between the district-level coordinator and principals and teachers at the school level. In the meantime, a TEP is likely to be looking elsewhere in case a placement with SPS cannot be secured. It is not unusual for SPS to arrange a student teacher placement only to find that the TEP has already placed the student teacher in a different district.

Overall, the volume of student teacher placement requests fielded, the unstandardized nature of those requests, and unclear expectations about how requests will be handled all conspire to make the effective management of the student teaching process challenging. St. John et al. (2018) document similar frustrations with the placement process expressed by TEPs throughout the state.

Opportunities to Improve the Student Teaching Process

When SPS took steps to centralize its student teacher placement process, it did so with the broader intention of ultimately creating a more purposeful structure around student teaching. The centralized placement process has allowed SPS to collect better information about where student teachers are from, with whom they are placed, and whether they subsequently apply for a position and are hired by the district. This put SPS in a position to think about how to improve the placement process and the experiences of both cooperating teachers and student teachers once a student teacher enters the classroom. Here we describe some initiatives SPS is considering to improve student teaching, including some that it has already begun to pursue.

Streamlining the Student Teacher Placement Process

The challenges associated with managing the student teaching placement process identified above are related to: (1) the number of placement requests; (2) recruiting cooperating teachers; (3) the non-standardized nature of placement requests; and (4) the lack of an agreed-upon structure between SPS and the TEPs for how placement requests will be processed.

Managing the number of placement requests. SPS has historically attempted to satisfy all placement requests by TEPs. The district is considering reducing the burden this creates for some schools year after year by creating school "pods" that would take turns hosting students teachers for two years at a time, and then potentially having several years free from hosting student teachers. The district is also considering the number of individual "asks" the district will handle for each student teacher. After two attempted placements, the district would give the TEP the go-ahead to move to another district with that student teacher placement.

SPS could also seek to distribute placements across grade levels and subject areas to better align with anticipated hiring needs; for example, districts in Washington have historically faced much greater demand for math, science, and special education teachers than the number of teachers in these areas produced by in-state TEPs (Goldhaber, Krieg, Theobald, & Brown, 2015). Recent work has also found a close connection between the *specific subjects* in which districts host student teachers and their ability to hire teachers in those subjects (Goldhaber, Krieg, Naito, & Theobald, 2019), so SPS could seek to alleviate their own hiring demands by hosting more student teachers in these areas. In the specific case of SPS, this would likely mean accepting fewer student teachers in self-contained Grade K–6 positions and more student teachers in special education.

Recruiting cooperating teachers. In addition to the challenge of recruiting enough cooperating teachers, the logistics of communicating with teachers about their willingness to mentor a student teacher have proven difficult and time consuming. SPS has therefore introduced a survey to help facilitate placements in the 2019-20 school year. This survey is sent to all teachers approved by school principals to host a student teacher, and asks these teachers whether they do or do not want to host a student teacher; if they say no, they can explain why by choosing from a dropdown list. If a teacher says yes, they can choose from different commitment timelines: two semester practicums and one semester student teaching; three quarter practicums and one quarter student teaching; or one full year MIT student teacher. There is also a space for additional comments where teachers can provide further context for any of their responses.

Adding structure to the placement process. SPS has also developed a more formal process for receiving and processing placement requests that clarifies expectations for both SPS and TEPs. When submitting a request, TEPs are asked to refrain from searching for a placement elsewhere. In return, SPS will agree to find a placement, or indicate to the TEP that it was unable to do so, within a specified time frame. To process placement requests, SPS has developed forms in collaboration with TEPs that place student teachers in the district in Survey Monkey through which TEPs are asked to submit placement requests. The survey forms take advantage of checkbox menus to force standardized responses for each student teacher's desired grade levels

and subject areas. This will generate sets of placement request information that are identical in structure across TEPs and can be exported into a single spreadsheet.

Supporting Cooperating Teachers and Student Teachers

SPS has also developed training initiatives that will ultimately be available to all student teachers and cooperating teachers. The training provided to student teachers consists of three sessions. The first session lays out expectations for what the student teachers will experience during their time with the SPS and the standards they will be expected to adhere to. A second session, which is run by the Student Services department, provides training on restorative practices, an area of practice SPS has identified as underdeveloped among novice teachers. The final training session focuses on the process of entering the workforce, including discussion of résumé preparation and interviewing.

Cooperating teachers are given a 6-hour training session defining the districts' expectations for student teachers and cooperating teachers and covering topics identified by SPS as key to student teacher growth and success. These topics include benefits and strategies for collaboration and co-teaching, how to conduct observations and provide meaningful feedback, and how to write an effective letter of recommendation. All cooperating teachers are given an SPS Cooperating Teachers' Handbook containing materials from the training and any forms and templates that will be used in interacting with their student teacher.

Assessing Student Teacher Experiences

Finally, as part of the district's broader effort to track student teacher placements, SPS is developing a survey tool to assess student teacher experiences. The survey will be administered at the conclusion of a student teacher's clinical experience and will collect information about what worked well, what could be improved, and what their intentions are moving forward in terms of entering the teacher workforce. These survey data will help SPS better understand which cooperating teacher-student pairings tend to be most successful and design initiatives to continue improving the student teaching experience moving forward.

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Conclusion

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As hosts and future employers of student teachers, school districts have a clear stake in the student teaching process. Yet, in spite of the important role they play, the perspective of school districts has largely been missing from the literature around student teaching. In this paper, we addressed this gap in the literature by discussing challenges and opportunities in student teaching from the perspective of Spokane Public Schools.

The challenges identified by SPS center on the difficulty of recruiting enough qualified cooperating teachers and non-standardized placement procedures that result in a cumbersome matching process. These challenges mirror those described by TEPs in the literature (see, for instance, Clarke et al., 2014; St. John et al., 2018), suggesting that both school districts and TEPs would benefit from better-designed placement procedures. For its part, SPS is taking additional steps to manage the number of student teachers it places each year and has developed online

survey tools to facilitate the recruitment of cooperating teachers. SPS has also created more structure around the placement process to align expectations held by SPS and TEPs and streamline the handling of requests.

The ultimate impact of the district's training initiatives remains to be seen (because workforce outcomes have not yet been observed for candidates who have experienced these changes to the student teaching process), but initial feedback has been promising. Recent evidence from Lafferty (2018)—who identifies the lack of preparation and training provided to cooperating teachers as a persistent weakness in the training of teacher candidates—suggests that cooperating teachers who received *some* form of training for their role as a mentor provided higher-quality student teaching experiences than cooperating teachers who had not received any training.

A fundamental challenge in efforts to improve student teaching is that TEPs have no authority over what happens in the classrooms of public school districts. To achieve meaningful improvements in the quality of student teaching experiences, it may be necessary for school districts to provide more leadership in defining the student teaching experience. The extent to which other districts have taken an active role defining the student teaching process is unclear, but for SPS thus far, the efforts to improve student teaching described above have been seen by district leadership as a positive step toward improving the development of teacher candidates.

Notes

1. See, for instance, Aaronson, Barrow, and Sander (2007); Goldhaber and Hansen (2013); and Hanushek and Rivkin (2010) for estimates of the effects of teachers on student test scores, and Chamberlain (2013) and Chetty, Friedman, & Rockoff (2013) on the long-term impact of teachers.

2. Atteberry, Loeb, and Wyckoff (2013), for instance, found that differences in teacher effectiveness observable in teachers' first year of service tend to persist; the lowest performing novice teachers do not tend to "catch up" with their peers. Rivkin, Hanushek, and Kain (2005) found that following the initial years of service, teacher experience is unrelated to teacher effectiveness.

3. Three aspects of TEP oversight are included in this measure: whether cooperating teachers are required to have a minimum level of teaching experience, whether the TEP picks the cooperating teacher (as opposed to the K–12 school or the student teacher), and whether a TEP supervisor observes the student teacher at least five times. The average summative score on this measure (ranging between 0 and 3) reported by Boyd et al. (2009) is 0.95 (SD = 1.07).

4. These interests are magnified by the fact that many teachers are hired into the district in which they completed their student teaching. In an analysis of Washington State, Krieg, Theobald, and Goldhaber (2016) found that roughly 40% of teachers were hired by the school district where they were student teachers.

5. There was also a perception that in some cases, TEPs were just happy to get "a body" because it was so challenging for placement officers to identify enough teachers willing to serve as mentors in local school districts.

6. State code stipulates that all Washington TEPs maintain a field placement agreement with each school district in which student teachers are placed, but these agreements tend to address liability, not the student teaching process.

7. In the state of Washington, Goldhaber, Krieg, and Theobald (2018a) report that 3.1% of teachers host a student teacher in a typical school year.

8. Washington state code (RCW 28A.405.100) requires public educators to be evaluated using the state's TPEP system, which scores teachers on 8 criteria on a scale of 1 to 4 (SPS uses a Marzano-based rubric).

9. Excluded, for instance, were criteria such as "Organizing the Physical Layout of the Classroom," "Planning and Preparing for the Needs of All Students," and criteria related to promoting positive interactions with parents.

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Don't Forget the Mentor Teacher:
Reflections on a Preservice Mentor Development Program

Jill R. Heiney-Smith

University-based teacher education programs support their mentor teachers through a variety of resources and professional development, but generally lack a dedicated curriculum for preservice mentoring. This article summarizes a dissertation study designed to learn what kinds of resources, tools, trainings, and experiences would better support mentor teachers in preservice teacher education. The study is informed by social learning theories and empirical research on mentoring, including research on teacher induction and professional development. Mixed-methods data were collected in three bracketed sequential phases with a total sample of n = 199 mentor teachers. Results indicate that mentors have sophisticated expectations for their professional development and desire a blend of formats, collaboration, easily accessed resources, and tools to promote reflection.

This purpose of this article is to summarize a dissertation study that was defended and published on ProQuest in late 2018 (Heiney-Smith, 2018). As such, this summary will highlight each of the five chapters with a brief overview. Broadly speaking, this study was designed to see what happens when a field experience office in a university-based teacher education program develops and implements a mentoring curriculum specifically designed for preservice teacher mentors. Rather than a simple adaptation of available induction curricula, this curriculum was informed by previous program data and based upon empirical knowledge about preservice teaching. Further, this study examined how mentors perceived their own experience with the curriculum as a tool for improving their mentoring practice through professional development. This study featured two research questions:

1. What are the characteristics of an effective preservice mentoring development program?
2. What features of the curriculum did mentor teachers report developed or constrained their experience?

Significance

Effective teacher preparation is widely regarded as a critical component of student achievement. Standards-based reforms have further raised this bar, as new teachers must develop greater knowledge and pedagogical skills than ever before to help their students reach standard (Anderson & Stillman, 2013; Darling-Hammond, Wise, & Klein, 1999; Jaquith, et al. 2010). Even with the rise of alternative certification programs that place would-be teachers in a classroom with minimal training and support, the primary method of teacher preparation remains the mentored internship (Feiman-Nemser, 2012; Henning, Gut, & Beam, 2015). Teacher education programs (TEPs) design clinical field or internship experiences that will provide candidates with opportunities for observation and a gradual release of responsibility. Good TEPs value the critical role of the mentor teacher in the candidate's acquisition of knowledge and skills and develop systems to train and support the mentors in doing this work. However, there is a dearth of true curricula for preservice mentoring. TEPs are left to assemble the right combination

of basic programmatic information and requirements, state mandates for clinical experience, and professional development (PD) that engages mentors in this very human work. This supports Feiman-Nemser's (2001) findings that mentoring training tends to focus on classroom management, situational adjustment, emotional support, and school policies.

Context for the Study

This study emerged out of one teacher education program's efforts to take typical program data such as end-of-year mentor surveys, and build a curriculum that might make a meaningful contribution to the teacher education research base. The resulting three-phase study was grounded in sociocultural learning theories by Vygotsky (1978) and Lave and Wenger (1992). This theoretical framework was important context for the study, as the investigator's anecdotal observations from previous PD suggested that mentors need to participate in a community of practice in order to grow, much like their teacher-candidate counterparts.

Literature Review

The National Council for Accreditation of Teacher Education (NCATE, 2010) identified field experiences as one of the three aspects of teacher preparation likely to produce significant outcomes for students (p. 180). However, an initial literature review yielded very little research describing how preparation programs optimize the mentor-to-preservice teacher relationship through mentor teacher development. Accordingly, an expanded search for peer-reviewed articles published between 1985 and the present was reviewed in ERIC, Google Scholar, and JSTOR using key words, including, "mentor teacher," "preservice mentors," "cooperating teachers," "mentor development curricula," "student teaching," "field experiences," and combinations of all of these. When it became clear that there was limited alignment to the research questions, related literature on induction and teacher professional development was also examined.

The literature review surfaced the complex role that mentors play in balancing their responsibilities to their K-12 students, the teacher candidate, and their own desire to grow in their own professional practice. Researchers such as Anderson and Stillman (2013), Athanases (2008), Cobb and Bowers (1999), Darling-Hammond (2013), Feiman-Nemser (2012), Valencia, Martin, Place, and Grossman (2009), and Zeichner (2010) are commonly referenced contemporary thinkers in teacher education, and they each develop the complexity of preservice mentoring in some way. For example, Zeichner (2010) notes that mentors tend to model and support through availability and encouragement, while the study conducted by Valencia et al. (2009) found that without explicit support from the university, mentor teachers focused on classroom routines, classroom management, and planning individual lessons rather than a deep self-analysis of practice and pedagogy.

Design, Methodology, and Validity

This study used a two-dimensional mixed-methods sequential bracketed design (see Caracelli & Greene, 1993; Onwuegbuzie & Collins, 2007). Qualitative data in phases one ($n = 108$) and three ($n = 6$) were gathered using open-ended items after mentors participated in PD activities. Phase

three also included analysis of email correspondence and the investigator's field notes. The quantitative phase (2) included a survey of 85 mentor teachers with objective items aligned with topics found from the first qualitative phase. All data were collected from mentors who worked with both undergraduate and graduate preservice teachers in a university-based program across a variety of grade levels and subject areas.

The items for improving professional development for mentor teachers were devised from the qualitative analysis of exit slips from mentor events in Phase 1. Responses were recorded on an Excel spreadsheet producing 197 row entries, which were grouped by date according to when the development session occurred. Each row was identified with one of 40 codes, such as candidate expectations and collaboration with mentors. The codes with the highest frequency were used to develop questions regarding desired topics for PD in the Phase 2 survey.

Principles of effective survey research guided the development of the survey items (Arthur, Waring, Coe, & Hedges, 2012; Creswell, 2015; Fowler, 2009; Gall, Gall, & Borg, 2007; Vogt & Johnson, 2016). Although this study was not designed to make causal claims, the Cronbach's alpha reliability procedure in Statistical Package for the Social Sciences (SPSS) was conducted to strengthen reliability of the survey used in Phase 2. The Cronbach's alpha for the instrument used in Phase 2 was .839. Together, the items informed through analysis of exit cards, previously published reliable instruments, and the results of the Cronbach's alpha reliability procedure produced a valid measure of quantitative data.

Considerations for validity of qualitative data included the procedures of triangulation and bracketing (Creswell, 2013; Creswell, 2015; Richards & Morse, 2007; Sandelowski, 2003). Additionally, the qualitative methods used in the final phase of data collection (Phase 3) allowed the investigator to extract and describe common meaning for six individuals in their lived experience of mentoring (Creswell, 2013).

A Snapshot of the Curriculum

While this summary cannot detail the entire curriculum, a snapshot of the sequential PD events will illuminate the study's results. In Phase 1, mentors attended in-person PD events and gathered resources from the presenter's toolkit, with activities drawn from Lipton & Wellman's (2003) *Mentoring Matters*, resources on co-teaching from St. Cloud's University such as the "Co-Teaching Placemat", and discrete program handouts such as a timeline for gradual release of responsibility to solo teaching. Typically, the presentation format consisted of the investigator serving as the single facilitator in an interactive session of 1.5 to two hours in duration. In phase 2, mentors reported their preferences for PD topics in the Likert-scaled survey, and this data directly informed the structure and materials for phase 3. Following is a sample of one PD agenda from phase 3. Each PD in phase 3 was designed with this format: introductory or warm up activity, opportunity for sharing, and opportunity to engage with resources and apply them to the mentor's context.

Table 1
Snapshot of One Mentor PD in Phase 3.

Agenda item	Activity focus	Description of activity	Source
Introductory activity	How to move from being a "maestro" to a "mentor" as defined by Graham (2006).	Mentors completed a self-assessment (drawn from Graham, 2006) comparing mentor actions that promote rote mimicry (maestro) versus actions that promote true self-reflection by the teacher candidate (mentor).	Graham (2006)
Mentor sharing	Guided discussion: mentors share about their needs at this moment in mentoring.	Facilitator used resources such as the lesson debrief guide to promote discussion on topics such as providing feedback to a teacher candidate.	Radford (2017)
Resource sharing	Mentors engage with resources provided by facilitator and share application to their mentoring.	Facilitator prepared resources such as the instructional coaching handout and co-teaching worksheet.	Materials drawn from investigator's personal collection. Shown in appendix.

Summary of Results

The full dissertation (Heiney-Smith, 2018) presents the study results in sequential order from each phase, and directly related to each research question. This summary will focus on overall findings.

Research Question 1: What Are the Characteristics of an Effective Preservice Mentoring Development Program?

Results from qualitative data in phases 1 and 3 revealed that when articulating their needs for professional development on mentoring, preservice mentor teachers expected certain characteristics including flexibility and resources, effective presentation of material, and collaboration with other mentors. The three most important topics for PD included instruction on the co-teaching model, handout resources and easily accessed resources.

Research Question 2: What Features of the Curriculum Further Developed or Constrained each Mentor's Reported Experience?

The results for this question were largely drawn from qualitative data in phase 3, and the analysis surfaced four clear themes.

Theme 1: The Professional Development Presentation Should be Skillfully Planned and Delivered

One primary finding shows that mentors have sophistication regarding their mentoring needs. They are teachers themselves and they expect effective instruction, organization, and complex content in their professional development. Qualitative comments were both complimentary and constructive. For example, one mentor from wrote, "Collect mentor teacher questions at the start to guide presentation" while another stated, "Would have liked to hear more voices: don't wait for volunteers, ask us." Others praised the organization, delivery, and tone of the presentation at each event.

Theme 2: PD Activities Should Balance Opportunities for Mentor Self-Reflection with Tools that Promote Dialogue with the Mentee

Results showed that easily accessed resources and tools that promoted self-reflection during PD will develop the mentor experience, while obtuse or hard to access tools (such as confusion with how to use a particular tool during the PD) were a constraint.

Theme 3: The PD Should Incorporate Ample Time for Peer Sharing and Discussion

Results from phases 1 and 3 showed that ample opportunity for peer dialogue are an important feature of an effective mentor curriculum. It was difficult to quantify this feature due to comments that mixed terms such as "collaboration" and "discuss" with other features of the curriculum. However, 100% of participants wrote something about collaboration with their peers on both exit cards for phase 3.

Theme 4: The Facilitator Should Provide Availability Between and After PD Sessions to Further Mentor Growth

Finally, three (50%) of the mentor teachers who participated in the intensive PD in phase 3 communicated with the investigator between sessions. This result suggests that the mentor experience will be developed by the presenter's availability between PD sessions.

Discussion and Recommendations

Results from the bracketed qualitative-quantitative-qualitative phases suggest that effective preservice mentor PD has many discrete characteristics. Additionally, this study confirmed other areas of research on mentoring and PD discovered during the literature review. Levin's (2003) study suggested that mentoring makes the mentor more metacognitive, which is supported in this study primarily with qualitative data. One mentor wrote, "It was good for self-reflection" and

another wrote, "The PDs helped me to reflect on being a mentor in real time" (Heiney-Smith, 2018, see Table 12). Odell's (2006) finding that mentors may choose to work with candidates for small benefits was also confirmed with these results. The exit cards from PDs in phase 1 contained multiple comments showing appreciation for the food. In phase 3, the investigator observed that effective and organized presentations, along with small items of appreciation such as a university folder for materials or a canvas totebag, communicated respect and value to the mentor. These small gestures are an important part of the mentor's overall experience with the university and may make a difference in the mentor's choice to volunteer again.

Table 2 summarizes the primary recommendations regarding suggested topics and curriculum implementation (please see the dissertation for full discussion along with related curricular materials presented in the Appendix). Additionally, the curriculum snapshot from the previous section reflects one of the most critical findings: the PD should incorporate ample time for peer sharing and discussion. The data showed that mentors appreciated a framework and shared language to help them analyze and discuss their own practice.

Table 2: Summary of recommendations and discussion.

Recommendation	Discussion
Suggested topics for PD	Results from the bracketed qualitative-quantitative-qualitative phases suggest that mentor PD should focus on a) communication, b) collaboration, c) easily accessed resources, and d) scaffolding (specifically, sequencing experiences for student teachers and understanding the needs of the student teachers).
Format and Delivery of the Presentation	Overall, the positive comments about the organization, format, and effectiveness of the presentation demonstrate that a skillfully planned and delivered presentation will develop the mentor experience. Reported constraints appeared idiosyncratic based on personal preference.
PD Activities Should Balance Opportunities for Mentor Self-Reflection With Tools That Promote Dialogue With the Mentee.	Select resources that are topical, timely, easy to use, and helpful for self-reflection.

Limitations of the Study

One limitation of the study is that it required self-selection to participate, and participants were likely already engaged in the work of mentoring. This was true for the larger sample in phase one, and even more true of the small group of six mentors in phase three, who chose to participate in at least two more face-to-face sessions beyond what was generally expected of mentors. While the study was not intended to draw causal conclusions (Robinson, Levin,

Thomas, Pituch, & Vaughn, 2007), it needed to be carefully designed and analyzed in order to capture common lived experiences and needs of preservice mentor teachers. Finally, because the investigator was a key facilitator at the PD events, it was necessary to explicitly consider and detail the relationship to the research (Creswell, 2013).

Conclusion

There was an important theme that the investigator identified but was unable to substantiate with direct evidence from the multiple sources of data. This theme is that *the university must foster a culture of respect and humility to encourage mentor growth.* This theme can be inferred from the many positive comments throughout all of the qualitative data, and especially by comments found in two of the exit cards from the PD in phase 1.

The investigator made an effort to show respect, humility, and partnership with mentor teachers at each event. This was reciprocated in person but was not effectively recorded as evidence for the study. However, this may explain the generally positive perceptions by mentors in phase 3 as well as their quick willingness to sign the institutional review board (IRB) forms. Finally, all of the participants showed up for the second session on a dark Thursday night in December after teaching and supporting their mentees all day. This demonstrates that an effective mentoring program is possible, and will benefit preservice mentors and teacher candidates alike.

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W. E. B. Du Bois's Data Portraits: Visualizing Black America

Pat Cummings

I once was at a book store with a graphic designer friend who remarked that we made our decision to buy after just a few seconds of quickly thumbing through a new book. We were drawn to the layout, snippets of content and other automatic elements that influenced and nudged our purchasing decision. With that in mind, I challenge my educational research colleagues to thumb through and *not* buy this book, W. E. B. Du Bois's Data Portraits: Visualizing Black America (edited by W Battle-Baptiste, B Rusert. 144 pp., Princeton Architectural Press, $20).

Most know W. E. B. Du Bois as a prolific author, early sociologist, co-founder of the NAACP, and prominent African American historian. But how many know him as a pioneer of data visualization? Before Excel, Adobe Illustrator, or Tableau, ink, watercolors and graphite were used to create graphs and charts representing data displays. Du Bois and his students at Atlanta University may be the rightful pioneers of modern data graphics, not just to display information but as a form of infographic activism.

Du Bois would have celebrated his 150th birthday this month. He was born a few years after the Emancipation Proclamation and raised by a single mother. He went to Fisk University in Tennessee then studied at Harvard under William James (the father of modern psychology). Du Bois was the first man of color to receive a PhD. At the end of the 19th century, Du Bois was teaching at Atlanta University, a historically black college, where he started working on an exhibit with his students for the 1889 World's Fair in Paris (the year the Eiffel Tower made its debut). The goal of the project was to capture the contributions of African Americans to the economy and society just 35 years after slavery was abolished. The exhibit told the story of slave decedents through 63 meticulously drawn ink and watercolor charts.

On the cover page, DuBois states: "The problem with the twentieth century is the problem of the color-line." He then proceeds to educate us with a series of infographics that are equally artistic and statistically revelatory. Fair participants were accustomed to derogatory ethnological expositions, also called "human zoos," that accentuated the difference between Europeans of Western civilization and non-European peoples by portraying the latter as primitive, lacking culture, and inferior. In this context, Du Bois wanted to provide information on the lives and culture of African Americans that would challenge this prejudice with empirical data.

Throughout Du Bois's exhibit, he presents post-slavery progress with images depicting African Americans as entrepreneurs, students, and home owners. The charts look as if they were created by a computer even though they were produced by hand as remarkable works of art. The charts are organized in two sections: "The Georgia Negro," which had the largest black-to-white ratio of any state, and "A Series of Statistical Charts Illustrating the Conditions of the Descendants of Former African Slaves Now in Residence in the United States of America." Topics such as illiteracy, income, expenditures of families, history of slavery, migration patterns, economic class, number of negro teachers in public schools, and even controversial topics such as race amalgamation trends in the South. The methods of display are multifaceted, including a range of

visual strategies such as geographic maps, circle and spiral diagrams, bar and area charts, and complex tables and grids, all surprisingly modern and worthy of framing as works of art.

This is very much the 1900 version of "black lives," using statistics and data to forward social justice. The data is used to understand the human condition, telling stories to connect and uplift. Du Bois states:

> *The American Negro deserves study or the great end of advancing the cause of science in general. No such opportunity to watch and measure the history and development of a great race of men ever presented itself to the scholars of a modern nation.*

Therefore, the project was not just a report of scientific visualizations but also a targeted attempt to influence the world's elite in acknowledging the accomplishments and values of African Americans emerging from post-civil-war tyranny.

Du Bois's inspiring voice from the past shows new ways of communicating and visualizing ideas that are as prescient today as they were a century ago. This should be a mandatory volume for the professional libraries of those who tell stories with data.

About the Author

Pat Cummings, now retired, worked in the area of assessment and research in the Peninsula, Federal Way, and Tacoma School Districts.