

# School-University Partnerships

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THEMED ISSUE: TEACHING IN TIMES OF UNCERTAINTY

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## WHAT IT MEANS TO BE A PROFESSIONAL DEVELOPMENT SCHOOL

### Essential 1: A Comprehensive Mission

*A professional development school (PDS) is a learning community guided by a comprehensive, articulated mission that is broader than the goals of any single partner, and that aims to advance equity, antiracism, and social justice within and among schools, colleges/universities, and their respective community and professional partners.*

### Essential 2: Clinical Preparation

*A PDS embraces the preparation of educators through clinical practice.*

### Essential 3: Professional Learning and Leading

*A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.*

### Essential 4: Reflection and Innovation

*A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.*

### Essential 5: Research and Results

*A PDS is a community that engages in collaborative research and participates in the public sharing of results in a variety of outlets.*

### Essential 6: Articulated Agreements

*A PDS requires intentionally evolving written articulated agreement(s) that delineate the commitments, expectations, roles, and responsibilities of all involved.*

### Essential 7: Shared Governance Structures

*A PDS is built upon shared, sustainable governance structures that promote collaboration, foster reflection, and honor and value all participants' voices.*

### Essential 8: Boundary Spanning Roles

*A PDS creates space for, advocates for, and supports college/university and P-12 faculty to operate in well-defined, boundary-spanning roles that transcend institutional settings.*

### Essential 9: Resources and Recognition

*A PDS provides dedicated and shared resources and establishes traditions to recognize, enhance, celebrate, and sustain the work of partners and the partnership.*

## Table of Contents

Introduction to the SUP Themed Issue: Teaching in times of uncertainty.....	1
<i>Sara R. Helfrich, Sara L. Hartman, and Marcy Keifer Kennedy</i>	
Pathways to partnership: How a differentiated approach sustained PDS efforts during times of uncertainty.....	14
<i>Elizabeth Levine Brown, Lois Groth, Audra Parker, Charlene O'Brien, Eric Laurits, Christopher Latham, Renee Berman, Francoise Casablanca, and Josh Douds</i>	
Dynamic changes: Analyzing the teacher candidate and mentor teacher relationship during continuous learning and COVID-19.....	27
<i>Lucas Shivers, Cynthia Emery, and Suzanne Porath</i>	
Coaching cubed: Mentor teachers' perspectives on the exponential nature of supporting teacher candidates during uncertain times.....	40
<i>Mark Helmsing, Audra Parker, Holly Glaser, Kristien Zenkov, and Andrew Porter</i>	
Virtually connected: Utilizing case studies to support mentor teachers in times of uncertainty.....	60
<i>John Henning, Christine Grabowski, and James Falco</i>	
Mentoring through uncertain times.....	77
<i>Crystal Marshall-Krauss, Eva Garin, and Dawn Nowlin</i>	
Adapting partnership work in times of uncertainty: A case from a rural school-university partnership during the COVID-19 pandemic.....	91
<i>David Virtue, Mary Jane McIlwain, Chad M. Cunningham, Jamie Harrison, Kathleen Sacco, Robbie Thomas, and Krystal Thomas</i>	
Virtual teaching and learning: Navigating uncharted waters through school-university partnerships.....	106
<i>Robin Johnson, Rochelle Cortino, Kimberly Moore, and Carmen Tejada-Delgado</i>	

The development of scenario-based simulation modules  
for online field-based experiences in a school-university  
partnership.....126  
*Robin Johnson, David Squires, and Carmen Tejada-Delgado*

Becoming:  
The story of first year teachers' student teaching in  
times of uncertainty and its impact on their future  
teaching.....145  
*Nisreen Daoud, Bradley Conrad, and Hoyun Cho*

## **Introduction to the Themed Issue: Teaching in Times of Uncertainty**

Sara R. Helfrich, Sara L. Hartman, Marcy Keifer Kennedy

Ohio University

**Abstract:** This article is the introduction that provides context for the themed issue of *School-University Partnerships* entitled Teaching in Times of Uncertainty

### **NAPDS Nine Essential Addressed:**

- Essential 2: Clinical Preparation – A PDS embraces the preparation of educators through clinical practice.
- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.
- Essential 6: Articulation Agreements – A PDS requires intentionally evolving written articulated agreement(s) that delineate the commitments, expectations, roles, and responsibilities of all involved.
- Essential 7: Shared Governance Structures – A PDS is built upon shared, sustainable governance structures that promote collaboration, foster reflection, and honor and value all participants' voices.
- Essential 8: Boundary-Spanning Roles – A PDS creates space for, advocates for, and supports college/university and P–12 faculty to operate in well-defined, boundary-spanning roles that transcend institutional settings.

Despite the challenges created by the COVID-19 pandemic, Professional Development Schools (PDS) illuminate the power of preparing teachers through intentional partnerships that focus on clinical practice that is grounded in reflection, open to innovation, and committed to sharing the results of research and practice (NAPDS, 2021). With the Nine Essentials (NAPDS, 2021) providing a strong foundation for this special issue, *Teaching in Times of Uncertainty* presents nine articles focused on lessons learned during the COVID-19 pandemic, as well as research that informs PDS work as we continue to move through the pandemic and beyond.

Since the March 2020 shutdown, teacher preparation programs and their PK-12 school partners have encountered unprecedented challenges. From state-mandated lockdowns that necessitated solely virtual learning to hybrid and in-person learning, the only constant for schools has been the changing nature of day-to-day school experiences. Uncertainty remains a constant state, and PK-12 schools and their university partners are expected to adjust instructional delivery plans with little to no warning. Adding to these challenges are substitute teacher shortages (Patterson, 2021), transportation issues (Lieberman, 2021), significant barriers to broadband services (Showalter et al., 2019), and ongoing conflicts related to masking and vaccination policies (Blad, 2021; Turner, 2021). The toll that the pandemic has taken on the physical and mental health of PK-12 children, college students, and educators is also now becoming apparent (Hartman, 2021; Ozamiz-Etxebarria et al., 2021; Talevi et al., 2020). The unpredictability of these ongoing challenges makes effectively preparing teacher candidates a daunting task.

At our institution, Ohio University, located in rural southeastern Ohio, the effects of the pandemic are at times overwhelming. We enroll approximately 1500 undergraduate teacher candidates and 200 graduate teacher candidates per year in programs that include licensure from preschool through high school and in Special Education and Reading Education. Being located in a rural setting makes arranging clinical experiences for this many teacher candidates an arduous task, one that is made possible only by embracing a Professional Development School model. When the pandemic began, some of our PDS schools switched to solely online teaching platforms, while others delivered instructional supplies via buses and through school pick-ups. With PDS partnerships in place, our teacher candidates' clinical experiences continued. In the fall of 2020, our institution decided to require that all early field experiences (any clinical experience prior to the professional internship) remain virtual, no matter the modality of the school partner. Consequently, during the 2020-21 academic year, only professional internships were conducted in person. Thanks to ongoing PDS partnerships, early field experiences were able to continue virtually. Research with mentor teachers revealed that it was only due to our established PDS partnerships that they agreed to continue hosting teacher candidates virtually once their classrooms were back in person (Hartman, 2021). In the 2021-22 academic year, teacher candidates at all levels were excited to return to in-person clinical experiences. However, with the Omicron variant sweeping the globe, PK-12 schools and their university partners are once again plunged into a heightened time of uncertainty, making the research implications and the innovative practices presented in this special issue incredibly timely. With the pandemic far from over, an understanding of practices that worked and the long-term effects on teacher preparation are of the utmost importance for the schools and universities who continue to work together to prepare the next generation of educators.

Most importantly, the broader focus of *Teaching in Times of Uncertainty*, while rooted in recent events, underscores the importance of adapting to the world as it changes, no matter the specific event. While how we teach and the ways in which individuals within the PDS interact

may change over time, relationships between members of the PDS must be established and maintained. Therefore, it is important that we, as educators, share what we have done during times of uncertainty in order to maintain relationships, take care of one another, learn, and continue to positively impact all students' learning. The nine articles described next highlight the innovation and resilience found in PDS partnerships, as well as the long-term challenges that we must be ready to encounter as we continue to navigate the COVID-19 pandemic.

### **Introduction to the Articles**

The articles within the *Teaching in Times of Uncertainty* special issue revolve around several themes that span the educational trajectory of a teacher candidate: support for newly entering teacher candidates; the essential role of mentoring; innovation within the PDS; and thinking ahead to their future teaching experiences.

### **Support for Newly Entering Candidates**

The first article in this special issue features the work of three schools in the Mason Elementary PDS partnership pathway. Authors Brown et al. describe how PDS schools supported the teacher candidates who entered the partnership during the pandemic. When the schools transitioned to online learning, continuing to support student learning while also being mindful of teacher candidates' development were key concerns for the partnerships. Importantly, the schools were sites of well-developed and carefully sustained PDS partnerships, which allowed challenges to be quickly identified and strategies for minimizing the impact of lost in-person classroom time to be implemented quickly. Through quality video resources and through observations of virtual teaching, high quality field experiences were maintained.

### **The Essential Role of Mentoring**

In the next four articles in this special issue, the essential role of mentoring was examined. Mentoring is an essential component of PDS partnership work, one that forms the foundation of strong clinical practice in teacher preparation (NAPDS, 2021). In the second article of the special issue, authors Shivers et al. used phenomenology to examine the mentor-mentee relationship between three pairs of mentor teachers and their teacher candidates. The study revealed that the mentor teacher-teacher candidate relationship was impacted in several ways, relating to the emotional impact, changing communication modalities, developing bi-directional support systems, and the need for ongoing support for navigating online learning.

Continuing an examination of mentoring, in the third article, authors Helmsing et al. examined the ways that mentor teachers' practices changed as a result of the pandemic. Their findings revealed that mentor teachers' practices related to mentoring shifted as a result of the pandemic. Additionally, their conceptions and beliefs about mentoring shifted beyond what would be considered traditionally received notions of mentoring. Based on their findings, the authors call for a reconceptualization of how the practice of mentoring is represented within teacher education programs.

Supporting clinical teacher mentors within the virtual environment was the focus of the fourth article. Authors Henning et al. highlighted the use of case studies to teach mentoring concepts and discover strategies for mentoring in the virtual learning environments that the COVID-19 pandemic brought about. The work discussed in this article may be useful for others working to build clinical capacity through professional development opportunities and can be applied within both traditional and virtual learning environments.



In the fifth article, authors Marshall-Krauss et al. investigated effective mentoring practices during virtual schooling between their university, an Historically Black College and University (HBCU), and their partnering school district. By examining these practices, the authors found that mentoring virtually during the pandemic could be as or more effective than mentoring in a face to face environment, but there are considerations to be made for teacher candidates' development of specific teaching skills, the relationship between teacher candidates and mentor teachers, communication, use of technology, and overall PDS structure.

### **Innovation Within the PDS**

The next three articles in this special issue showcase the innovation that PDS work often leads to and the ability to capitalize on it during the pandemic. With the sudden shift to a virtual teaching and learning environment, teacher educators had to make innovative adjustments to their programming. In the sixth article, Virtue et al.'s work sought to answer the following questions: How do school and university partners adapt their work to meet the needs of students, teachers, teacher candidates, university faculty, and the community? What does partnership work in a context of change and adaptation mean to individual partners? From their investigation into changes made to their community-embedded summer programming, three themes emerged: inspiration, interconnections, and innovation. By grounding their partnership work in strong theoretical and conceptual commitments to community funds of knowledge, social constructivism, the Nine Essentials framework for PDS partnerships, and social justice, the authors and their PDS partners were able to persist through the challenges faced during the pandemic.

In the seventh article, Johnson, Cortino et al. shared how they used the shift to virtual teaching and learning as an opportunity to provide a unique summer experience for their non-traditional teacher education students and the P-12 students they serve within their partnership. The redesign and implementation of their program was able to successfully meet the needs of a virtual and online teaching and learning environment. The authors reported stakeholders – boundary spanners, teacher educators, and elementary and secondary students – all benefitted from this unique experience and that engaging in this virtual learning experience afforded students opportunities they may not otherwise have had.

With the change to a virtual context for the field-based experiences courses, Johnson, Squires et al. recognized that improved field-based instructional content was needed. In the eighth article of this special issue, the authors described a collaboration between faculty and field-based educators that created scenario-based simulation modules for field experiences. The goal was to assist teacher candidates in preparing for deeper, practical engagement within a remote learning experience. The findings are relevant for other educator preparation programs who seek to improve the quality of virtual field experiences through collaborative PDS structures.

### **Thinking Ahead**

As we continue to see the COVID-19 pandemic disrupt teaching and learning, we must consider what we can come to expect to be the pandemic's continued impact. Implications suggest that we will need to continue to offer support to teacher candidates and new teachers in the years to come. To that end, the ninth and final article focuses on the story of first year teachers. Daoud et al. shared the story of two teachers whose professional internship was disrupted by the COVID-19 pandemic and the impact not completing this experience had on

them during their first year of teaching in their own classrooms. Through this work, they asserted the need for continued mentorship to support novice teachers. The findings revealed that the impact of the COVID-19 pandemic are likely to be felt for years to come. With this knowledge, educator preparation programs must give serious consideration to how novice teachers are being supported once they complete their program, and school districts must re-evaluate the adequacy of supports, resources, and mentorship they provide.

### **Final Thoughts**

If there is one connection that the articles in *Teaching in Times of Uncertainty* reveal, it is that the PDS model has been essential in supporting quality clinical experiences during the COVID-19 pandemic. Despite the unprecedented situations created by the pandemic, PDS partnerships created structures that not only allowed clinical experiences to continue but also permitted innovations to thrive. From supporting teacher candidates who were new to field experiences, to improving mentoring relationships, to creating a space for innovative practices, this special issue highlights the power of the PDS model. As we look to the future, we hope that educator preparation programs and their PK-12 partners will find value in the research and practices presented in *Teaching in Times of Uncertainty*.

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## **Pathways to Partnership: How a Differentiated Approach Sustained PDS Efforts During Times of Uncertainty**

Elizabeth Levine Brown<sup>1</sup>, Lois Groth<sup>1</sup>, Audra Parker<sup>1</sup>, Charlene O'Brien<sup>1</sup>, Eric Laurits<sup>1</sup>,  
Christopher Latham<sup>2</sup>, Renee Berman<sup>2</sup>, Francoise Casablanca<sup>2</sup>, and Josh Douds<sup>2</sup>

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**Abstract:** The unexpected switch to online teaching and learning caught school stakeholders (teachers, teacher educators, administrators, teacher candidates, PK-12 students, families) off guard. PDS partnerships were uniquely situated to navigate the challenges of 2020 given their shared goals of supporting PK-12 learning, teacher preparation, and professional development. This work highlights how three schools, representative of each Mason Elementary PDS partnership pathway, navigated the pandemic and subsequent transition to online learning. Key benefits to the pathway model provided schools with clarity in their roles which resulted in (1) focused support on teacher candidates in either field work or internship, (2) consistent modes and timing of communication, and (3) clear expectations for mentorship. It was the strong cadre of mentors, program graduates and faculty in place across schools which allowed for a continued presence of university-based teacher educators in schools even in remote capacities. Implications for practice and PDS research are discussed.

**Keywords:** PDS, school-university partnerships, elementary, teacher education

### **NAPDS Nine Essentials Addressed:**

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- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.

## **Pathways to Partnership: How a Differentiated Approach Sustained PDS Efforts During Times of Uncertainty**

The COVID-19 global pandemic profoundly shifted lives and disrupted American schooling. During these tempestuous times, educators found themselves dealing with physical, financial and emotional uncertainty. Schools and universities were not immune to the tumult. The unexpected switch to online teaching and learning caught all stakeholders (teachers, teacher educators, administrators, teacher candidates, PK-12 students, families) off guard. Educators found themselves with new responsibilities as they supported children and families experiencing isolation at home, trauma, family illness or death, and families' limited access to technology.

Despite these unprecedented times, schools and universities continued the work of teacher preparation. Professional Development School (PDS) partnerships in particular were uniquely situated to navigate the challenges of 2020 given their shared goals of supporting PK-12 learning, teacher preparation, and professional development. In the sections that follow, we highlight how three schools representative of each Mason Elementary PDS partnership pathway navigated the COVID-19 pandemic and subsequent transition to online learning. Across the vignettes, we describe how the pathways to partnership model (Parker et al., 2016) provided schools with clarity in their roles, which resulted in focused support of teacher candidates in either field work or internship.

### **Situating Pathways to Partnership in Clinical Teacher Preparation and the PDS Nine Essentials**

The turn toward clinical teacher preparation in teacher education is rooted in the 2010 NCATE Blue Ribbon Panel Report which outlined a set of design principles intended to resituate the field as central to learning to teach. Since that release, a host of national organizations and state/national policy groups have advocated for the thoughtful integration of clinical experiences into all aspects of teacher preparation (AACTE, 2018; CAEP, 2013; NCATE, 2010). At the heart of clinical teacher preparation are robust school university partnerships. In fact, the Clinical Practice Commission describes school university partnerships as “the vehicle by which the vision of renewing teacher preparation through clinical practice becomes operational” (AACTE, 2018, p. 22).

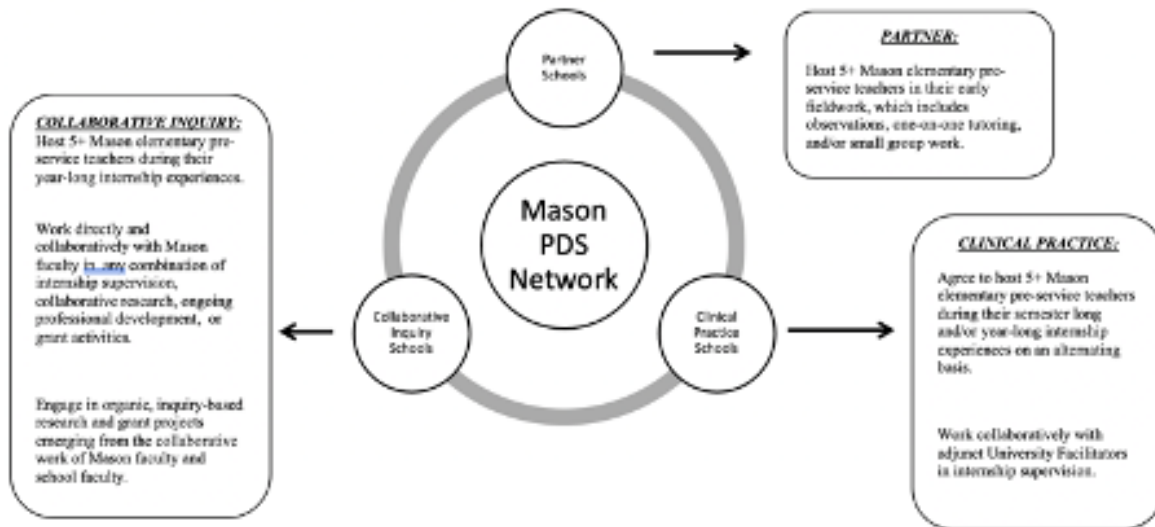
PDSs represent one of many routes to partnership between PK-12 schools and universities. PDS partnerships, rooted in the work of the Holmes group (1986, 1990), adhere to a four-pronged philosophy: positively impacting PK-12 student learning, inquiry, shared engagement in stakeholder professional development, and clinical teacher preparation. These tenets are accomplished through consideration and application of the Nine Essentials (2021). Recently revised, the Nine Essentials provide a framework to guide stakeholders in creating sustainable school-university partnerships and include the following principles: a comprehensive mission rooted in advancing equity, clinical preparation, professional learning and leading, reflection and innovation, research and results, articulated agreements, shared governance structures, and boundary-spanning roles (2021).

The Mason Elementary PDS Program has a 20+ year history of school university partnerships. While the structure of the partnerships has evolved over the years, the most recent iteration resulted in the current Pathways to Partnership model (Parsons et al., 2017). In 2016, program faculty, in collaboration with school-based teacher educators and district leaders, redesigned the partnership structure to be more responsive to the varied contextual needs that

arise in any given academic year. The resulting Pathways to Partnership model created three ‘paths’ for collaboration among stakeholders: *partner schools*, *clinical practice schools*, and *collaborative inquiry schools* (Parker et al., 2016). These paths are necessarily fluid, meaning schools can change the nature of their engagement as circumstances at the school, university or both dictate. *Partner* schools host early field hours students and on-site courses, *Clinical Practice* schools and *Collaborative Inquiry* sites work exclusively with teacher candidates in their final semester long or yearlong internship, with the *Collaborative Inquiry* having a dedicated full time faculty member supporting the partnership efforts and shared inquiry (see Figure 1). Over time, stakeholders acknowledge the power of the Nine Essentials (NAPDS, 2021) as a guiding framework for a differentiated approach to partnerships, rather than a one-size-fits-all approach.

**Figure 1**

*Mason’s Pathways to Partnership Model*



Within the framework of the Pathways to Partnership model, the Mason Elementary PDS Network functions as a multi-district collaborative of over 25 clinical field sites. Because the Pathways to Partnership model allows for varied levels of engagement (partner, clinical practice, and collaborative inquiry sites), the network can be responsive to the evolving needs of teachers, students, and teacher candidates. While it changes necessarily from year to year, on average, the Mason Network has 4 collaborative inquiry sites, 9-10 clinical practice sites, and 12-15 partnership sites. It is within this network that we situate our clinical teacher education efforts for two teacher preparation programs: a post graduate MEd/Bachelors to Accelerated Masters plus licensure program and our newly created BSEd in Elementary Education licensure program. In all, we have approximately 100-150 students placed in cohorts at various stages in the program--all with required field experiences in partner schools culminating in a capstone final yearlong or semester-long internship in clinical practice or collaborative inquiry sites.



### **Illustrations of Pathways to Partnership in Action**

In the section that follows, we highlight how three schools representative of each Mason Elementary PDS partnership pathway navigated the COVID-19 pandemic and subsequent transition to online learning. Constructed as vignettes, we demonstrate how navigating a tumultuous year highlighted unexpected strengths and elevated underappreciated benefits of the Pathways to Partnership model. We begin by briefly introducing each school partner and then shift to a description of the Pathways to Partnership benefit illustrated in the vignette. Pseudonyms are used for each site.

#### **Green Elementary School (Partnership Site): Benefit 1: Maintaining and strengthening established relationships**

Across spring 2020 and fall 2021 semesters, new yearlong cohorts (15-20 students) entered our Mason Elementary program taking three courses (*spring: Elementary Methods, Foundations of Education, and Child Development*) and two courses (*fall: Foundations of Education, and Child Development*) respectively. Along with course requirements, these YL students participated in an early field experience (15 per class) at our partnership site, Green Elementary School. Green serves a diverse population (55% Hispanic, 20% Black, 10% Asian and 10% Caucasian) with over 50% of students speaking English as a second language and 70% of students receiving free or reduced lunch. As a school that receives Title I funds, it is defined by its diverse population, strong sense of community and continuous desire to develop lifelong learners by providing constant access and opportunity for all students.

Typically, our Green ES partnership site supports instruction of one university class taught on site. Site-based course instruction, a hallmark of the PDS partnership, creates opportunities for candidate observation and site facilitator and university facilitator co-teaching. This allows the course instructor (university facilitator) to partner with in-service teachers, staff and leaders with specialization and experience in course content who apply that course material to everyday practice. Similarly, teacher candidates engage with school staff for observation outside their weekly course, inclusive of participation in meetings and school-based activities. This embeds candidates within the school ecology and allows them to engage as stakeholders in the expected outcomes of the partnership. As a result, these onsite courses and clinical field experiences connect candidates with other key school-based personnel (e.g., parent liaison, school psychologist, home-visit specialist). Green Elementary school members are intimately involved in all aspects of the course, including application of course content and actualization of that content in required assignments.

In Spring 2020, schools and universities made the sudden and necessary switch to online learning as a result of the global pandemic. Given our teacher candidates' immersion in site-based course instruction and their extensive field requirements, it quickly became clear that significant alterations would be needed. Because teacher candidates were in their first semester in the program, we were also cognizant of the need to support teacher candidates' acquisition of the foundational content and pedagogical knowledge. Similarly, we had to acknowledge the tremendous shifts in K-12 schools and support Green ES in navigating this new online sphere of education. Working as a team, course instructors and school-based partners collaborated to alter each of the three courses and brainstormed ideas for modifying assignments and course experiences in order to ensure teacher candidates gained the essential knowledge needed to succeed in the program and as future teachers. Moreover, Green ES needed assistance in

accessing resources and free online materials to support their educational delivery models and inform teachers' development of high-quality online pedagogies.

Several key benefits unfolded because of *maintaining and strengthening established relationships* between Green ES and Mason (Parker et al., 2020). For instance, through building upon the expertise of the site facilitator, one benefit was the identification of course topics most impacted by the loss of access to 'real-time' classroom experiences. Another benefit was the overwhelming response from our Green ES observation mentor teachers, leaders, and key personnel (i.e., parent liaison, technology director) to engage as guest lecturers and co-instructors in our ELED courses. In these guest lecturer and co-instructor roles, Green ES faculty and staff joined online synchronous class sessions focused specifically on content relevant to both the course objectives and emerging outcomes of the pandemic (e.g., discussions of classroom management, teacher language, the special education referral process, working with English Language Learners and connecting students from low economic households to technology for distance learning) as well as opened their virtual classroom walls for observation.

Two, we facilitated field experiences through use of quality video resources (Teaching Channel (<https://www.teachingchannel.com/>) and Atlas (<https://atlas.nbpts.org/cases/>)) and through observations of virtual teaching. Videos created opportunities to witness, pause, reflect, and discuss elementary methods and management in action. Our observation mentor teachers, when guest lecturing or coteaching, remarked on the professional development they received from also viewing and reflecting on these videos. Our Green ES observation mentor teachers offered candidates to join them virtually in their classrooms for virtual field experiences. Reflection for both teacher candidates and observation teachers expanded from the discourse created from these virtual field opportunities and resources to promote high-quality online teaching was researched and shared. For example, teacher candidates introduced Green ES staff to the online teaching workshop created by a Mason faculty member (<https://www.theresawills.com/>) to strategize for online activity supports in the classroom. These opportunities scaffolded teacher candidates' understanding of the content online as well as supported the professional growth of our Green ES partnership staff, mimicking what they would have experienced if engaged in site-based instruction.

Three, through our authentic, mutually beneficial relationship, Green ES asked for Mason's support in considering how to access free, online resources for their families and students. For example, the university facilitator (or site-based course instructor) was able to facilitate finding a low-cost solution for obtaining technology access for families in the community as well as support strategies to engage families in their children's online learning by connecting them with free resources (e.g., <https://www.learningkeepsgoing.org/>). Additionally, teacher candidates supported these partnership site needs through their research and shared insights into online free resources to support literacy instruction (e.g., Epic Books (<https://www.getepic.com>); Raz Kids ([www.raz-kids.com](http://www.raz-kids.com)), and math (e.g., Zearn ([www.zearn.org](http://www.zearn.org))).

Because of the initial trust and further maintenance of the mutually beneficial partnership between Green Elementary and Mason, more innovative online instruction developed, which created a robust online PDS learning community from day one. And in true PDS partnership, all stakeholders learned from each other.

## **Central Elementary (Clinical Practice Site): Benefit 2: Listening to and learning from partners**

Central Elementary has a long history of partnership with the Mason Elementary PDS Network. With new leadership at the school level and in the university facilitator role, the events of Spring 2020 onward highlighted the power of the Pathways to Partnership model for creating opportunities to listen and learn from our partners, engage in boundary spanning, and elicit responsive innovations. Central Elementary School is a PreK-6 school serving a diverse population of 800 students (13% White, 14% Asian, 68% Hispanic, 3% Multi-ethnic, 1.5% Black), of which 26% received ESOL services, 14% receive Special Education Services, and 72% receive Free or Reduced Lunch. Central Elementary is a Clinical Practice site providing year long and semester long internship placements for graduate students and is growing their cadre of school-based teacher educators across grade levels K-6. In Fall 2020, as a new cohort of yearlong interns excitedly began their clinical practice experience at Central Elementary amid a global pandemic, school leadership was working to minimize the uncertainties of teaching in a virtual learning environment for school staff.

The teaching landscape from Spring 2020 through Spring 2021 was an ongoing response to the national pandemic and resulted in schools rethinking not only how to support teachers as they provided responsive instruction for students, but also how to support and provide a strong clinical teaching experience for teacher candidates. This PDS partnership seized the opportunity to adapt practices, with the goal of providing experiences for teacher candidates consistent with the in-person internships of the past. This adaptive spirit spurred a collaborative effort within the partnership to provide continuity of classroom instruction and innovative professional development opportunities for teachers, teacher candidates, and the University Facilitator, all while empowering teacher candidates to reflect and contribute as partners in their clinical practice experience. The reciprocal relationship within this partnership allowed the work of each participant to inform the other's work, ultimately blurring the walls between the school-based and university-based teacher educators as new processes were developed.

For example, school-based leaders and mentor teachers helped the university facilitator understand that the shift to online learning did not translate smoothly to the traditional view of the internship timeline and expectations. This was the year for the university partner to listen and learn, as the school-based educators took the lead in developing new processes and practices as a clinical practice site in response to school needs.

In the beginning of Fall 2020, school-based leaders offered an honest assessment of the additional professional development requirements along with uncertainties classroom teachers were confronting and advocated on their behalf, suggesting flexibility in typical beginning-of-the-year, school-based PDS events. The university facilitator delayed the initial meeting and solicited input from mentor teachers and teacher candidates for optimal times for scheduling meetings as well as suggestions for content topics applicable to online learning for the biweekly seminars. The university facilitator further responded by offering time for additional individual support to teacher candidates and new mentor teachers during the semester as needed. This adjustment allowed the mentor teacher and teacher candidate more time to develop their relationship with one another and establish their classroom community, as they became more comfortable teaching in a virtual environment. The shared decision making about seminars and meeting times became an ongoing practice for the year.

As the school district continued to respond to state mandates for social distancing and classroom safety, communication about the changes became more frequent. School-based

leadership extended an invitation to the university facilitator (teacher candidates were included as staff members) to attend all virtual staff meetings and ad hoc “office hours,” understanding the need for all partners to have consistent information. The university facilitator received current information along with school staff, heard authentic concerns, questions, and clarifications between staff members and school leadership, and learned first-hand how the updates might affect the teacher candidate’s experience. This seamless communication allowed for responsive versus reactive communication between school and university partners and timely adjustments for routine interactions, such as lesson observations, virtual classroom visits, and teacher candidate assignments that involved collaborative work.

An important assignment, a series of Guided Observations, is structured to collaboratively study high leverage practices. It is modeled after Central Elementary School’s collaborative learning visits, a form of professional development for grade level teams implemented at this site. After content about the high leverage practice is presented in a seminar, teacher candidates and the university facilitator schedule to observe three to four individual teachers in a lesson using a structured guide. After each lesson, they reflect as a group, create a list of best practices noticed in the observation, and then, teacher candidates apply these best practices as they plan and teach a subsequent lesson on their own. Videos of the lesson are shared and reflected on with teacher candidates, mentors, and the university facilitator during a seminar. When access and time to observe in multiple classrooms for this assignment became a challenge in early fall, teacher candidates and mentor teachers developed a protocol for the virtual environment. In the modified assignment, content on the teaching practice was presented in a seminar; however, teacher candidates individually observed in their own virtual classroom or another on their grade level team. They reflected, created a list of best practices they noticed, and planned and taught a lesson. Teacher candidates uploaded videos on GoReact and partnered with another teacher candidate to provide feedback on the lesson video, replicating the elements of the assignment typically done in person.

In any clinical practice site, face-to-face teaching and building relationships in a physical classroom are the foundation of teacher preparation. When mentor teachers and teacher candidates shifted to teaching in virtual classrooms last spring, community building, student engagement, instruction, and assessment were contained in digital screens, chat boxes, breakout rooms, and Google classrooms. Weekly planning for four days of synchronous instruction and one day of asynchronous instruction required extra preparation time as teachers and teacher candidates learned and developed online content and coordinated instruction across grade level teams. During virtual seminars and individual zoom meetings, the university facilitator listened to teacher candidates share how positive they felt as they learned about and creatively used new instructional resources. They also shared their feelings about the challenges of full days teaching on a screen. Until February or March 2021, teacher candidates, mentor teachers, and the university facilitator had spent months without the opportunity of meeting one another in person. The lack of face-to-face interaction seemed to wear on all partners. As a way to respond to this need, the university facilitator began each seminar and phone chat with a wellness check. In seminars the *grounding* was often an interactive slide or visual to prompt the check-in and start a conversation about social emotional well-being. These check-ins built community and facilitated conversation between partners as they supported one another through a shared experience.

As we transitioned to the independent teaching phase in spring 2021, the pandemic restrictions disrupted the typical gradual release of the classroom to the teacher candidate. During spring 2021 the school district phased re-entry into the building for face-to-face learning

based on grade level. As teacher candidates prepared to start their independent teaching, there was a pause. Anticipating these challenges, school-based leaders, in collaboration with mentor teachers, presented an adaptation of the independent teaching schedule set by the university for the university facilitator's consideration. Mentor teachers re-entered classrooms to model classroom set up and to establish routines and procedures for students in face-to-face learning. Teacher candidates returned to school buildings to gain this valuable in person teaching experience. In four of the six placements, mentor teachers were remaining virtual, generating a complication for the teacher candidate's independent teaching. Teacher candidates were thoughtfully placed in a classroom on their grade level, with an experienced teacher who previously served as a mentor teacher. This provided an opportunity for teacher candidates to teach students in-person for the first time in a year, using familiar curriculum and with a mentor teacher familiar with the expectations. The school district implemented a concurrent model, with virtual students learning simultaneously with in-person students. By the end of the independent teaching phase, all interns were able to successfully complete required teaching hours and have in-person teaching experiences.

Though the PDS Clinical Practice site at Central Elementary School had to reimagine instructional delivery and support of teacher candidates due to non-school factors, teacher candidates learned generative practices they will take to their first year of teaching regardless of the learning environment. This partnership has developed strong clinical practice experiences, trusting relationships between partners, adaptive processes with teacher candidates' growth in mind, and provided an optimistic outlook in spite of the uncertainties this past year posed for all participants. These attributes will continue to support effective instruction for students and strong clinical preparation for teacher candidates.

### **Davidson Elementary (Collaborative Inquiry Site): Benefit 3: Rekindling, re-forming, and rethinking relationships**

Davidson Elementary is a PK-6 school with a diverse student population of 750 students (40% White, 30% Hispanic, 15% Asian and 15% other) where 30% of the students receive ESOL services, 14% receive Special Education services, and 33% receive Free or Reduced Lunch. During its five-year tenure as a Collaborative Inquiry PDS, there have been four different Assistant Principals, two different Principals, and four different Site Facilitators. Davidson began its partnership with Mason as a Partner Site in Spring 2016. At the end of that initial spring, they hosted a pair of classes onsite, taught collaboratively by two Mason faculty, with concurrent field experience in the kindergarten and first grade classes (Parker et al., 2019). Starting in Fall 2016, Davidson transitioned to a Collaborative Inquiry Site. During the four years prior to Fall 2020, the PDS model in general, and specifically the collaborative inquiry pathway, fostered a climate of inquiry at Davidson. The kindergarten team engaged annually in collaborative action research with at least one teacher candidate and the university facilitator, who is a full-time literacy faculty member. Mitchell et al. (2009) contend that this type of action research "focuses on creating climates of inquiry in communities of practice, often with different stakeholders functioning as co-researchers" (p. 345). On-site course instruction continued and expanded through the four-year time frame as well. During their four year partnership, Davidson hired fourteen Mason Elementary Education program graduates.

Fall semester 2020 instruction at Davidson was fully virtual. Teacher candidates began attending virtual meetings with their mentor teachers and other school personnel two weeks prior to the first day of classes for the students. The school held virtual back to school meet and greets

and in-person, drive-by laptop and school supply pickups. The teacher candidates were included in these events, providing them with crucial opportunities to meet many of their students and the students' families face-to-face.

Typically, teacher candidates completed their fall placements at Davidson with one mentor teacher. Decisions about spring placements were deferred until early December when input from the teacher candidates, the mentor teachers, and the university facilitator was used to establish plans for spring placements. Most of the time spring placements were completed with a mentor teacher at a different grade level from fall placements, with an exception of two year-long placements with the same mentor teacher occurring across four years. The spring 2021 semester saw every intern changing placements and an influx of new mentor teachers at Davidson, all of whom were recent Mason program graduates. Although new to mentoring, familiarity with the existing program served this group well and assisted in adjusting the negativity and noise surrounding online instruction as well as the insecurity of not knowing when there would be a return to face-to-face instruction. Rekindling the relationships with program graduates at our PDS sites tends to be a cyclical process as they garner three years of teaching experience and decide to become mentor teachers in the program from which they graduated. Reforming the relationships is necessary as the former graduate students have now become the school-based educators, transitioning from mentee to mentor. Their role with the university facilitator also changes as they are no longer students of that faculty member and are seen more as peers in their common role of mentoring teacher candidates and supporting the development of the PDS.

Throughout spring semester, the elementary students attended school in various formats - either all synchronous online, two days per week face-to-face and the other two online, or all four days face-to-face (Monday was asynchronous for all students). Teachers as well as teacher candidates were responsible for teaching the face-to-face and online classes concurrently. The new mentor teachers brought fresh eyes and new ideas to the mentor-mentee relationship. Their flexible thinking enabled mentor teachers and the facilitator to reimagine ways to support teacher candidates. Examples of these revised relationships include a mentor teacher who remained online while the teacher candidate was in the classroom, as both taught the entire class (online and face-to-face) concurrently. A pair of interns at the same grade level shared the teaching load across two classes, one that included mostly online learners and the other with a majority of face-to-face learners. In the absence of available face-to-face mentors, this configuration enabled both teacher candidates to have robust face-to-face teaching experiences.

Maintaining an inquiry-based approach to instruction and pedagogy development has long been a core tenant of the Mason Elementary Education preparatory programs (Groth & Morrison, 2020). An unexpected yet very welcome benefit of the number of Mason graduates now serving as mentors in 2020-21 was the opportunity to explore the building of their "virtual toolkit" alongside a teacher candidate through a mutual process of inquiry and discovery. Candidates and classroom teachers were truly exploring new strategies and tools together, providing the candidate with an increased sense of ownership and intention over their teaching craft and the teacher with an opportunity to model responsive choices for adjusting their teaching craft. Just as Ravich (2014) suggests, questions about their pedagogy grew organically based on their prior instruction as well as the new instructional landscape provided for them, building on the foundation of inquiry built at Mason. All stakeholders could speak and engage with a common dialogue and shared target outcome.

For this collaborative inquiry site hosting yearlong teacher candidates in their final placement and supported by a university faculty member, existing relationships were a key factor in navigating the 2020-2021 school year. New mentor teachers' familiarity with the program and expectations was a crucial time saver and allowed all stakeholders to modify expectations swiftly. Adding new mentors strengthened the cadre of university-based teacher educators at this PDS. These new mentors brought an openness to rethinking mentoring relationships, enabling teacher candidates to successfully complete their internship and more importantly, preparing them to be effective and flexible classroom teachers.

### **Moving Forward: Implications of Our Pathway, Benefits for Practice, and Future Partnership**

The responsive capacity of the Mason Elementary PDS Network's Pathways to Partnership in the midst of the pandemic met the many needs of stakeholders in times of uncertainty. Because of relationships built and sustained over time through a differentiated partnership structure, stakeholders ran towards each other, rather than away during a time of crisis. Through reflection on these vignettes, we now recognize the role of the Pathways to Partnership model as a simultaneously stable, yet fluid, framework for our PDS stakeholders.

As the work of teaching and teacher education moved forward amid a pandemic, the existing structures in the pathways to partnership model supported stakeholders with 1) articulated shared roles for school and university-based teacher educators, 2) consistent modes and timing of communication, and 3) clear expectations for mentorship. Continued collaboration increased the knowledge-base of university faculty with regards to online teaching, which they could incorporate into their university courses. Similarly, the PDS partnership supported school-based faculty in leveraging access to online-teaching as well as access to resources. Teacher candidates were continuously supported in their field work or internships by the fluid adjustments the pathway model enabled as school-based and university needs changed. Notably, it was the strong cadre of mentors, program graduates and faculty in place across schools in the partnership network which allowed for a continued presence of university-based teacher educators in schools, even in remote capacities.

Partnership is powerful when executed with shared governance, flexibility and trust. Communication remains central to the authenticity and efficacy of partnership and with regards to how utilization of the Pathways to Partnership model unfolds. Because the Pathways to Partnership model was intentionally designed with flexibility and differentiation at its core, the model naturally supported necessary shifts resulting from a year of uncertainties. The ebb and flow of these responsive adjustments were driven by the needs and input of our school-based partners and candidates. Ultimately, we recognized that partnership can be revised, reshaped, and re-visioned in many ways moving forward. One model of a pathway doesn't fit all school partners, clinical practice and collaborative inquiry sites. Even within each pathway and each school site we need to be flexible and responsive.

Despite the unprecedented situation of a pandemic, our school and university partnerships kept the mutually beneficial work of teacher preparation, teacher professional development, PK-6 student learning, and shared inquiry moving forward. How that work looked varied across pathways, within pathways, and even within individual school sites. Although the model set the stage for framing these partnerships, it was stakeholders responding to events in real time, informed by existing rich relationships and mutual trust that ultimately shaped how these school-university partnerships navigated inordinately challenging times.

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## **Dynamic Changes: Analyzing the Teacher Candidate and Mentor Teacher Relationship During Continuous Learning and COVID-19**

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**Abstract:** This phenomenological study of teaching in times of uncertainty focuses on the central question: How was the relationship between teacher candidates and their mentor teachers affected by remote learning during the COVID-19 pandemic? Interview data of three mentor teacher/teacher candidate pairs suggests the COVID-19 crisis impacted the mentor teacher and teacher candidate relationship and the teaching and learning situation in a variety of ways including: 1) Cultivating emotional agility in personal, family, and professional spheres; 2) Navigating constant changes in modes of communication channels; 3) Developing reciprocal support; and 4) Evolving professional learning to support teachers during distance learning.

**Key words:** teacher candidate, mentor teacher, COVID-19

### **NAPDS Nine Essentials Addressed:**

- Essential 2: Clinical Preparation – A PDS embraces the preparation of educators through clinical practice.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.

## **Dynamic Changes: Analyzing the Teacher candidate and Mentor Teacher Relationship During Continuous Learning and COVID-19**

The onset of the COVID-19 pandemic, stay-at-home orders and remote learning abruptly transformed the education world; especially for the mentor teacher and teacher candidate relationship when they were forced to teach in times of uncertainty. Districts and universities stepped in to help stabilize situations for students, families, and communities; yet the long-term extent of the pandemic's human, social and learning impacts continues to unfold. The temporary nature and quick implementation transformed the entire mentor-mentee relationship. PDS partnerships commit to the preparation of future educators, even in pandemics where both mentor teachers and teacher candidates embraced engagement strategies in the sudden digital transition to remote learning.

This study of teaching in times of uncertainty outlines dramatic implications, particularly for the teacher preparation. We seek to answer the central research question: How was the relationship between teacher candidates and their mentor teachers affected by remote learning during the COVID-19 pandemic in spring 2020? This project notes the PDS priority of shared commitment to innovative and reflective practice by all participants.

### **Background and Rationale**

In the education sector, mentor teachers and teacher candidates were forced to rethink relational change, student engagement and communication channels in the face of coronavirus, continuous/remote learning, increased technology reliance and immediate mental wellness concerns. The systemic, operational, and strategic challenges related to COVID-19 tested the limits of educators' capabilities. When the dust settled and educators took stock of the reckoning, the teacher candidates and mentor teachers were forced to take strategic steps to restore capacity and strength to serve students.

### **Literature Review**

The student teaching experience serves as a capstone of a new teacher's sequence of formal post-secondary education. The internship can shape the entire trajectory of a teaching profession (Tabachnick & Zeichner, 1984; Torrez & Krebs, 2012; Wexler, 2020); and it is vital to build a positive relationship of positive influence from the mentor teacher (Anderson, 2007). Yet, in the time of COVID-19, teacher candidates and mentor teachers much better understand how to exert positive influence in times of crisis, particularly exploring the aspects of mentor teachers' evaluations, distribution of knowledge, vested authority, and charisma (Anderson, 2007).

Positive mentor-mentee relationships during the student teaching experience are a contributing factor to teacher candidate success. Mentor teachers are successful mentors when they act as a coach and a defensive 'parent' figure (Clark et al. 2014). Ideal qualities of a mentor teacher include flexibility, collaborative, friendly, and welcoming. Mentor teachers also need to know when to hold back and when to step in and help their teacher candidate (Clark et al. 2014). Mentor teachers are often carefully chosen by building administration based on their ability to coach future teachers. During regular times, many mentor teachers exude these characteristics with ease, yet in times of unprecedented pandemic, mentor teachers' ability to be flexible was put to the test (Piccolo, Tipton, & Livers, 2020). Relationship building from a distance using only

virtual means was a challenge mentor teachers and teacher candidates across the country had to face.

Collaboration and communication during the student teaching experience is vital to the learning of the teacher candidate. Ong'ondo and Jwan (2009) identify important forms of two-way dialogue for teacher candidates are “collaborative conversations” between teacher candidates and “mentoring conversations” between teacher candidates and their mentor teachers. In-person communication was affected during COVID-19 due to social distancing requirements and communicating in person was not common practice. During a typical student teaching experience, the most common communication between teacher candidates and their mentor teachers is face to face conversation with some email or phone communication. Because all schools in this district were closed at the start of the COVID-19 pandemic, face to face conversations ceased to occur and other communication techniques were used instead.

### **Methods**

This analysis uses a phenomenological methodology, which is an approach to qualitative research focusing on the commonality of a lived experience within a particular group of teacher candidates and mentor teachers. Phenomenological researchers seek to arrive at a description and interpretation of the nature of the particular phenomenon (Creswell, 2013). Phenomenological research uses in-depth interviews, as researchers describe as accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts as provided by the interviewees. Wellman and Kruger state, “Phenomenologists are concerned with understanding social and psychological phenomena from the perspectives of people involved” (1999, p. 189). Phenomenology is concerned with the lived experiences of the people involved, or who were involved, with the issue that is being researched (Maypole & Davies, 2001).

The phenomenon under study was the experience of mentor teachers and their teacher candidates during a crisis point in education and the world: Spring of 2020 when COVID-19 shut down physical schools and teaching and learning went to remote instruction. This remote instruction significantly impacted the traditional relationship of mentor teachers and teacher candidates, along with how these teachers interacted with their students. This situation was classically a phenomenon as it was “not constructed, designed, or defined in the autonomously-encased human mind separated from the world” and had significant impact on how the teachers found themselves “being in relationships to the world with our [their] day-to-day living” (Vagle, 2018, pg. 20).

Interviews were conducted with three pairs of teacher candidates/mentor teachers who had first-hand knowledge of the COVID-19 education experience. These interviews were transcribed for coding and analysis. Each pair of mentor teachers and teacher candidates were interviewed together through Zoom with a list of open-ended questions like: As communication went digital, what tools supported you in working and planning together? Can you give any examples of how you engaged learners in the continuous learning process? What were the priorities of the continuous learning plans? How did you cover the remaining quarter of your standards? Can you share examples of resources you used in continuous learning plans?

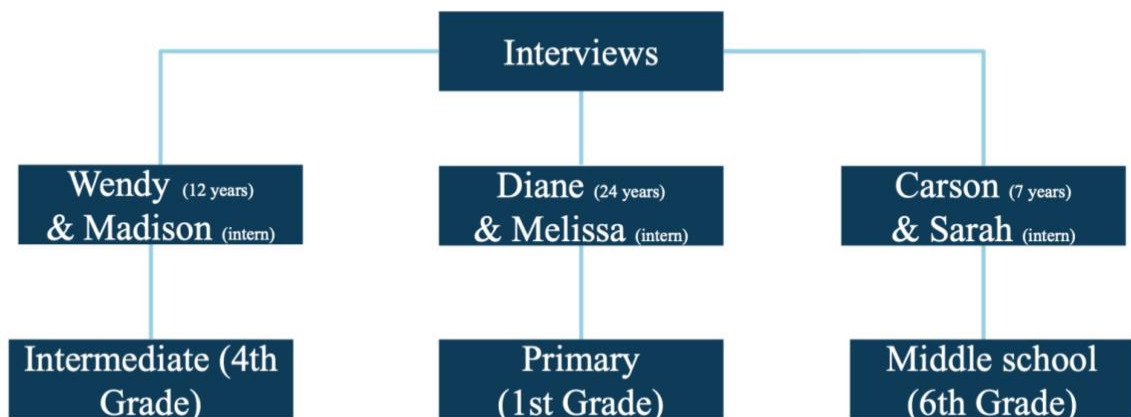
Our data was analyzed and themed for similar phrases and grouped to form clusters of meaning (Creswell, 2013). We sought to construct some universal meanings from the COVID-19 crisis experience and arrive at a more profound understanding of the phenomenon. Phenomenology researchers try not to prescribe techniques, instead they seek new areas of description and understanding (Holloway, 1997). Hycner stated, “There is an appropriate

reluctance on the part of phenomenologists to focus too much on specific steps” (1999, p. 143). Researchers try to not impose existing methods on a phenomenon “since that would do a great injustice to the integrity of that phenomenon” (p. 144). Two of the researchers independently read each transcript for a holistic understanding of the entire text. Then the researchers independently completed a line-by-line reading with open descriptive codes and condensed these codes into themes. They repeated this for each transcript. Finally, the researchers met to discuss their initial descriptive codes and themes to arrive at essential categories and develop global themes across the transcripts (Vogel, 2018).

Limitations of the study included a small sample size of only three pairs and by self-selecting into the study the interview participants may have had a more positive experience than other educators in the district and, therefore, were more willing to discuss their experiences with the researchers.

**Figure 1**

*Participants in the Study*



A call for participation was sent via email and three pairs of mentor teachers and teacher candidates responded. To detail each pair (See Figure 1), Wendy (12 years of experience teaching) and Madison (teacher candidate) taught fourth grade. They taught at a small Title 1 school with two sections per grade. The next set included Diane (24 years) and Melissa (teacher candidate) who taught first grade at a large Title 1 school with three or four sections per grade. The final pair Carson (male teacher with 7 years of experience) and Sarah (teacher candidate) taught sixth grade in a small Title 1 school with only one section per grade level. These teacher candidates were three of approximately two dozen placed from the university in the elementary setting in the district. Each mentor teacher had prior experience with teacher candidates, and they received multiple rounds of professional training to serve in this role, along with a small stipend for their extra time dedicated to mentoring.

### **Analysis**

Data suggests the COVID-19 crisis personally and collectively impacted the mentor teacher and teacher candidate relationships and learning situations in a variety of ways. Four themes emerged: 1) Cultivating emotional agility in personal, family, and professional spheres;

2) Navigating constant changes in modes of communication; 3) Developing reciprocal support; and 4) Evolving professional learning to support teachers during distance learning.

### **Theme One: Cultivating Emotional Agility in the Face of a Crisis**

Emotional agility is about being healthy with one's self (Brown, 2021) and managing negative emotions to take action, even in times of great potential stress and trauma (David & Congleton, 2013). After setting up routines in-person from January to March 2020, the world turned upside down for mentor teachers and teacher candidates, including Wendy and Madison; Diane and Melissa; and Carson and Sarah. In March 2020, both the university and school district abruptly and disjointly began a process of shutting down on-site learning. Mentor teachers and teacher candidates voiced their initial despair and overwhelming emotions as they processed together the enormous changes with descriptors such as "shocking," "gut-punched" and "really hard" in the interviews. These pairs provided great emotional support for each other due to their shared experiences.

The initial emotions were negative. Madison related feeling "worried about the unknowns" and unsure what school closures would mean for her as a teacher candidate. Diane relayed similar feelings, sharing her frustration that her teacher candidate was "cheated out of that experience of seeing the growth she helped with." Carson initially held on to a glimmer of hope that school closures would be short-term before being told students and teachers would not be returning to brick and mortar schools to finish out the school year. Both Carson and Sarah reported feelings of "disappointment," with "so many questions" that weren't being answered.

Conflicting information from district and university sources pairs to navigate through competing values of priorities. Melissa stated, "The university just kind of said, 'okay, whatever your district says.' And so at that point, it was kind of just receiving information from the principal from then on out." Being at a large building, the communication was more impersonal due the size and use of mass emails. The other pairs noted that there was a more intimate and personalized approach with the smaller size of building to remain in-touch and they had more check-ins than just sending a full one-size-fits-all message. The emotional safety net seemed stronger within the mentor teacher/teacher candidate relationships at the smaller schools. However, at all schools, mental health and self-care was emphasized as a priority for all educators. The pairs in this study reported feeling like they were providing additional support to colleagues because they were actively involved in the school's pivot to remote learning.

Each pair of mentor teachers and teacher candidates also noted the distressing waves of cancellations and lack of clarity. The initial expectations seemed to constantly change. Mentor teacher Carson said, "Things started happening really fast. So I was like, 'okay, actually, we're going to have a couple weeks off, and then try and go back. And then it was like, okay, that's not happening.'" The pairs noted the emotional upheaval was continually caused by moving targets. As teacher candidate Sarah noted, "[The university was] being very, like vague, and they were making it sound like even if they let us graduate, we still wouldn't be able to get a job because we wouldn't be able to get our license. And then once that was cleared up, it was literally like, do whatever your mentor teacher tells you to do. But otherwise, just like hanging back. So that was kind of frustrating." Teacher candidates felt caught in a bind with competing communications from the university and the district.

Social and emotional student support was essential. Carson and Sarah noted, "We worried about the kids. I mean, I think, we'll be fine. As adults, we figure things out. I just worried about the kids. That's my number one thing," mentor teacher Diane noted, "I would say

our number one priority was making sure the kids are okay. That was a huge priority for us. And just making sure that [the] focus [was] on social emotional support, making sure that they were okay.”

Diane and teacher candidate Melissa highlighted ways to ensure time for students to be sheltered from the raw emotions of the initial responses. For their grade one students, they noted key topics to address as priorities. As Diane noted, “I mean [there was] a lot of sadness and a lot of overwhelming feelings. How do we do these next steps and, and what comes next and will we be back. Melissa and I were able to still be that emotional springboard for the kids. I feel like a little bit more reserved, but just that emotional support that the kids needed for those last months of school.” Creating space, time, and an environment where the emotional flow could continue was important as teachers bonded with students from a distance. Yet, the pressures continued when Diane noted, “I just felt like I wasn't there for them.” The guilt, shame, and feeling of being out of control weighed heavily on the pairs. It was not only levels of concern for students; but also within their pairings as Diane continued, “I had a lot of guilt because she wasn't even able to finish her portfolio the right way with as far as her end of the unit assessments and all of her requirements from the university.” It became an intense professional crisis with multiple layers of sudden change. Living in chaos and uncertainty affected educators greatly.

Mentor teacher Wendy and teacher candidate Madison noted they needed to filter the emotional downflow and find positive ways to prioritize their own overall balance and ways to keep students from suffering from the incredible weight of the sudden changes. Recognizing the digital gap within the district, teachers were instructed to send home paper packets of work, though there was little accountability for completing them as grading was also paused. Wendy quickly noted the need to put emotional wellbeing before academics in the times of crisis, “By packet two, I feel like my focus was social and emotional. I had a lot of kids not do the packets. And so it was more important to me to just keep that connection.” Putting the focus on the social and emotional wellbeing for the whole child was a key part of empowering pairs to balance academics and daily routines. As Wendy continued with her time with Madison, “Keeping them engaged in the Zooms for social and emotional [work], and if they didn't engage on that, reaching out to them on Dojo or email became more important to me than packets.” This outreach will be covered more in the next section with communication channels.

Cultivating emotional agility, or being healthy with oneself, allowed for pairs to process through a full ‘tunnel of emotions’ that were challenging. Rather than pushing their own emotions aside, the pairs used their emotions as signposts to determine their needs and the needs of others, including students and families. The overall sense of the teachers and teacher candidates was best summed up by teacher candidate Madison, stating “just kind of worried about the unknowns a little bit like okay, what does this mean for me as a teacher candidate? What does it mean for me?” This emotional capacity of the pairs to hold their emotions lightly and not become locked down into rigidity with the overwhelm of the chaos. As Brené Brown stated, “Emotional agility [is the] ability to be with ourselves in ways that are curious, compassionate, and courageous, so we can take values-connected steps,” (2021). Being curious about their own feelings, compassionate toward each other, and courageous in their outreach to their students and families, these pairs of educators navigated the complex emotional upheaval of the initial COVID challenges together.

## **Theme Two: Navigating Constant Changes in Modes of Communication**



Slowed by physical distance and lacking the proximity of working together in the same room, the educators relied on a variety of communication channels. In a typical year, most teacher candidates and mentor teachers were able to meet face to face to plan and implement instruction. To continue student learning and do what was best for their students, the pairs adjusted their communication channels drastically.

Diane and Melissa said they “maintained constant communication,” saying they developed “a close friendship along with a working relationship.” The communication channels used included texting, talking on the phone numerous times a day, and sometimes using FaceTime video calls. Mentor teacher Wendy noted, “Obviously not seeing each other every day slowed [us] down; but I feel like we stayed connected with what we needed to for the education purposes.” Often, pairs connected with whatever the “quickest communication” method was, mentioning texting, calling or social media. Teacher candidate Madison said they used texting to communicate for the most part since it was quickest, using email or phone as secondary communication methods. With many different modes of communication readily available, Wendy noted a need to centralize with a few methods to get ‘good’ on those to become consistent, stating the importance of getting “communication down at the very beginning.”

The whiplash of changes occurred at breakneck pace. Mentor teachers reported forwarding information sent out by the district to their teacher candidates to keep them ‘in the loop’. Teacher candidates were invited to participate in a variety of Zoom meetings, including building level check-ins, informational meetings, and packet development with district grade level teams. The mentor teachers stated participation in those meetings was voluntary, but it was an offer met with willingness by the teacher candidates. The teachers and teacher candidates also found the need to constantly adjust communication with families, students, and stakeholders to build trust. Key groups like special education and other specialist classes needed layers of additional messages and coordination to support the students.

Constraints from the district caused stress for teachers, students, and families. The district hadn’t regularly used Zoom with students and had no policies or protocols in place for Zoom instruction. Therefore, initially, teachers were told class Zoom meetings were not allowed, yet a few weeks later this changed and teachers were allowed to host non-instructional Zoom meetings with students. One reason for this change was students’ need for social emotional support while sheltering in place. Madison noted, “We would do lunch Zooms. We did a talent show on Zoom. We just try to do different things. We planned a virtual field trip on Zoom. So it was a little chaotic because there were like 36 kids on there interrupting.” The district required two adults be present during all Zoom meetings with students and other precautions to manage risk and support equity. Diane stated she felt guilty for her co-workers without teacher candidates because she and Melissa had one another during this time. Other teachers had to rely on scheduling with paraeducators or other specialist teachers for their Zoom session with children. The pairs built strong relationships within digital settings to support their students and each other. A common belief was that students and teachers may struggle with relationships online, but the teachers found ways to intentionally over-communicate and stay connected.

### **Theme Three: Developing Reciprocal Support**

Traditionally, the mentor teacher took the role of mentor for teacher candidates. However, during crisis remote teaching, this relationship became more reciprocal for a variety of reasons. First, by district policy, the teacher candidate was with the mentor teacher on almost all Zoom sessions with children. This provided more contact time during instruction than in a

traditional physical classroom. In addition, the teacher candidates had some unique technology skills and were able to step into a lead teaching role with that technology. However, each pair demonstrated different support techniques and levels, ranging from a typical teacher candidate relationship to a more peer-like relationship in which the mentor teacher and teacher candidate leaned on each other for support.

Mentor teacher Diane and teacher candidate Melissa formed a collegial relationship, relying on one another to split the workload evenly and planned both together and separately for instruction. In this relationship, the teacher candidate stepped into a co-teacher non-traditional role with more responsibilities, such as providing translation services to Spanish-speaking families. Melissa noted that when they began remote teaching, they completed the first calls to families together and then began dividing up the workload, stating, “We kept the partnership and worked closely together, but also split off to divide and conquer.” This pair quickly began ‘working on everything together’ and the mentor teacher commented about how her experience teaching during the onset of COVID-19 was vastly different from her peers due to the teacher candidate taking on so much of the workload, more so than a typical teacher candidate. As a result, Diane reported a lowered stress level; eased by the support of her teacher candidate Melissa.

Wendy and her teacher candidate Madison had a more traditional teacher candidate/mentor teacher relationship, with the mentor teacher leading in all aspects of teaching. In this relationship, the gradual release of responsibility did not occur as it typically would, due to the drastic changes to teaching and learning following school closures. The teacher candidate had not begun teaching content areas prior to school closures, which may have contributed to the lack of responsibility placed on her by the mentor teacher. Madison was not able to take over content areas as she regularly would have due to the district’s decision to use grade-level paper packets to deliver instruction.

Carson and Sarah’s relationship was a unique blend of both collegial roles and mentor/mentee mentality. In personality, mentor teacher Carson and teacher candidate Sarah were similar, which led to an easy working relationship. Some division of responsibilities with regards to contacting families for wellness checks occurred, but instruction was almost solely provided by the mentor teacher in this pairing. As with Wendy and Madison, Sarah did not fully take over the class at any point.

#### **Theme Four: Evolving Professional Learning**

During the initial onset of the COVID-19 pandemic, ongoing professional development support teachers during distance learning was non-existent. Teachers found professional development opportunities outside of the district and the local university. They had to make their own options to personalize their learning during these demanding times to support their students with the best next steps forward in the uncertainty.

Wendy and Madison found courses on educational technology from an online professional development site helpful. Madison stated, “Technology; that’s being able to use it to the full force. I feel like I’m pretty tech savvy; but constantly having to be on it?” She also stated that many of the technology components she learned were not useful for her context. These new shifts in professional responsibility pivoted the learning to virtual formats.

Carson hoped information learned during a college course on cooperative Google tools in the classroom would support his distance teaching, but district restrictions surrounding technology made this difficult as paper packets were the preferred method of instructional

delivery. Carson also sought trauma informed professional development. He stated, “[I was] just trying to reach kids and ask them certain questions, open ended, trying to get them to open up about anything with us.” Being ready to respond to students’ needs and demands often required even more, ongoing learning. Diane found special social, emotional and behavior webinars and videos about implementing blended learning with her first graders helpful, as she shared, “I’m looking at a lot of the personalized learning videos. We were looking on our own and watching lots of videos.”

### **Conclusions**

In a recent interview, Dr. Doug Fisher, co-author of *The Distance Learning Playbook*, felt that educators engaged in crisis teaching rather than distance learning at the onset of the COVID-19 pandemic (Fisher et al., 2021). Crisis teaching and crisis management is significantly different than intentional and thoughtful remote or distant learning. In the beginning, the teachers in this study were pulling anything they could find to create packets or work for students to provide, as the district called it, “continuous learning.” While a tremendous amount of work went into packet completion, students were not expected to return their work. As Carson said, “We wanted [students] to do [the work], we’re going to keep checking on it, but there’s no way for us to really know if they are or not.” This followed the recognition that the teaching and learning environment was in crisis. The first focus, as the teachers and teacher candidates mentioned in this study, was the social and emotional needs of the students and families, and then academics.

While the relationship between teacher candidates and their mentor teachers is a robust area of research, this study was unique because of the immediate and unanticipated switch from in-person traditional school to online or packet instruction. Not only did teacher candidates and mentor teachers need to adjust quickly to a different structure for school, they also needed to shift the ways they communicated, collaborated, and coached from mostly in-person to phone, text and email communication, creating potential roadblocks for relationship building. In addition, there were unique emotional stressors during this crucial development time for the teacher candidates. Each pair developed different ways of handling the pivot and stresses of remote learning.

These six educators all recognized the need for technology as a component of remote learning that fits the context. As there was no precedence for this type of school closure, district-level support was limited. Educators used their personal and professional networks to support their practice until district policy and professional learning caught up. Closer to the end of the school year, the local university began offering distance teaching courses, resources, and support to educators and teacher candidates. At that time, the district also announced the learning platform Canvas would be used in the fall to support distance learning and educators would have an opportunity to learn about the platform.

At the onset of this research study, there was an assumption that K-12 schools would be nearly back to normal by fall 2020, therefore the research didn’t ask pairs about preparations for fall based on their experience in spring. As a result, this study was a snapshot in time during crisis teaching in the initial onset of the COVID-19 pandemic. Since that time, there has been emerging research in this area. Understanding the challenges and successes discovered by mentor teachers and teacher candidates with lived experiences during crisis may help others in a similar situation. Since March of 2020, research has developed to support educators in remote

instruction, however there is very limited research on clinical internships during crisis and, more specifically, the teacher candidate/mentor teacher relationship.

This will not be the last time schools will need to pivot and make drastic changes mid-school year. Plans developed during the COVID-19 pandemic will prepare districts for natural disasters and other pandemics that will inevitably happen in the future. In the past, school preparedness plans for natural disasters, such as hurricanes, have not included distance education but rather focus primarily on student social and emotional health and safety (Schwartz, Ahmed, Leschitz, Uzicanin, & Uscher-Pines, 2020). Lessons learned from distance learning at the onset of the pandemic in spring of 2020 and, further, from school re-openings in the 2020-2021 school year will prepare educators, students, and families to engage in successful distance learning in the future.

In conclusion, the drastic changes to teaching and learning following school closures forced many changes in the clinical internship experience and especially with the mentor and teacher candidate relationship. The shift to remote instruction precipitated a blend of collegial, co-teaching and the traditional mentor/mentee mentality. Clinical Preparation (Essential 2) highlights the crucial role a PDS has in “nurturing and developing the next generation of educators by engaging candidates and valuing them as active members of the school.” This was especially true during a crisis.

Each of the teacher candidates continued to be engaged in teaching and learning activities and experienced an authentic clinical experience of teaching through a crisis. The mentoring and support of their mentor teacher ensured that they were professionally ready, regardless of the circumstances. Reflection and Innovation (Essential 4) was imperative during the pivot to remote instruction and in refining instruction as the pandemic continued. It was through reflection that the educators recognized the immense need for social-emotional care and emotional agility their students needed, along with caring for themselves. This precipitated innovative ways of creating community with their students through remote methods. Two principles can be applied to current educational practice from the experiences of participants in this study: 1) open and consistent communication is vital for a strong community and 2) social-emotional wellbeing is essential for teaching and learning.

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# **Coaching Cubed: Mentor Teachers' Perspectives on the Exponential Nature of Supporting Teacher Candidates During Uncertain Times**

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**Abstract:** Engaging in mentoring for teacher candidates radically changed during the COVID-19 pandemic, resulting in an exponential increase in the nature of mentor teachers' activities and roles. In this study, we examine how mentoring practices changed during the pandemic in our university's elementary and secondary education programs. We analyzed mentor teachers' responses to a survey designed to examine mentor teachers' beliefs and conceptions about mentoring. Using a third space framework (Gutiérrez, 2008; Zeichner, 2010), we found shifts in mentor teachers' practices of mentoring, and shifts in mentor teachers' conceptions and beliefs about mentoring, went beyond traditionally received notions of mentoring. We posit the pandemic brought about a shift from instrumental to development conceptions of mentoring for some mentor teachers. We conclude by calling for reconceptualizing how we represent the practice of mentoring within our programs in light of the effects of the exponential nature of supporting teaching candidates during the pandemic.

**Keywords:** mentoring, School-University partnership, teacher education, clinical experiences

## **NAPDS Nine Essentials Addressed:**

- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.
- Essential 7: Shared Governance Structures – A PDS is built upon shared, sustainable governance structures that promote collaboration, foster reflection, and honor and value all participants' voices.
- Essential 8: Boundary-Spanning Roles – A PDS creates space for, advocates for, and supports college/university and P-12 faculty to operate in well-defined, boundary-spanning roles that transcend institutional settings.



## **Coaching Cubed: Mentor Teachers' Perspectives on the Exponential Nature of Supporting Teacher Candidates During Uncertain Times**

When the spread of COVID-19 in mid-March 2020 prompted most institutions of higher education to pivot to remote, online modes of instruction, the nature of university-based teacher preparation changed seemingly overnight. Unlike many other academic units within a university, teacher education programs were forced to contend with numerous external concerns, such as monitoring the operational plans of partnering school divisions, deliberating how to modify and redirect heretofore face-to-face clinical teaching experiences in schools, and working with mentor teachers and school leaders through new uncertainties and anxieties that shifted daily. Within this array of challenges, one particular aspect of teacher education warranted immediate attention and consideration and caused significant consternation, given our collaborative boundary-spanning structure: specifically, we wondered how mentoring and being mentored was changing with the uncertainties and intensification of teaching remotely, virtually, and in hybrid formats throughout different points of the pandemic.

For those of us dedicated to, and working in, school-university partnerships and Professional Development Schools (PDSs)—and thus unconditionally committed to honoring the work and roles of our school-based teacher educator partners and to rich clinical experiences—these mentoring capacities and activities were central to our teacher candidates' development and success. We ultimately determined that the nature of mentors' activities and roles had not just increased but had grown exponentially. In this article, we (five university-based teacher educators) investigate how mentoring practices and relationships have changed during the COVID-19 pandemic in our elementary and secondary education programs.

### **Purpose of Study & Review of Literature**

Our consideration of the shifting nature of mentoring practices during the COVID-19 pandemic is rooted in several research bases. These include studies of mentoring models and the evolutions of mentors' roles and examinations of the challenges mentor teachers have faced as both classroom practitioners and mentors, including the urgent conversion to virtual and hybrid instructional modes. Below, we explore the body of research literature for these topics to ground our study.

### **Evolutions in mentors' roles**

This study was inspired in part by recent calls from education policymakers, teacher education scholars, and our professional associations, who recognize that effective preservice teacher education must be based on meaningful clinical experiences (AACTE, 2012; ATE, 2015; Feuer et al., 2013). In response, we and a growing number of teacher educators are lobbying for, living out, and scrutinizing our boundary-spanning capacities across school and university contexts. Understandably, while such shifts in mentor capacities are supported by the now long-standing third space orientation and PDS structures, the circumstances of the pandemic and the unavoidable impact on teacher education made for substantial, if perhaps temporary, shifts in the nature of the mentoring of preservice teachers.

The lexicon of the American Association for Teacher Educators (AACTE) defines mentor teachers as “the primary school-based teacher educators for teacher candidates completing clinical practice or internship” (AACTE, 2018). Mentor teachers play a pivotal role in guiding teacher candidates' transition into the field and their translation of theory to practice

(Butler & Cuenca, 2012; Feiman-Nemser, 2001). Indeed, mentor teachers are considered “experts of practice” by their university-based teacher educator counterparts (Butler & Cuenca, 2012, p. 297). Teacher candidates identify mentor teachers as the most critical factor in their professional development, and as such, they play a central role in teacher preparation (Hobson, Ashby, et al., 2009; Valencia, Martin, et al., 2009; Zeichner & Gore, 1990).

Mentor teachers vary widely in their approach to the vital work of mentoring teacher candidates. This variability is a predictable byproduct of numerous factors, including inconsistent and haphazard mentor selection processes, approaches to mentor preparation varying from non-existent to credit-bearing professional development courses, and an overall lack of understanding of the critical role mentors play in teacher candidate professional development. When asked, mentor teachers have described their roles in supporting teacher candidates in such diverse terms as coaches, counselors, supporters, trouble-shooters, parental figures, to name only a few (Boreen, Johnson, et al., 2000; Richter et al., 2013). In their study of mentoring, Butcher and Cuenca (2012) typified the roles mentors enact during the culminating student teaching internship, ranging from instructional coaches to socializing agents to emotional support systems.

Feiman-Nemser (1998) suggested the notion of educative mentoring as a means for explaining the complex and optimal role of a mentor teacher. She defined educative mentoring as helping “novices learn to teach and develop the skills and dispositions to continue learning in and from their practice” (p. 66). While emphasizing the role of intentional development of school-based teacher educators as educative mentors, she highlighted their “combination of showing and telling, asking and listening in helping novice teachers learn” (p. 72). Educative mentors engage alongside their mentees in the learning process as “co-thinkers” and “co-learners.”

More recently, scholars have worked to conceptualize other philosophical orientations mentor teachers bring to their work. van Ginkel and colleagues (2016) studied the interaction of mentoring motives—or why teachers engage in the act of mentoring—with mentoring conceptions, which are mentors’ internal beliefs about mentoring. Based on their literature review, van Ginkel and colleagues (2016) offer two primary approaches to mentoring—instrumental and developmental—noting that mentors likely move within a continuum between these two approaches and can hold beliefs indicative of both sources simultaneously. An instrumental conception of mentoring suggests, mentors describe their mentoring efforts as a top-down power dynamic concerned with giving teacher candidates the fundamentals of teaching, encouraging replication of the mentor’s teaching, and emphasizing task completion (Graham, 2006; Orland-Barak & Klein, 2005). Mentors conceptualizing mentoring via a developmental orientation embrace a more collaborative, reflective learning approach (Graham, 2006; Orland-Barak & Klein, 2005). This orientation, much like Feiman-Nemser’s notion of educative mentoring, emphasizes a co-learning, co-constructed approach to learning to teach, whereas instrumental mentoring mirrors that which is more like a teacher-directed orientation to teaching (Donche & Van Petegem, 2011).

While the research literature on mentors’ roles during the pandemic is for the most part still in production, the outcomes of our own examinations echo the findings of other scholars’ inquiries, suggesting that the circumstances of the pandemic have democratized mentor teachers’ and interns’ roles and uniquely merged and aligned their learning curves, primarily related to virtual pedagogies (Barnhart, 2020; Canipe & Gunkel, 2020). Pandemic mentoring practices have been oriented toward a collaborative construction of virtual pedagogies, rather than a

traditional expert-to-novice exchange of content knowledge and communicating this information (Hoffman, Svrcek, et al., 2019). And, while it may be impossible to determine intentionality in mentors' efforts or causality in the impact on new teachers' practices, scholars have noted how mentoring practices during this pandemic have positively affected teacher candidates' senses of professional belonging, and, potentially, their longevity in the teaching profession (Walker & Ardell, 2020).

### **Teaching challenges during the pandemic**

Classroom teachers have encountered not one but a quickly evolving set of challenges, including mentors, mentees, and their PK-12 students accessing and learning to use new forms of technology. These constituents of schools have also faced existential questions related to what it means to teach and learn both virtually and face-to-face during the pandemic when issues of engagement, achievement, and development are suddenly in doubt and must be considered anew as our teaching practices rapidly change.

As well, since the onset of the pandemic and now—as of this writing—fourteen months later, numerous teacher preparation programs reported suspending their involvement with the clinical elements of their teacher education efforts (Moorhouse, 2020). Concerned with how several states waived clinical requirements and suspended clinical experiences and placements for teacher candidates during the spring and fall 2020 semesters (AACTE, 2020)—a move that we saw as isolating our mentor teachers, stunting their own and teacher candidates' development of effective online pedagogies, and hindering our consideration of virtual teacher education and mentoring practices—we met extensively to discuss how to continue offering these clinical elements across all program stages. Ultimately, the challenge of continuing these experiences presented unexpected pedagogical opportunities for teacher candidates, mentor teachers, and university-based teacher educators to rethink aspects of clinical teacher education, including the chance to integrate new technologies and virtually-based pedagogies into our instruction (Ellis et al., 2020; Zenkov et al., 2021).

Seemingly overnight, beginning in March 2020, almost all PK-12 classroom teachers had to urgently consider ways to convert their instruction from face-to-face to online modes. Whereas traditional mentoring practices might focus on providing scaffolded “rehearsals” or “practice spaces” where teacher candidates could develop pedagogical “core practices” (Grossman et al., 2019) and “pedagogical content knowledge” (PCK) (Shulman, 2005), the turn to virtual instruction necessitated an additional consideration of developing teacher candidates' and mentors' technological pedagogical content knowledge (TPACK) (Mishra & Koehler, 2006). Similar to the research on the challenges faced by classroom and mentor teachers during the pandemic, there is now only a small but growing body of literature on how classroom and mentor teachers adapted their TPACK to meet the demands of the pandemic. Without this robust research base and mentor expertise in TPACK-informed virtual instruction, the turn to online modes added yet another complex layer to the already exponential nature of mentoring in a pandemic.

### **Theoretical Framework**

Our theoretical perspectives as applied to teacher education—and, by extension, to clinical experiences and the roles of mentors—are grounded in the explicit acknowledgment that the majority of our field's work has long been accomplished in elementary and secondary classrooms by veteran teachers serving in almost invisible school-based teacher educator and

mentor roles. Echoing the work and reflecting the stances of numerous other practitioners and scholars operating in school-university and PDS settings, we employed the concept of “third space” to develop and examine the mentoring roles and structures in our teacher education efforts. This notion recognizes how we, teacher candidates, and our programs’ school-based mentors might increasingly “live across” school and university settings to effectively engage in clinically-centered teacher education work (Gutiérrez, 2008).

The notion of third space was borrowed from the post-colonial theorist Homi Bhabha (cited in Rutherford, 1990) and also has bases in hybridity theory (Soja, 1996), which recognizes that individuals draw on multiple discourses and cultures to understand and respond to phenomena in given contexts (Rochielle & Carpenter, 2015). This construct also appreciates that functioning in a middle ground, between multiple sets of experiences and points of view, can assist members of a given community of individuals with roles in different but related institutions to perceive constructive options and existing constraints of current structures. A third space orientation intends to bridge the cultures of the university and PK-12 schools (Cuenca, Schmeichel, et al., 2011), enabling mentors and university instructors to reconceptualize their roles.

McDonough (2014) extended the application of the concept of third space beyond these structural and role considerations, suggesting that this orientation allows for what Zeichner (2010) terms a “shift in the epistemology of teacher education” as well as a shared consideration of pedagogical practices. The knowledge base for teaching strategies is collaboratively and iteratively reconstructed (Klein, Taylor, et al., 2013). This notion also influenced our consideration of technology tools to supplant and enhance traditional, observation-focused experiences, as well as our efforts to develop boundary-spanning roles for ourselves (university-based teacher educators at various points on career continua), our veteran teacher project partners, and the teacher candidates and youths involved in our project (Burns & Badiali, 2020).

### **Methodology**

Our research team designed a qualitative study to identify, describe, and share mentor teachers’ experiences and sense-making of mentoring practices as affected by the shifts in the nature of their work during the pandemic. Using survey data, we generated analytically-shaped descriptions of mentor teachers’ beliefs and ideas about their practice. We engaged in iterative coding of these descriptions to identify particular distinctions among the different accounts mentor teachers provided about how they conceptualized their beliefs and ideas about mentoring. We then analyzed these codes to note particularly insightful qualities relevant to our field to understand better how mentor teacher practices—and the ideas behind such practices—have exponentially changed during these uncertain times. This section describes both the contexts of our program in which the mentoring occurred and the methods we employed for this study.

### **The Context of Mentoring in the Elementary Education Program**

The Mason Elementary PDS Program has a rich history of clinical teacher preparation based on the tenets of the Professional Development School (PDS) model. Our Pathways to Partnership model establishes mutually beneficial partnerships between school-based teacher educators and administrators and creates three ‘paths’ for collaboration among stakeholders: *partner schools*, *clinical practice schools*, and *collaborative inquiry schools* (Parker, Parsons, et al., 2016). Partner schools support five to six early field hours students each semester, whereas clinical practice and collaborative inquiry schools support semester-long and yearlong interns.

All sites host site-based university courses infused with real-time fieldwork. This responsive framework allows schools to engage in clinical teacher preparation and PDSs with the necessary flexibility to respond to our partners' changing contextual needs.

The Mason Elementary PDS Network includes over 25 elementary schools across multiple districts in the Northern Virginia region. Teacher candidates in the Mason Elementary PDS program are placed for early fieldwork, practicum, and internship in one of our PDS sites. Each PDS site is supported by school- and university-based teacher educators in specific roles, including a university facilitator, a site facilitator, and a mentor teacher. The Mason Elementary PDS Program orients school and university-based stakeholders to support the shared mission of the partnership with ongoing professional development, ongoing communication, advisory groups, and monthly meetings.

As noted in the research literature, mentor teachers, particularly those supporting the internship experience, are the most critical factor in a teacher candidate's professional development. Thus, intentional mentor teacher preparation and selection are core practices of the elementary program. This preparation includes engaging mentors in the design and implementation of initial and advanced mentor training and ongoing mentor teacher discussions held monthly at each PDS site with university facilitators. While both the training and the meetings include logistical information aimed at preparing mentors to work with teacher candidates in our program, the primary focus is on essential skills in effective mentoring (e.g., identifying attributes of effective mentors, co-teaching, navigating difficult conversations).

### **The Context of Mentoring in the Secondary Education Program**

The Mason Secondary Education (SEED) Program consists of five disciplinary concentrations working together to prepare secondary educators to teach at the middle and high school levels in mathematics, science, English language arts, social studies, and computer science. NAPDS' "Nine Essentials" (NAPDS, 2021) inform the clinically-rich continuum of experiences, evolving in complexity from exploratory observations in early program coursework to a focused co-teaching partnership in the advanced subject-specific teaching methods course, and culminating in a semester-long student teaching internship.

The structure for these school-based clinical experiences includes 16 partner schools (eight middle and eight high schools) in which the program's teacher candidates engage in co-teaching experiences with both middle and high school mentor teachers. Each partner school is assigned a university-based teacher educator and a school-based teacher educator to recruit, identify, and support mentor teachers to work with the program's teacher candidates. Together, the school-based teacher educator and the university-based teacher educator facilitate the clinical experiences in a partnership model that mobilizes a cadre of mentor teachers each fall and spring semester to mentor the program's teacher candidates.

Like the Mason Elementary PDS Program, the Mason SEED Program offers initial and advanced mentor training and ongoing mentor teacher support conducted by the school-based teacher educator and university-based teacher educator in each partner school. Mentor teachers are also increasingly involved in university-based teacher education coursework. While the program is growing more opportunities for mentor teachers to span the boundaries of their mentoring outside of their school-based classrooms, the majority of mentoring experiences—especially those discussed in this study—still occur in the school-based classroom contexts.

## **Design of Study**

All mentors in both the elementary and secondary education programs who supervised graduate teacher candidates in the Spring 2020, Fall 2020, and/or Spring 2021 semesters were invited to participate in this study. This study is part of a broader, ongoing, longitudinal study occurring in four phases. This manuscript focuses on data generated during Phase One of the study, in which all mentors were invited to respond to an Initial Short Survey. Survey follow-up interviews, to be conducted in Summer 2021, will comprise Phase Two. Phases Three and Four will consist of sending a Follow-Up Short Survey in Fall 2021 and Spring 2022 and completing a new round of interviews with selected mentors. Below we describe the collection and analysis of data generated during Phase One.

## **Data Collection and Analysis**

In the spring semester of 2021, our research team invited 100 mentor teachers in the elementary education program and 56 mentor teachers in the secondary education program to participate in the Initial Short Survey for Phase One. Forty-five mentor teachers across both programs consented to participate in the study; 12 respondents did not complete the entire survey, and their responses were eliminated from coding consideration. Thus, 33 mentor teacher responses were included in this study for an overall and identical program-specific response rate of 21%. Of these 33, twenty-one were elementary education mentor teachers, and 12 were secondary education mentors. They represented five different school divisions and 22 schools, including 12 elementary and ten middle and high schools.

The survey consisted of 23 questions, 11 of which were demographic questions such as years of teaching experience, current teaching setting, and the number of candidates mentored (Appendix A). The remaining 12 questions were open-response and asked mentors to reflect on their experiences and relationships with teacher candidates during the pandemic. Below we focus our analysis on the open-ended questions, specifically those related to mentors' perceptions of mentoring before and during the pandemic. These questions included, "What elements of mentoring have stayed the same for you thus far during the pandemic?" and "What elements of mentoring changed for the better (or were negatively impacted) thus far during the pandemic?" Additional questions focused on mentors' prior and current conceptions of mentoring and their beliefs around the attributes of an effective mentor.

To analyze mentor teachers' survey responses, we used content and thematic analysis to code the mentor teacher surveys inductively and identified several recurring themes (Richards, 2014). First, we grouped questions by topic. Two members from the team were assigned to each group of survey questions to code individually. This arrangement enabled each researcher pair to develop familiarity with the survey data. After each individual coded the responses line-by-line, the assigned researcher partners met to share and explain codes and devise a master code list. With this list, the researcher pair re-read and re-coded each question together to either confirm or reject the first individual reading. The researcher pairs were able to analyze and sort codes into categories used to detect consistent and overarching themes for the survey data, which allowed the entire research team to meet and discuss how best to illustrate the critical analytical findings that emerged, which we discuss below (Järvinen & Mik-Meyer, 2020; Pratt, 2008).

## **Findings**

In the following section, we consider survey responses from the 33 participants, twenty-one of whom were elementary mentors, and 12 of whom were secondary mentors. We begin by

documenting mentors' prior experiences and then share mentors' descriptions of shifts in mentoring practices and conceptions of effective mentoring during the pandemic.

### **Documenting Mentoring Experience**

Participants were asked to identify how many years they had been teaching and the number of teacher candidates they had mentored throughout their careers. Of the 33 total participants, thirteen were in their first decade of teaching, eleven had been teaching for 11-20 years, and nine had been teachers for more than 20 years. Only five of the 13 mentors with ten years or less of experience were in their fourth or fifth years of teaching. Approximately one-third of participants shared that they had served as mentors of one teacher candidate, while another third had experience mentoring two or three teacher candidates. Four participants had mentored six or more teacher candidates throughout their careers.

In addition to asking about teaching and mentoring experiences, mentors noted when during the pandemic they had mentored a teacher candidate, as well as the context in which this mentoring took place. Thirteen of the 33 participants served as mentors in Spring 2020 at the beginning of the pandemic, and seven of those 13 did not mentor again in Fall 2020 or Spring 2021. Eighteen participants each mentored in Fall 2020 and Spring 2021, and of the 18 that mentored in each of those semesters, twelve from each semester mentored during another pandemic semester. Overall, nineteen of the 33 participants mentored only once during the pandemic. The context in which this mentoring occurred varied by semester. Most Spring 2020 mentors began face-to-face, then moved to a virtual format. All but one of the 18 participants mentoring in Fall 2020 did so virtually. By Spring 2021, virtual and concurrent (virtual and face-to-face simultaneously) were the most popular formats, with seven and 13 participants, respectively, mentoring in these ways.

### **Shifts in Mentor Teachers' Practices of Mentoring**

With three survey questions, we explicitly inquired about the elements of mentoring that (1) remained the same, (2) changed for the better, and (3) were negatively impacted during the pandemic. Overall, while many elements of mentoring and mentors' philosophies remained the same, and some elements of the mentor/intern relationship and practice improved, the majority of the impacts of the pandemic on mentors' practices—and, by extension, interns' growth—were negative.

The most consistently appearing themes related to the nature of collaboration between mentors and interns, the learning stance mentors and interns had to adopt, and the existence and the forms of collegial interactions. Mentors repeatedly highlighted how they and their interns were required to learn together—learn new technologies, learn new ways to engage with each other and their peers and their students, and learn to achieve the same ends with new virtual pedagogies. There was a leveling of the teaching and learning terrain, as mentors were no longer experts in domains where many had spent years and even decades developing honed, effective pedagogical, relationship-building, and coaching skills. One secondary education mentor spoke to this unavoidable but most often appreciated reality:

I think the difference is that I myself was in uncharted territory, so there was a lot more experimentation and trying things out...We tried things out together, and I felt that it was more of a co-learning experience. Obviously you can always learn from your teacher candidate, but in this case, we were on pretty much the same level of experience.

While mentors were almost universally forthcoming about the extent to which they were now learning alongside their interns and optimistic about this very substantial shift, they also described how interns also suffered the loss of another, often invisible and harder to quantify, form of collegiality: with the teachers on their grade level and subject area teams.

Another primary theme we identified in mentors' responses related to the broad notion of communication. Mentors detailed and lamented how communication with interns that occurred via virtual and technology-mediated forms—about teaching plans, feedback on their lessons, and even daily check-ins about their well-being—took so much longer and was not as authentic as usual. As well, often because of the additional security measures put into place by schools and school districts—especially in the pandemic—interns simply weren't aware of the email exchanges, administrative messages, and caregiver check-ins to which they would have had access in typical face-to-face school contexts. Perhaps most notable was the loss of automaticity, informality, and rhythm in these communications. While most mentors—and likely no interns—would have been aware of the value of their on-the-spot, minute-by-minute exchanges pre-pandemic, mentors were conscious of but could not precisely quantify or detail what was lost for interns as the result of this abrupt, dramatic shift in communication mode.

Finally, mentors detailed how the very nature of their own—and, naturally, their interns'—teaching practices shifted. Indeed, they learned together how to translate face-to-face pedagogies to virtual instruction effectively, but they often made decisions to operate as instructional islands to better serve their students, out of concern for their own or their students' health, and in response to pressures to perform from their principals. One elementary mentor was exceptionally articulate about this isolating shift:

So to be the most beneficial with our time for the students, we separated our virtual teaching and in-person...I would see the virtual groups and my intern would strictly work with the in-person students...We have students that have lost a quarter and half of [instruction], but unfortunately the expectations and what they need to be able to do at the end of the year has not changed.

Mentors also noted that these necessary choices to “divide and conquer” resulted in interns developing greater senses of teaching efficacy and independence. But the virtual mode and the fact that mentors and interns so much less frequently engaged together with individual students meant that those everyday, every lesson moments when they could recognize and address a child's confusion or question simply vanished. Many mentors identified this loss as a significant concern, with one secondary mentor highlighting it poignantly: “When we can see the students' expressions it allows us to get an idea of their level of comfortability with the content. Also, when they are working, and they get confused on a topic, it is easy to see them disengage in person.”

### **Shifts in Mentor Teachers' Conceptions and Beliefs about Mentoring**

Using an “I used to think...but now I think...” protocol, two survey questions asked mentor teachers to elaborate on their shifting conceptions of effective mentoring and the attributes of effective mentors. Interestingly, mentors' responses did not mirror the largely negative perspectives they shared when explicitly asked how their mentoring practices had been impacted by the pandemic. Instead, mentors' descriptions of effective mentoring and effective mentors revealed how this experience of mentoring in the pandemic helped them to develop a more nuanced understanding of and commitment to mentoring.



Few mentors described mentoring as challenging, time-consuming, or complex, and of those responses, over half simultaneously acknowledged mentoring as a rewarding experience or investment in the profession. For example, one elementary mentor stated that they now believe mentoring is “a way to give back and to learn and grow from the experience and is very challenging at times!” Further, while mentors describing mentoring as a challenging experience remained relatively stable, those relating it through a more positive lens increased slightly across responses. Likewise, the theme of mentoring as a moral imperative or as stewardship of teacher candidates’ development as teachers increased substantially from mentors’ previous conceptions of mentoring. Whereas 39% of all respondents used to believe mentoring was about investing in future teachers and students, 56% now believe in this concept of mentoring as stewardship. Strikingly, while responses from elementary mentors related to this theme remained nearly the same over time, the number of secondary mentors echoing this response more than doubled.

When considering attributes of an effective mentor, the vast majority of mentor teachers’ responses referenced technical skills, roles, and personality traits associated with mentoring. For example, mentors described technical skills using terms such as “organized,” “helpful,” “effective communicator,” and “knowledge of standards, practice with assessment, lesson planning and classroom management.” Personality characteristics were frequently referenced as attributes of effective mentors with typical responses including terms such as “patient,” “kind,” “flexible,” and “open.” In comparing responses from across the pandemic year, nearly half of the mentors revised their descriptions of effective mentors to include terms reflective of the uncertainty of the times, such as “empathetic,” “humble,” “realistic,” and “accepting.” One-third of the responses also included descriptions of mentors’ philosophical orientations to mentoring, with approximately half of these conceptualizing attributes through the lenses of both characteristics and philosophical orientations. When included, these philosophical orientations either did not change or shifted from an instrumental to a developmental orientation.

This shift was echoed in mentors’ responses to what they believed constituted effective mentoring. While more than half of participants initially stated that mentoring was about imparting their knowledge about teaching to their mentees, that number later dropped by one-half and one-third, respectively, for both elementary and secondary mentors. Furthermore, these decreases mirrored an increase in the number of respondents stating that they now believe mentoring is about learning from, and with, teacher candidates and making the tacit knowledge of teaching more explicit for teacher candidates. For example, one elementary mentor initially defined effective mentoring as “showing them [teacher candidates] how to teach,” yet later revised this response, stating that effective mentors “let them (teacher candidates) discover their own voice.” A secondary mentor initially described effective mentoring as “be[ing] regimented and bossy,” then contrasted this with their current belief that effective mentors “work alongside a mentee and collaborative learning with targeted goals.”

A similar refrain was shared by another secondary mentor, who moved from describing effective mentors as “advising student teachers in best teaching practices” to noting that “they [teacher candidates] can also be observers to make their own conclusions of best teaching practices.” An elementary mentor summed up this shift when writing,

Before becoming a mentor, I used to think mentoring was mostly modeling what an effective teacher looked and sounded like. [Now I think mentoring is] learning from each other. Constant communication. Coaching and providing effective feedback while also being flexible and being willing to let go of control of your classroom. Gradually

releasing the responsibilities of the teacher candidate and constantly providing the WHY behind everything you do.

This evidence indicates that mentors' initial, more hierarchical notions of mentoring as transmissive or incremental acts leveled more into a transformational or developmental conception—a shift echoing the finding described above that collaboration increased during the pandemic.

### **Discussion and Implications**

The findings highlighted above suggest a significant shift in mentoring practices and relationships during the pandemic. With the switch to online learning, mentors were repositioned into the role of novice teachers, requiring them not just to encourage interns but to rely on collaboration with these teacher candidates to help them plan and provide quality instruction to students. As we considered the findings of our study, we wondered to what extent the experience of mentoring in a pandemic forced mentor teachers to reconsider the practice of mentoring through a new lens similar to how Andrews (2014) suggests that “in the very act of teaching, we must take ourselves through the steps of relearning our subject, and in so doing making the familiar strange to use once again” (p. 77). Given that mentors had no prior experiences mentoring teacher candidates in a virtual environment—not to mention doing so during a pandemic (which impresses us now as perhaps the most consequential aside *ever* noted)—mentors could not rely on their existing “familiar” approaches to mentoring to aid them as they navigated teaching, mentoring, and living through a new “strange” set of circumstances. This was evidenced in additional attributes identified by mentors as they redefined mentoring and the characteristics of effective mentors. Using descriptors such as “accepting” and “empathetic” suggests mentors were seeing teacher candidates in new ways and perhaps were reconnecting with what it felt like to be a novice teacher.

The notion of making the familiar strange can also be applied to how mentors viewed best practices associated with mentoring. As a result of the pandemic, experienced mentors who felt they had a grasp on what their teacher candidates should know, understand, and be able to do by the end of their internship were left to seek evidence of learning through diverse and uncharted means. And while mentors indeed described negative mentoring experiences in the pandemic, such as issues with communication and feeling unsure what their teacher candidates had learned, their responses also reflected several positive outcomes. For example, a significant number of mentors described a shift from instrumental to developmental conceptions of mentoring (van Ginkel et al., 2016), along with a deepened commitment to their stewardship of teacher candidates' development. This shift in mentoring approaches reflects an increasingly collaborative and less transmissive philosophy around mentoring. Additionally, while mentors may not have been able to measure their teacher candidates' learning through traditional means, they did note that teacher candidates developed heightened and different senses of professional and pedagogical self-efficacy than in previous years. These positive outcomes may reflect a learning cycle through which the mentors themselves grew as pedagogues as they refined and reimagined their mentoring practices and relationships.

While the pandemic certainly provided a context for making the familiar act of mentoring new and strange to mentor teachers in our partnership networks, Taylor and Hamdy's (2013) multiple-theories adult learning model may begin to shed some light on how mentors made meaning of their evolving notions of mentoring. In this model, a learner is 1) presented with and engages in a task that causes dissonance, 2) refines their understandings and researches possible

solutions, 3) evolves in their thinking and synthesizes new information into an existing schema, and 4) engage cycles of feedback and reflection. The sudden, unanticipated, and dramatic shifts required during the pandemic presented dissonance in their mentoring practices for the mentors in this study. Throughout the mentoring experience, mentors refined understandings and researched possible solutions to challenges encountered in their daily mentoring work. Our data suggest mentor teachers enacted new and novel ways of communicating, collaborating, co-teaching, and providing feedback to teacher candidates. This indicates an evolution of their understanding of mentoring practices and a synthesizing of new information into existing schemas in order to take action. In this study, the mentors seemed to have progressed through this cycle to articulate their new learning around mentoring. We assert the very nature of mentoring during such unprecedented times likely set off a learning cycle that enabled mentors to move from a more instrumental to a more developmental conception of mentoring.

On the one hand, it is encouraging to see a shift in some mentor teachers' practices. Yet, as Taylor and Hamdy (2013) remind us, such shifts are the result of a dissonance caused by a sudden alteration to one's way of working. Still, despite this learning to mentor amidst great uncertainty, the results of our study indicate many mentor teachers perhaps value the new insights and approaches they were required to develop. Perhaps it is not entirely a negative phenomenon for an experienced mentor teacher to again encounter the feeling of "being a first-year teacher" and reconsider their teaching and mentoring practices—making the familiar strange.

### **Conclusion**

The lived experiences of the pandemic have shown us that the practice of mentoring teacher candidates—and the practice of teaching itself—has increased the labor and effort of teachers in almost incalculable ways, which we have characterized as "exponential." The data and findings of our study support and illustrate this characterization: mentors were learning to teach virtually, while learning to mentor virtually, while learning to model grace at such dramatic shifts in their daily practices and daily lives. These layers of learning are not simply additive or cumulative: each compounded the other. Teachers serving as mentors were responsible for a level of coaching at least cubed if not higher.

At the outset of this study, we wanted to make sense of the myriad shifts in mentoring practice and how mentor teachers made sense of these shifts. In thinking about what it means for something to be exponential, we considered how some mathematicians argue the exponential function "is the most important function in mathematics" (Rudin, 1987, p. 1). This is because the concept of exponentiation helps in understanding many examples of increased changes in our everyday lives, from compound interest, to population growth, to radioactive decay. Our field must continue investigating how the pandemic has affected the exponential growth in the work teachers and teacher educators—and particularly mentor teachers—perform.

While we recognize the positive outcomes of this study, these must be tempered by remembering the contexts and the seismic shifts in teachers' work within which these shifts occurred. To continue supporting the positive professional development of mentors, we suggest teacher educators create spaces for mentors to be able to step outside their traditional roles and move beyond an "apprenticeship of observation" orientation to interns' development (Kennedy, 2005; Lortie, 1975). This might be the third space afforded by our school-university partnerships and Professional Development Schools, with those merged, boundary-spanning roles and collaborative orientations and structures. By systematically presenting mentor teachers with

opportunities to make the familiar strange, we might turn the exponential into the reasonable in partnership with teacher candidates and university-based teacher educators.

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## Appendix

### Initial Survey for Mentor Teachers

#### Demographic Info:

1. Name (open response)
2. Email (open response)
3. Age Range (forced choice: elementary, middle, secondary)
4. Grades/Subjects Taught (forced choice + option write in; Science, Social Studies, Math, Language Arts, Computer Science, write-in option)
5. Current Grade Level(s) (check multiple options: K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12)
6. Current School District (open response)
7. Current School (open response)
8. Please check which semesters you have mentored teacher candidates during the pandemic, then provide information on how that mentoring was provided:
  - a. Spring 2020
    - i. If you mentored in Spring 2020, was it Online, F2F or both?
  - b. Fall 2020
    - i. If you mentored in Fall 2020, was it Online, F2F or both?
  - c. Spring 2021
    - i. If you are currently mentoring in Spring 2021, is it Online, F2F or both?
9. How many years of teaching experience do you have? (open response)
10. How many teacher candidates have you mentored? (open response)

**Survey Questions (all open-ended):**

1. I used to think mentoring was...
2. Now I think mentoring is...
3. I used to think the attributes of an effective mentor were...
4. Now I think the attributes of an effective mentor are...
5. What did you do to get to know your teacher candidate?
  - a. ...in Spring 2020 (or n/a)
  - b. ...in Fall 2020 (or n/a)
  - c. ...in Spring 2021 (or n/a)
6. Prior to the beginning of the pandemic in March 2020, what experiences have you had as a mentor of teacher candidates?
7. Describe your experiences as a mentor of preservice teachers since March 2020.
8. What elements of mentoring have stayed the same for you thus far during the pandemic?
9. What elements of mentoring changed for the better thus far during the pandemic?
10. What elements of mentoring were negatively impacted thus far during the pandemic?

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**Virtually Connected:  
Utilizing Case Studies to Support Mentor Teachers in Times of Uncertainty**

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**Abstract:** The pivot toward remote teaching and learning has undoubtedly complicated the work of preservice mentor teachers. In this article, school leaders, boundary spanners, and university leadership share a concerted effort to support clinical teacher mentors in a virtual setting. More specifically, it highlights the use of case studies to (1) teach mentoring concepts and (2) discover strategies for mentoring in virtual learning environments. The design and implementation of case studies is based on frameworks for experiential learning and the four roles of the preservice mentor teacher. Teacher educators may find this approach helpful for building clinical capacity by providing professional development for mentoring teachers within both traditional and virtual learning environments.

**Keywords:** clinical teacher preparation, teacher development, mentoring, mentoring roles, virtual learning

**NAPDS Nine Essentials Addressed:**

- Essential 2: Clinical Preparation – A PDS embraces the preparation of educators through clinical practice.
- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice or inquiry.
- Essential 4: Reflection and Innovation – A PDs makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.

## **Virtually Connected: Utilizing Case Studies to Mentor Teachers in Times of Uncertainty Introduction**

When the education world pivoted to virtual teaching and learning, mentor teachers struggled to teach remotely while simultaneously supporting the development of their teacher candidate. Educator preparation programs were forced to rethink and recalibrate the professional development necessary to support mentor teachers during this time of unprecedented uncertainty. Out of this uncertainty emerged the use of case studies to simulate the experience of mentoring and to discover new strategies for mentoring in a virtual environment. In the following article, we demonstrate how to design and discuss case studies as part of a mentoring workshop based on a Framework for Experiential Learning and research describing the four roles of a mentor teacher.

### **The Role of Mentoring in Clinically Based Teacher Preparation**

In November of 2010, the NCATE released the landmark Blue Ribbon Panel Report calling for a clinically-based approach to teacher preparation. clinical preparation and partnerships for improved student learning under the expert tutelage of skilled clinical educators (NCATE, 2010). Since 2015, efforts to extend and deepen clinical teacher preparation in New Jersey have led to widespread changes, the greatest of which featured the expansion of clinical experiences. This included the promotion of a yearlong clinical experience that requires candidates to (a) complete 50 hours of clinical practice prior to the yearlong experience, (b) complete a minimum of 100 clinical hours prior to full time clinical practice, and (c) remain in the same placement for their full-time clinical internship.

High-quality clinical internships are central to helping teacher candidates develop the knowledge, skills, and professional dispositions necessary to demonstrate a positive impact on P-12 students' learning and development. A review of clinical experience programs by the Education Commission for the States found that a common characteristic of high-quality clinical experiences was strong supervision by well-trained mentor teachers (Allen, 2003). The research exploring the importance of the clinical practice indicates that preservice mentor teachers play a pivotal and influential role in the experience. The expanded roles of a clinical teacher mentor are even more diverse and dynamic: they involve serving as a model, co-teacher, coach, and reflective practitioner. Clinical teacher mentors have tremendous influence over the beliefs and future practices of teacher candidates working in their classrooms.

Darling-Hammond et al. (2005) agree that expert guidance is needed if novices are to receive the modeling, coaching, and feedback they require. They also note that successful clinical experiences include (1) modeling of good practices by expert teachers who make their thinking visible (2) frequent opportunities to practice with continuous formative feedback and coaching (3) multiple opportunities to relate classroom work to university coursework, and (4) structured opportunities to reflect on practice with an eye toward improving it. Pre-service teachers develop their skills when they learn, experiment, and reflect on their practice with feedback from a mentor who has more expertise (Borden, 2014).

However, the research indicates a lack of consistent training for clinical teacher mentors. In cases where preparation courses are available for those mentoring a pre-service teacher, it has been found that they are often program specific and provide limited information about the nature and role of mentoring (Hall et al., 2008). It is often assumed that the classroom teacher's experience will enable them to mentor a pre-service teacher effectively and provide a worthwhile

experience for the latter (Gagen & Bowie, 2005). Unfortunately, many classroom teachers are not well prepared for mentoring, particularly when difficulties arise with the pre-service teacher (Giebelhaus & Bowman, 2002; Valeni & Vogrinc, 2007). In the absence of preparation or training, many classroom teachers revert to their own experiences as pre-service teachers and duplicate the methods used by their own supervising teachers (Clarke et al., 2012; Hobson et al., 2009; Wang & Odell, 2002).

Although mentors may be excellent practitioners, they may not be effective with adult learners. Mentors require additional training to best serve the needs of those they support, especially in times of uncertainty (Clarke et al., 2012). Mentoring practices, according to Wang and Odell (2002), can be cultivated through professional development for mentoring:

Research suggests that mentor preparation can substantially influence knowledge of particular mentoring techniques and skills to shape their mentoring practice. Research that has specifically investigated the effects of mentoring on pre-service teachers suggests that mentor training increases the positive impact that mentoring can have on the growth of both the skills and knowledge of the mentees (Giebelhaus & Bowman, 2002).

### **The Mentor Academy**

In an effort to build greater capacity for mentoring yearlong teacher candidates, Monmouth University introduced the Mentor Academy workshop series in the fall of 2015. Teachers from one of 29 partner schools are invited each semester to participate in ten hours of professional development on mentoring, conducted over four sessions. Since its inception, the Mentor Academy has helped to better prepare over 400 yearlong clinical mentors from partner schools. At its core, the Academy affords the university the opportunity to better address the role of clinical experiences in learning to teach, the assessment of teacher candidate performance in clinical settings, and the development of profession-ready graduates who can fluidly enact teaching strategies and positively impact student learning from the moment they enter the classroom.

In this article, we examine the use of case studies as an example of facilitating the professional development of mentor teachers in a virtual learning environment. We begin by explaining two frameworks utilized in designing the curriculum for the Mentor Academy. The first characterizes teacher development through the Framework for Experiential Learning, a matrix of processes contributing to the growth of the teacher candidate in clinical settings. This framework is helpful for designing case studies that include, action, emotion, cognition and awareness, four key components of learning through experience. The second is a characterization of the four roles of the mentor teacher as professional colleague, co-teacher, coach, and reflective partner. The four roles provide insight into the different types of interactions that mentors may have with their teacher candidates and how they might approach mentoring.

### **Teacher Development**

Our approach to conceptualizing teacher development is constructed around four components of experiential learning: action, emotion, cognition, and awareness. This approach extends models of experiential learning based on action and cognition to also include the influence of emotion and awareness. The incorporation of these four provides a richer, more inclusive, more holistic conceptualization of experiential learning. Theoretically, there is strong support for including all four, and practically, the addition of emotion and awareness provides a fuller conception of classroom experience. This is especially helpful when designing new cases.

Including each of the four ensures that mentor teachers will have ample opportunity to practice a wide range of mentoring skills.

In Figure 1, each of the four components of experiential learning is represented in the first four columns of the Framework for Experiential Learning (FEL). In the fifth column is context, or the place where experiential learning occurs. Each of these five columns is broken down even further into multiple levels corresponding to sub personal, personal, social, and the world. The personal occurs at the individual level, the social at the group level, and the world refers to the broader context for learning. By adopting FEL, experiential learning processes can be observed from multiple perspectives, thereby ensuring an appropriate level of complexity for the case study design.

**Figure 1**

*Design Framework for Experiential Learning*

	<i>Action</i>	<i>Emotion</i>	<i>Cognition</i>	<i>Awareness</i>	<i>Context</i>
<b>Subpersonal</b>	<i>Purpose</i>	<i>Disposition</i>	<i>Perception</i>	<i>Attention</i>	<i>Ground</i>
<b>Personal</b>	<i>Enaction</i>	<i>Feelings</i>	<i>Intuition</i>	<i>Intrapersonal</i>	<i>Emergent</i>
<b>Social</b>	<i>Interactions</i>	<i>Relationship</i>	<i>Analysis</i>	<i>Interpersonal</i>	<i>Familiar</i>
<b>World</b>	<i>Systems</i>	<i>Synergy</i>	<i>Creativity</i>	<i>Transpersonal</i>	<i>Novel</i>

The framework utilizes a systems perspective; in other words, all of the elements in the Framework influence each other. Changing one has an effect on all the others. For example, the sub personal level represents different components of what individual teacher candidates experience individually. Honing each or any one of them will improve performance at the personal level. Likewise, learners experience of action, emotion, cognition, and awareness at the personal level influences how the individual interacts with the group. Teachers need to be aware of fundamental motivating processes for action, their own processes as a learner, how to use their knowledge to influence the learning of their students, and finally, how to create the conditions for the expansion of their practice or the discovery of new teaching methods.

Experiential learning occurs through the interaction between a teacher candidate and a student. As they interact, each influences the other (Gallagher, 2020). Action begins with a purpose that is enacted through a single individual, which leads to interactions with another or within a group. The novel or unfamiliar part of the interaction triggers experiential learning through changes in emotions, perception, thoughts, and behaviors that result in experiential

learning (Dewey, 1963; Kolb, 1984; Perls et al., 1994). With practice, teachers increase in their skill level; their behaviors, both verbal and physical, become more complex; they become more autonomous in their actions; and they make more decisions independently. To foster development in students, they must encourage a similar type of growth. The creation of systems; whether management, motivation, or learning systems; results in a structured approach to fostering the type of developmental growth described above.

Through action, emotions arise within the individual. How the individual reacts to his interaction with the context depends in part on his initial disposition. Dispositions can color perceptions and affect how environmental challenges are perceived and processed. Action is affected by the feelings that ensue from the individual's reaction to an encounter with the environment (Prinz, 2004). This emotion becomes the motivation for action - or the lack of it. Positive emotions that acknowledge and accept the reality of the world around are associated with expeditious movement through the environment. Negative emotions are associated with emotional resistance and the inhibition of action. Emotions influence our actions, interactions, thinking, and level of awareness. Because emotions can be positively cultivated, they play a critical role in teaching and learning to teach. While some emotional reactions are instinctive, many can be influenced by our values, judgements, perceptions, and more largely our narrative. In this case, teachers are working on themselves and managing themselves so they can better influence their students' emotional experience.

Action and interaction between the individual, the group, and the world form the basis for embodied cognition (Varela et al., 2016). The role of thought is to construct new cognitive relationships that can predict and guide behaviors to make adjustments or to solve problems in context. Thinking is often sparked by problems, which are often solved using both tacit and explicit thinking. Through the repetition of purposes, actions, lesson plans, and interactions with students, teachers move from a kind of fuzzy impression of feelings, images, and gestalts to schemas they may eventually link to educational research and theory. Teachers are able to simultaneously think on a more abstract level with greater awareness and control over their thinking. The emergence of explicit abstract knowledge provides more control, more ability to change, and more ability to work across contexts.

Awareness is recognition of relationships in an instant, whether simple or complex – like the “aha” moment in the creative process, an instantaneous moment of recognition that occurs in the present moment (Prinz, 2002). That differs from cognition, which evolves in a linear sequence before, during, and after the experience (Varela et al., 2016). By cultivating attention, teacher candidates can foster their development by becoming more aware of their emotions, their actions and their thinking, as well as their students (Wu, 2014). Focusing more attention on the present moment provides more content for thought.

### **The Four Roles of the Mentor Teacher**

In the 2019-2020, one of authors completed a qualitative research study, the goals of which were to examine (a) the role of pre-service mentor teachers within a clinical teacher preparation model, (b) the pre-service teacher mentors' training and preparation for those roles, and (c) the pre-service teacher mentors' perceived needs regarding additional training and support (Falco, 2020). This study set out to answer the following research questions:

1. What do pre-service teacher mentors report as their role in the guidance and development of yearlong teacher candidates?
2. What do pre-service teacher mentors perceive as the most effective tools to support the



various roles of a yearlong clinical mentor?

3. What do preservice teacher mentors perceive they need to mentor yearlong teachers more effectively?

Findings from the study identified four primary roles for mentoring: (a) mentor as professional colleague, (b) mentor as co-teacher, (c) mentor as coach, and (d) mentor as reflective partner. Research findings from this study linked the four primary roles of preservice mentor teachers to the mentoring dispositions, strategies, and tools referenced in Table 1.

**Table 1**

*Mentoring Dispositions, Strategies, and Tools*

Mentoring Dispositions	Mentoring Strategies	Mentoring Tools
Transformations in Thinking	Relationship Building	Personality Inventory
Collegiality	Engagement	Orientation Guides
Collaboration	Communication	The Development Curriculum
Coaching	Co-teaching	Co-teaching Strategies
Reflective Practice	Co-planning	Video Coaching
	Modeling	
	Feedback	
	Questioning	
	Self-Reflection	

Mentor as a Professional Colleague linked the temperament, habits, and mindset of an effective yearlong clinical mentor with collegiality, collaboration, coaching, and reflection. Professional development experiences that cause mentors to thoughtfully revisit their first years of teaching can engender a disposition of acceptance toward beginning teachers (Rowley, 1999). Professional development should also include strategies and tools that encourage mentors to reflect on their personality and communication styles. These can provide valuable insight into the way they approach mentoring and communication with candidates, students, and colleagues.

The mentor as co-teacher addresses the most effective strategies used to promote the development of yearlong teacher candidates. Mentors must be prepared to communicate co-teaching and co-planning expectations, explain and model the use of various co-teaching strategies, and connect co-teaching to tools such as the Developmental Curriculum, which outlines a developmental sequence of teaching experiences (Henning et al., 2019). Activities that

promote collaboration and coordination can also emphasize the qualities of a positive co-teaching relationship.

The mentor as coach addressed the practical tools used to support the mentoring of yearlong teacher candidates. Addressing the professional development of this role should include greater attention to coaching strategies, tools and dispositions. Topics must include adult learning, conferencing strategies, questioning techniques, listening to understand, coaching responses, approaches to building receptivity to feedback, strategies for depersonalizing feedback, and ways in which to encourage critical self-inquiry. Greater attention to this role will allow yearlong clinical mentors to be more deliberate, systematic, and accurate when providing instructional support.

The mentor as reflective partner centers on strategies and tools that assist with facilitating reflective dialogue with teacher candidates. This may include attention to the use of video recording as a tool for encouraging self-reflection, verbalization, and dialogue. Candidates can videotape a particular teaching segment, reflect privately using one of several rubrics, and engage in dialogue with their mentor thereafter.

### **Case Studies**

The above descriptions of the Framework for Experiential Learning and the four roles of mentor teachers are the foundation for the Mentoring Academy. In this section we show how these descriptions can be used to create and discuss authentic case studies for the purpose of fostering the mentoring of teacher candidates. A new approach was needed to support clinical educators, who were forced to rethink learning through experience as they adapted to new school districts policies regarding observing and recording live instruction. Analyzing case studies helped us think through the new teaching environment, become more aware of the new approaches taken by mentor teachers, and foster the discovery new mentoring approaches through the discussion.

We realized that our cases must address two significant components of mentoring during the pandemic. The mentors in the Academy needed new skills for mentoring in a virtual, hybrid or in-person setting with shortened school days, masks and social distancing. Further, they needed to also provide teacher candidates with insight into how teaching would occur in a “normal” classroom setting, for example, during small group instruction, when students are sitting near one another, sharing materials, and closely collaborating with one another. Discussions with various stakeholders led to the following two questions in preparation for the 2020-2021 Mentoring Academy.

- How could we prepare clinical interns for teaching in a pandemic, while still providing them with appropriate knowledge of “traditional” teaching?
- How could we effectively teach mentors to take on this monumental task and support them in a virtual environment?

By using case studies, the mentors could examine a scenario to identify actions, emotions, awareness, cognition and context. To illustrate how this process works, we have shared two example case studies. Both address mentoring in virtual classrooms. In each case, we first ask mentors to reflect on the teacher candidate’s experience from the four perspectives discussed above: action, emotion, cognition, and awareness. After they had completed their discussion of the analysis, we asked them to assume the four different roles of the mentor teacher, then strategize about the best way to facilitate the growth of teacher candidates in each of those experiences. To demonstrate our approach to these discussions, we offer an analysis of

two different case studies below, the first of an elementary teacher candidate and the second a high school science teacher.

### **Case Study #1: Elementary**

*Ms. Harris is a Yearlong Clinical Intern in third grade at Main Street Elementary School. Her students chose one of two options to start the school year: attending in person five days a week on an early dismissal schedule or attending virtually. By the end of September, the class consists of five remote learners and thirteen in person learners, sitting six feet apart at individual desks fitted with shields.*

*Ms. Harris delivers instruction using Smartboard for the students physically in the classroom and via Zoom for virtual students. She has become proficient at using the Zoom platform and many of the digital tools that the school district has provided for instruction. During conferences, her mentor teacher tells Ms. Harris that her lessons are well designed.*

*When observing a math lesson on fractions, the mentor notes that Ms. Harris has projected a Google Slides presentation with various graphics with examples of fractions. She is sitting at the desktop computer in the front of the room so the virtual students can hear and see her. In the back part of the room, it is noted that the students are quietly talking with each other and not paying attention to Ms. Harris' instruction. She does not notice and keeps proceeding through the slides.*

*Ms. Harris begins to circulate around the room when the students move on to independent practice with fractions. The students in the back area of the room all raise their hands because they do not understand how to complete the assignment. Ms. Harris feels flustered and begins aggressively questioning the students.*

*Soon she hears her virtual students calling her name. She quickly makes her way up to the desktop and pulls up a whiteboard on Zoom to show the students some other strategies. Other students are asking for help in the room and Ms. Harris tells them that they need to wait. The end of the math class comes, and she tells the students to finish the assignment for homework.*

### **Teacher Development**

Below are illustrations of our discussion on the case described above. We organized our discussion around the Framework for Experiential Learning and the four roles of the mentor teacher. In the following subsections, we discuss how we used those two lenses to more fully explore the complexity of mentoring teacher candidates in a virtual environment.

#### **Action**

We began the discussion by asking this question: "As a mentor, what actions did you see Ms. Harris specifically take in the lesson?" Ms. Harris was attentive to her virtual learners by using the digital tools to engage them in the lesson. She prepared a visual on the Smartboard for all learners, responded to students negatively when they did not understand the material, and circulated the room to attend to the needs of the learners. When discussing this case, the mentors were quick to identify strategies to improve her interactions with students. As leaders in the academy, we also stressed the importance of encouraging clinical interns to reflect on their actions and appropriate in the lesson. We also reminded the mentor teachers that Ms. Harris is a preservice teacher who is learning, and therefore needs positive reinforcement, just as much as she needs feedback regarding areas for improvement.

### ***Emotion***

The actions conversation segued perfectly into a discussion of the emotions at play in the scenario. It was clear from the discussion that Ms. Harris's reaction stemmed from frustration with the students who did not grasp the concept. Additionally, she seemed overwhelmed by managing the virtual and in-person learners simultaneously. The complexity and difficulties involved were subjects of much reflection by the mentor teachers. They commented that an inexperienced preservice teacher might not yet have the skill set to manage this new kind of instruction.

During the discussion, we explored ways could the mentors act as a reflective partner to provide guidance in managing stress and finding ways to control her frustration. Empathizing with the teacher candidate as a reflective partner promotes honest discussions and strengthens the mentoring relationship. Engaging in conversation helps put the intern at ease and in turn elicits a more appropriate response to students. It is critical for the teacher candidate to realize that successfully managing her own emotions will result in more positive interactions with students, which will ultimately lead to a more positive outlook by the teacher candidate and a sense of synergy with the class.

### ***Cognition***

The mentors quickly recognized the relationship between Ms. Harris' emotions and thinking. Although her lesson plans were well structured and clearly demonstrated a variety of creative teaching strategies, the mentors concluded that her frustration stemmed in part from her unrealistic expectations that she connect with each student perfectly. So, when the inattentive students started asking questions, Ms. Harris appeared disappointed they didn't grasp the material better. We asked the mentors to collaboratively analyze and discuss her thinking to collectively discover the best strategies to alleviate her concerns.

### ***Awareness***

It was immediately clear to the mentors that Ms. Harris lacked an awareness of effective classroom management. She was not aware that students in the back of the room were not attentive and were whispering among each other. Her focus was more intrapersonal; she was attentive to her own perceptions of how the material was delivered rather than how it was received. Her aggressive questioning solidified the mentor's observation that she lacked the interpersonal awareness needed to manage a classroom effectively.

A question was posed for the mentors to discuss in breakout rooms, "How would you make Ms. Harris more aware of how she presented and executed this lesson?" Many of the mentors talked about sharing their own personal stories about situations and how they handled them. We also encouraged them to foster purposeful noticing to teacher candidates to enhance their awareness. Purposeful noticing entails making very focused observations, in this case on classroom management, to enhance awareness. It helps the candidate to become more aware of her students, which is interpersonal awareness, as well as increasingly aware of the importance of continually striving to extend her awareness. We refer to her awareness of her unawareness as transpersonal awareness.

### **The Roles of the Mentor Teacher**

In this section, we discuss approaches to mentoring through the different relationships mentors have with teacher candidates. An awareness of these relationships can help the mentor

more effectively cultivate different aspects of the teacher candidates' experiences.

### ***Mentor as Professional Colleague***

This role of *Mentor as Professional Colleague* is grounded in dispositions, strategies, and tools that promote relationship building, engagement, and communication. Effective yearlong clinical mentors are capable of fostering strong, caring mentoring relationships by building trust with teacher candidates. A case study provides an excellent means to discuss the role of the mentor teacher as a colleague, a relationship that encourages teacher candidates to feel comfortable about asking questions, making mistakes, and experimenting with new strategies.

### ***Mentor as Co-Teacher***

In the role of a co-teacher, mentor teachers should work to ensure the candidate becomes more familiar, skilled, and comfortable with co-teaching. It may include co-planning to discuss goals, specific roles within a lesson, and management strategies or the use of varying co-teaching strategies to place the candidate in varying roles and situations that will build confidence in the hybrid learning environment. Co-teaching strategies are based on the work of Cook and Friend (1995) and may include (a) one teach, one observe; (b) one teach, one assist; (c) parallel teaching; (d) station teaching; (e) alternative teaching; and (f) team teaching. While engaged in co-teaching, mentor teachers should carefully observe teacher candidates and provide feedback that facilitates their performance.

### ***Mentor as Coach***

Pre-service teachers enter the yearlong experience with varying degrees of skill in instructional design and delivery. Whatever their skill level, effective yearlong clinical mentors must be willing to coach teacher candidates to improve their performance. Helping a candidate in becoming more confident and capable in the co-taught classroom may utilize the “I Do, We Do, You Do” approach. Mentor teacher modeling may help the teacher candidate better understand how her mentor reasons through situations, how she draws conclusions from their experiences, and how she uses those conclusions to inform her decision making.

The use of feedback is also foundational to the role of *Mentor as Coach*. Rowley (1999) maintained that training in this area should help mentors value description over interpretation in the coaching process, develop multiple methods of classroom observation, employ research-based frameworks as the basis for reflection, and refine their conferencing and feedback skills. Some coaching strategies that can be introduced through case studies include listening to understand, the use of paraphrasing to establish a shared understanding of the situation, and the use of a “compliment sandwich” to build receptivity to feedback, and ways in which to de-personalize feedback.

### ***Mentor as Reflective Partner***

As a reflective partner, mentor teachers can foster teacher candidate development through reflective dialogue. This may include the use of video recording as a tool for encouraging self-reflection, verbalization, and dialogue. A mentor may encourage the candidate to videotape a particular teaching segment, reflect privately using one of several performance assessment rubrics, and engage in dialogue afterwards. This may help the candidate become better aware of herself and the interactions occurring around her.

## **Case Study #2: High School**

*Mr. Thompson is actively engaged in the first semester of his Yearlong Clinical Internship at Valley High School. He has been quite excited to be working with his mentor teaching freshman biology in the science department, even if the school is fully virtual. The mentor and Mr. Thompson have been co-teaching on Google Meet to deliver instruction to the students. They only know each other through Google Meet: they have not met in person. Mr. Thompson and his mentor teacher have worked hard to adapt to virtual teaching. For example, they used YouTube videos to demonstrate dissections normally be done in the lab. Teacher mentor modeling has helped Mr. Thompson has become proficient with Google Slides and other virtual platforms.*

*When Mr. Thompson took the lead in teaching classes, he struggled to engage his students and most of the students left their cameras off. His mentor teacher's feedback suggested that he was on target with his procedures and activities outlined in his lesson plans. But if he called on someone, they would give a short answer, or say they didn't know. He knew that he should be questioning students to elicit high level thinking, but he was keenly aware that the students would answer with their silence. His mentor recommended telling students to turn their cameras on and off to signal agreement or disagreement with statements. However, Mr. Thompson did not believe that to be an effective questioning technique.*

*Shortly after, the mentor noticed that Mr. Thompson, once so eager to take the lead in lessons, had stopped volunteering to teach. He told his mentor that he preferred a more supportive role as the co-teacher. She noticed a concurrent decrease in his enthusiasm. It seemed as if he was just going through the motions to complete the basic requirements for the first 100 hours of his internship.*

### **Teacher Development**

#### **Action**

Mr. Thompson familiarized himself with the available online teaching tools, prepared high-quality lessons, and developed high level discussion questions. Negatively, he did not take the advice of his mentor and ignored her suggestion to increase engagement. That eventually led to retreating and shutting down. The mentors were asked, "What would be the first steps you would take to support Mr. Thompson virtually?" For them, the key to the problem was relational: Mr. Thompson had not met either his students nor the mentor in person. Thus, the mentor teachers discussed strategies for building relationships. Hopefully, those strategies would help Mr. Thompson gain some confidence, improve his interactions and return to his energetic and positive self.

#### **Emotion**

Through the discussions, it was determined Mr. Thompson was struggling with his emotions. He started out as an eager participant and it was clear to see that he was feeling defeated. The students lack of engagement fed his feelings of inadequacy and eventually led to his lack of energy and interest. Everyone agreed the mentor should serve as a reflective partner, reassuring him that as a team they would work through these struggles together. We asked the mentors to examine their own emotions first, then consider the feelings of Mr. Thompson. We hoped this strategy would provide additional insight into addressing the mentee's emotional state.

### ***Cognition***

A central part of the discussion in this case study was a reflection on virtual teaching in this Zoom or Google Meet environment. Although the mentors were expert with in person teaching strategies acquired over a period of years, they were novices as “virtual” educators. The mentors commented they were learning to adapt to this teaching environment through trial and error. Therefore, it is imperative that mentees be active discussants so they can better plan effective instruction for the students. Mr. Thompson could also benefit from listening to the thought processes of a veteran teacher.

### ***Awareness***

In this case study, Mr. Thompson was aware that his students were not engaged and motivated. Consequently, he became disengaged with the class and was content to let his mentor take the lead in the lessons. The mentor suggested a way to improve engagement and communication with the class; however, Mr. Thompson did not heed his mentor’s advice. He had already formed his opinion about the class: they were not paying attention or even interested in the instruction. He was focused on the intrapersonal (his individual self) level and could not see that perhaps the students did care. His negative conclusions were based on his opinions and preconceived notions, rather than considering the interpersonal space. The mentors suggested surveying the students about their needs, wants and learning styles. Much can be learned from hearing the voices of the students, especially in a virtual setting. As mentors, it is critical to guide these young novice educators to examine issues from multiple perspectives to cultivate a heightened awareness of their interactions with students.

## **The Roles of the Mentor Teacher**

### ***Mentor as Professional Colleague***

When assuming the role of Mentor as Professional Colleague, a focus on engagement may serve to center candidates on areas of strength and emphasis. To support Mr. Thompson through this time of uncertainty, the mentor may choose to utilize the Developmental Curriculum, a tool for coaching and reflection that is aligned with the InTASC standards. The Developmental Curriculum charts the step-by-step developmental progression of teacher candidates from the first day of clinical experience through the culmination of the clinical internship. This tool can be used for setting goals, building confidence in areas of focus and monitoring progress (Henning et al., 2019).

### ***Mentor as Co-Teacher***

This case alludes to the use of at least one co-teaching strategy, but it is unclear as to the extent that multiple strategies have been utilized. Further, the co-teaching relationship in this study is threatened when the candidate expresses a reluctance to try his mentor’s suggestions. Co-planning that focuses on addressing student engagement and asking discussion questions is a good starting point here. In addition, the use of co-teaching strategies such as station teaching may allow Mr. Thompson to build confidence in these areas in a smaller setting. This may assist Mr. Thompson in connecting with his students for the purpose of promoting greater buy in and participation.

### ***Mentor as Coach***

Mentors who not only model good practice, but also model the thought process behind it, can help teacher candidates develop greater competency. In this case study, the teacher candidate struggles with higher level questioning and student engagement. After several failed attempts, the candidate shuts down and becomes disengaged. To re-engage the candidate, the mentor may opt to model a best practice. Through modeling, mentors can share their planning process, demonstrate effective teaching, alert candidates to key aspects of teaching, and model reflective thinking (Henning et al., 2019).

### ***Mentor as Reflective Partner***

As a reflective partner, mentor teachers can foster teacher candidate development by engaging in dialogue. They can include quick conversations following a specific instructional segment, troubleshooting at the end of a school day, or conducting an exit conference at the end of a clinical experience. One strategy that may assist Mr. Thompson's mentor is the Describe, Interpret, Interpret, and Justify (DIJS) model, the goal of which is to develop teacher candidates' abilities to accurately describe what is occurring in the classroom; to accurately interpret those events; to use those interpretations to develop new strategies; and to justify those strategies using past practices, research, and learning theories (Henning et al., 2019).

## **Conclusion**

Regardless of the environment, mentoring will remain a critical component of preparing new teachers. Thus, the preparation of mentor teachers will continue to be a critical element of building an effective teacher preparation program. One approach to effective mentor teacher preparation is the use of case studies, as described in this article.

Case studies can be more effectively designed and discussed if they consider the development of teacher candidates, as well as the four roles of the mentor teacher. The design of the case can incorporate important parts of the teaching experience, i.e., what the teacher candidate did, how they felt about it, how they thought about it, and their level of awareness in the context. Using the Framework for Experiential Learning facilitates the creation of case scenarios that incorporate key elements of any teaching experience.

Mentoring can be effectively taught, by considering the different roles that a mentor assumes, such as colleague, co-teacher, coach, and reflective partner. As a colleague, mentors can empathize with the challenges, frustrations, and disappointments of the profession. As a co-teacher, they can model strategies, share their thinking, and foster the awareness of teacher candidates. As a coach, they can provide critical feedback to help teacher candidates improve their performance, and as a reflective partner, they can pose questions and share their thinking in a way that stimulates reflection.

Further case studies provide an open sharing of strategies so when new contexts for mentoring emerge, like the pandemic, mentor teachers have a chance to share their strategies, thus multiplying the collective thinking of the entire group. In this article, we showed how we utilized case studies to further our knowledge in a virtual environment. By giving the mentor teachers case studies that included problems that are unique to virtual teaching, we enable the possibility to learn from our participants, as well as guide them. We fully expect that virtual mentoring strategies will continue to play an important role in a post COVID world.

Case studies are a good vehicle for furthering our own professional growth as educators. In order to foster our own growth, we have to act (try new things), persevere (push forward),



think (keep reflecting), and remain aware (stay focused in the present moment). When we were thrust into a new context, we have to take advantage of different circumstances and how the different environments fertilize our thinking as we look for new relationships and connections. This certainly was our experience as we moved forward with discussing case studies virtually. We had allowed a space for mentors to give us new insights into how mentoring can be enhanced in a virtual environment. They did not disappoint; they did a beautiful job of teaching us. We learned a lot from them, and we hope, they from us.

But work still needs to be done. We believe that utilizing case studies for discussion can extend our thinking about mentoring by building a collective knowledge of mentoring in a virtual environment. In this way, case studies provide a vehicle for a constant rethinking of the curriculum and instructional strategies.

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## **Mentoring Through Uncertain Times**

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**Abstract:** Professional Development Schools have faced unprecedented challenges with emergency shifts to virtual learning and mentoring during the COVID-19 pandemic. Through a NAPDS-recognized Exemplary PDS between a Historically Black College (HBCU) and a large urban/suburban school district in the northeast region, we began wondering how the pandemic was impacting our PDS work during these times of uncertainty. We also wondered what we could learn from one another about mentoring teacher candidates in the virtual classroom. In this article, we share the results of our action research study that focused on best virtual practices in PDS and mentoring teacher candidates in the virtual classroom, how to maintain connections in our PDS partnerships, and the impact of sudden changes on our PDS program.

**Keywords:** PDS, teacher preparation, virtual mentoring

### **NAPDS Nine Essentials Addressed:**

- Essential 5: Research and Results – A PDS is a community that engages in collaborative research and participates in the public sharing of results in a variety of outlets.

## Mentoring Through Uncertain Times

Our PDS Network, like others in the nation, has faced unparalleled challenges with emergency closures and shifts to virtual learning for all grade levels due to the COVID-19 pandemic. As we continued to prepare teacher candidates through year-long clinical internships, we knew we would have to modify our approaches. But how could we move forward with changes without hearing the voices of our teacher candidates and mentor teachers? Our PDS Network has a long history of using action research, inquiry groups, and teacher researchers to investigate best practices and student performance to build reflective practitioners in our PDS sites and with our teacher candidates to address the National Association of Professional Development Schools [NAPDS] Nine Essentials (NAPDS, 2020). We decided to use the lens of action research to investigate effective mentoring practices during virtual schooling through our PDS partnership between Bowie State University and Prince George's County Public Schools. Dr. Eva Garin, PDS professor; Dawn Nowlin, a fifth grade mentor teacher; and Crystal Marshall-Krauss, a part time graduate student and middle school teacher, investigated what is working during virtual internships. We wondered what gaps in teacher clinical preparation aspiring teachers may experience as a result of the COVID-19 pandemic when they begin their first year of teaching in the 2021-22 school year. This action research investigation aimed to support our PDS program improvements by identifying the practices mentor teachers are using to support teacher candidates in a year-long internship program, learning about the experiences of our teacher candidates, and gathering examples of effective teaching in this time of uncertainty.

Beginning in the early fall semester, we used surveys, focus groups, and interviews with mentor teachers and teacher candidates to provide insight into the effectiveness of mentoring in a virtual classroom, particularly regarding several key areas including classroom management, relationship building, and communication. By the end of the spring semester, we were able to implement changes and program improvements for the following school year.

For this study, the definition of action research offered by Kemmis and McTaggart (1992; 2000) is used:

Action research is a deliberate, solution-oriented investigation that is group or personally owned and conducted. It is characterized by a spiraling cycle of problem identification, systematic data collection, reflection, analysis, and data-driven action taken and finally problem redefinition. (p.14)

Because the teacher researchers in our PDS Network have extensive experience both conducting action research and supporting their teacher candidates' action research, we were able to identify our focus and formulate our action research question. As one teacher researcher writes, "A teacher researcher may start out not with a hypothesis to test but with a wondering to pursue" (as cited in Hubbard & Power, 2003, p. 2). Dana (2017) defines wondering as "a question focused on a problem of practice that emerges from a felt difficulty or real-world dilemma experienced by the practitioner" (p. 7). The wondering guiding this study is, *How does the pandemic impact our PDS work, and what can we learn from one another about mentoring teacher candidates in the virtual classroom?*

## **Methodology**

### **Participants**

Twenty-nine participants participated in this study. All survey participants were volunteers from PDS sites and attended monthly, virtual meetings for PDS support. Sixteen were mentor teachers, eleven were teacher candidates at elementary schools, and two were secondary teacher candidates.

Participants for focus groups and interviews were selected from the survey participants who expressed interest in follow up focus groups and one-on-one interviews during the virtual meeting. Attention was given to include perspectives from mentor teachers, elementary teacher candidates, and secondary teacher candidates.

### **Data Collection**

#### ***Surveys***

A survey was distributed to mentor teachers and teacher candidates consisting of ten questions about their experiences with their particular role. The survey asked mentor teachers and teacher candidates to use a Likert scale to rate the overall effectiveness of mentoring during virtual schooling and to rate the effectiveness of mentoring practices in six categories of teacher preparation. The six categories were: content knowledge, building classroom environment, building relationships with PK-12 students, assessing student learning, designing effective instruction, and meeting the needs of diverse learners. These categories were selected based on the teacher candidate methods courses and teacher evaluation criteria from the PK-12 district the PDS sites are located within. The survey included one optional, open-ended comment question; eight of the mentor teachers and ten of the teacher candidates provided additional comments (See Appendix A).

#### ***Focus Groups***

We conducted two focus groups through virtual meetings using a web conferencing platform. We posed three open-ended questions to participants about their experiences as mentor teachers and teacher candidates during virtual school internships. We used questions to encourage discussion between participants. Each question focused on a different aspect of mentoring teacher candidates including communication, support for mentor teachers and teacher candidates, and planning for the future in our PDS partnership. Questions were developed based on the survey results with an aim to gather more information about the results. For instance, a survey response suggested that communication between mentor teachers and teacher candidates was not consistently effective or ineffective. Based on this information, the authors posed a question asking participants to describe the communication as a mentor teacher or teacher candidate to gather more detailed information. Each focus group session lasted approximately one hour and was recorded. See Appendix B for Focus Group questions for each group.

#### ***Interviews***

We conducted interviews with three participants to better understand our survey results and focus group discussions. These interviews were conducted with one mentor teacher and two current teacher candidates. Interview questions were based on the survey and focus group findings and focused on learning more detail about individual experiences in the PDS program during virtual schooling. Interview participants were also asked to provide any suggestions for

improvement in an open-ended format. The interviews were recorded and transcribed for analysis. Interview participants were asked the same questions as focus groups with an emphasis on their personal experiences.

### **Data Analysis**

For the quantitative items in the survey, we used color coded bar graphs to compare the answers by participant groups. We used these bar graphs to formulate questions to pose to the focus groups.

The qualitative survey responses and interview transcripts were analyzed using coding categories, or themes described by Bogdan and Biklen (2007) as “terms and phrases developed to be used to sort and analyze qualitative data” (p. 271). The interview transcripts and qualitative survey results were read and reread by each of us and then we used Google Docs to highlight five themes: classroom management, relationship building, communication, PDS program, technology/other, and patterns. Finally, we compared our analysis at a Zoom meeting. These themes from the qualitative data sources were triangulated with the survey data, interview data, and focus group data.

### **Findings**

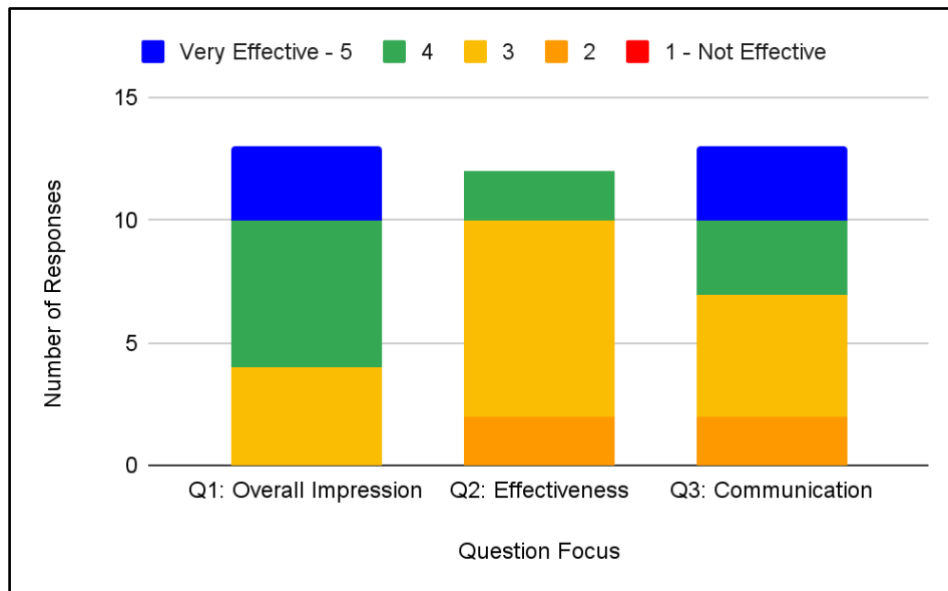
#### ***Mentor Teachers***

**Survey.** Mentor teachers responded to survey questions about their year-long teaching internship experiences during the COVID-19 school closures. The first three questions asked mentors to rate their general impressions in three ways. On Question 1, mentor teachers were asked to give an overall impression of the year-long teaching internship. On Question 2, mentor teachers responded on how effective they found the internship in preparing teacher candidates for future teaching positions. Eight mentor teachers responded with a mid-range score of 3, neither effective nor ineffective. On Question 3, mentor teachers were asked to compare the effectiveness of their communication with their year-long interns with their experience mentoring before COVID-19 school closures on a 1-5 scale, with 1 being not effective at all to 5, effective. Responses to Question 3 were spread throughout the range from 2-5. Notably, no mentor teacher selected “not effective” for any of the general questions.



**Figure 1**

*Mentor Teacher Responses: General Questions*

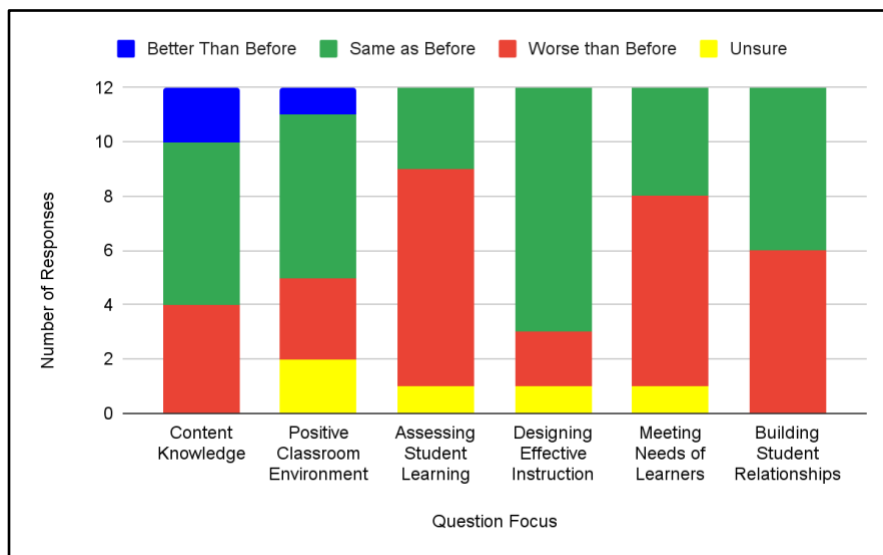


Finally, mentor teachers were asked, “How effectively do you feel you are able to mentor a year-long intern in the following areas during the COVID-19 school closures compared to mentoring pre-COVID?” The domain areas included: content knowledge, creating a positive classroom environment, assessing student learning, designing effective instruction, meeting the needs of diverse learners, and building relationships with PK-12 students.

Mentors responded that some domains of mentoring teacher candidates during COVID-19 are as effective or more effective than previous mentoring during in-person school. The following areas showed more than half of respondents selecting *equal to before* or *better than before*: content knowledge, creating a positive classroom environment, and designing effective instruction. In contrast, there were several areas mentor teachers identified as worse than before COVID-19, including assessing student learning and meeting the needs of diverse learners. The mentor teachers were divided on the area of building relationships with PK-12 students, where half of the mentor teachers stated this was worse than before and half responding this was better than before.

**Figure 2**

*Mentor Teacher Responses: Domain Specific*



**Focus Groups.** Mentor teachers stated that communication with year-long teaching interns was an adjustment but is more frequent than during face-to-face internships. One mentor teacher stated that in her experience, the virtual environment required “really looking at the lesson plan in detail and having a conversation” with the teaching intern. Mentor teachers found that by using text messaging, emails, and web conferencing tools, they had more explicit communication with year-long teaching interns. Mentors stated that being intentional about communication resulted in more frequent contact and clear focus for each discussion with teacher candidates. Mentor teachers highlighted the need to clearly plan roles and explain strategies before virtual synchronous classes. One mentor teacher stated, “We are on the phone, we’re on Zoom every day. We meet with them, especially when they take over, preparing for the instruction. We would do this 48 hours in advance. What the objective is and what the goal is, the outcome. And we will walk them through to a point where they would create their slides.”

Many mentor teachers also expressed uncertainty and concern about the lack of experience interns are having in teaching reading in small groups, managing transitions during a face-to-face school day, and managing their time effectively. Several mentors reported using online curriculum resources, such as teaching demonstration videos, to allow teacher candidates to observe instructional strategies. One mentor teacher described some of the learning the interns participated in at her PDS site, “[The teaching interns] do attend meetings with us on different subject areas, and when they can’t attend I would record and share it out with them, so they know what to expect for the different subject areas.” Mentor teachers also reported the importance of sharing all curriculum resources and explicitly explaining how teachers use curriculum resources to design learning experiences and lessons for students in a virtual environment.

**Interview.** During the interview, the mentor teacher affirmed the results of the survey and focus groups by stating she was concerned about teacher candidates’ skills with classroom management due to the nature of virtual schooling and the policies in place in school districts

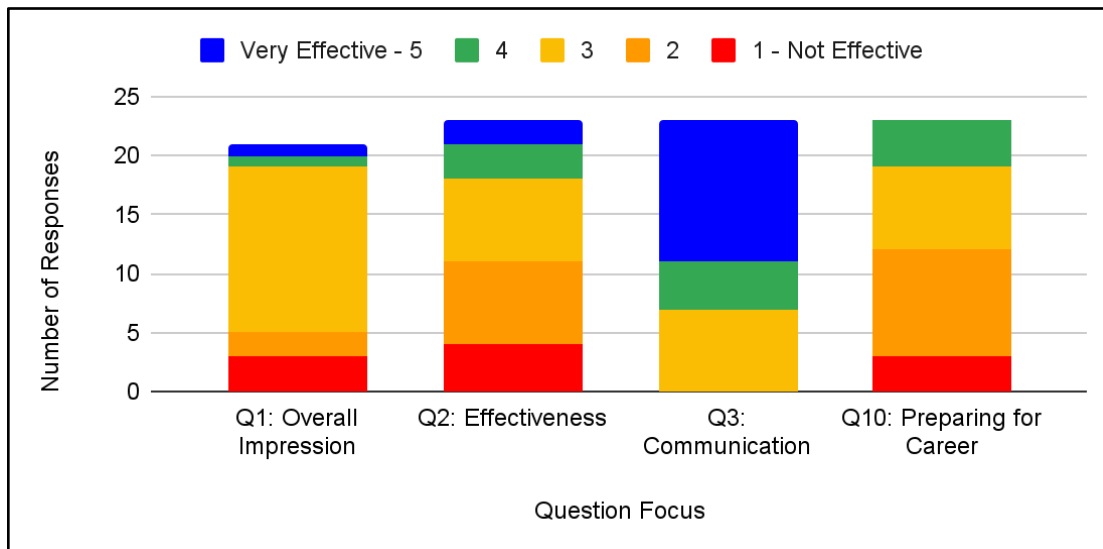
regarding how teacher candidates may work with students. In this particular school district, teaching interns were not allowed to be present in a virtual space for relationship building or instruction without the mentor teacher present. This created challenges for the typical gradual release of responsibilities the mentor teacher had previously used. The mentor teacher also identified access to technology and reliable internet as a barrier for some teacher candidates, stating, “there were a lot of issues with the technology piece.”

### ***Teacher Candidates***

**Survey.** The Teaching Internship during COVID-19 Survey was completed by 23 students currently completing the year-long internship with a mentor teacher. On Question 1, “Overall, how is your virtual year-long internship going?” respondents used a 1-5 scale with 1 being “very poorly” and 5 being “very well.” Teacher candidates provided scores that included the full range of the scale. Fourteen teacher candidates selected a middle score of 3. On Question 2, teacher candidates were asked to compare the effectiveness of their current virtual internships with their pre-COVID-19 field experiences in classrooms. Similar to Question 1, teacher candidates reported the full range of responses on Question 2. Question 3 asked “Overall, how is the communication between you and your mentor teacher?” Teacher candidates responded with all 3, 4, or 5 scores, with 12 responding that communication was “Very Effective.” Finally, teacher candidates responded to the question, “Overall, how effectively is your year-long teaching internship preparing you for your first year teaching face-to-face?” Twelve teacher candidates responded with a 1 or 2 indicating they did not find the internship to be effective for preparing them for their future professional careers. Eleven teacher candidates responded with a 3 or 4 indicating some effectiveness. No teacher candidates indicated that the virtual year-long teaching internship was very effective at preparing them for their future careers.

**Figure 3**

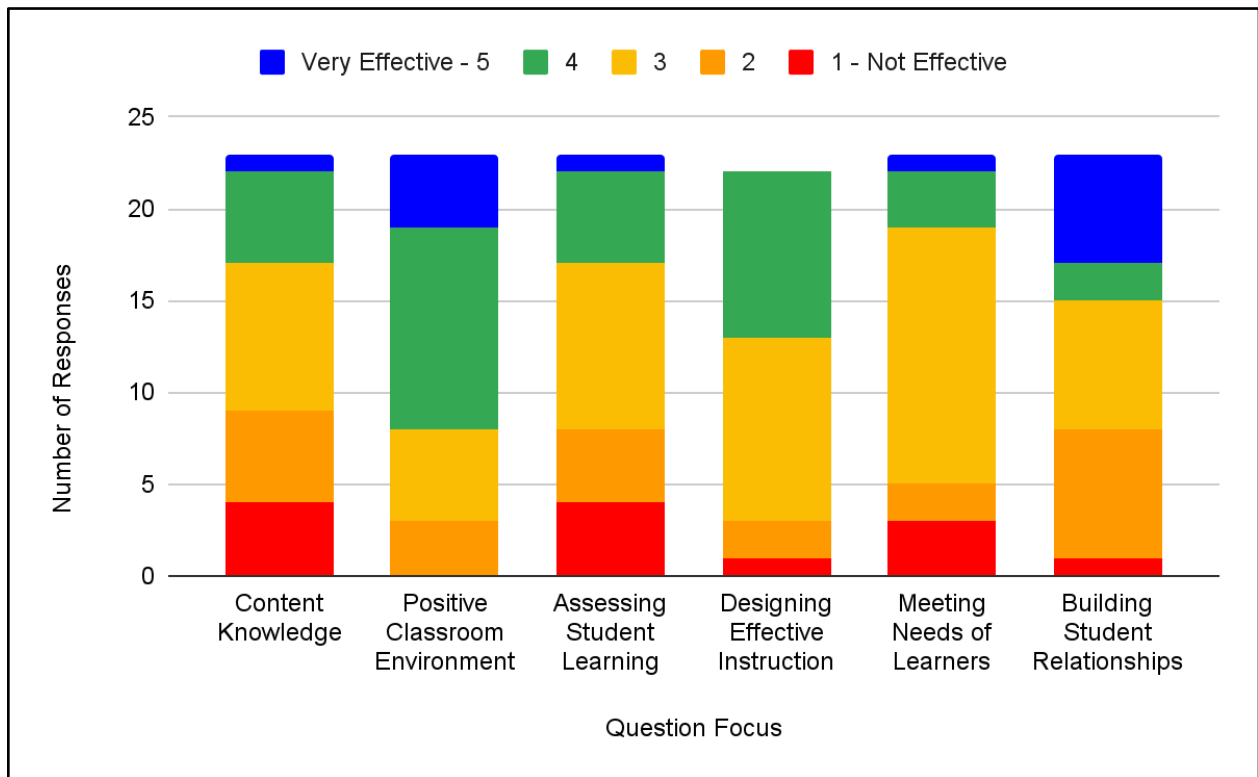
*Teacher Candidate Survey: General Questions*



Similar results were repeated on the remaining survey questions. Teacher candidates reported a wide range of experiences in the virtual year-long internship in specific domains. Figure 3 highlights the areas that were more effective or less effective, while responses for most domains fell in a middle range of 2, 3, or 4 on the scale. Building student relationships and a positive classroom environment showed more responses of “very effective” than other domains. In contrast, development in content knowledge, assessing student learning, and meeting diverse needs of students all had more “not effective” ratings than other domains.

**Figure 4**

*Teacher Candidate Responses: Domain Specific Questions*



Seven teacher candidates provided a response to the open-ended opportunity to provide comments (See Appendix A). In general, many expressed the university program requirements needed to be modified as a result in the change in the school model to virtual.

**Focus Groups.** During the focus groups, teacher candidates provided insight to several aspects of the year-long virtual internship experience and identified areas where the PDS program could better support teacher candidates and mentor teachers. In response to a question about effective communication during the internship experience, one teacher candidate focus group participant highlighted the need for school site PDS coordinators to “start a relationship with the student teachers that are coming into your school.” She continued to explain that her experience was that she “never spoke to those two teachers unless somebody was coming to visit the school because college students were in there.” This response helped explain some of the inconsistent responses to the survey about effective communication between teacher candidates and mentor teachers during the virtual internship experience. As this participant demonstrated, the PDS site-based coordinators had inconsistent communication styles.

Another area of focus for teacher candidates was access to the technology systems at the school. Many teacher candidates were frustrated with the lack of access to learning management systems, online curriculum materials, and access to other digital tools students were expected to use throughout classes.

Finally, the teacher candidate focus group spoke to the university requirements during the year-long teaching internship. Many stated that the coursework, assignments, and other requirements were unclear. One teacher candidate stated, “It’s a lot of duplication of forms; they’re not clear.”

**Interview.** During interviews, the teacher candidates reported on the difficulties of learning classroom management when students are in their own homes. One teacher candidate described how virtual learning has created “15 different learning environments, one for each student.” Another teacher candidate also reported developing relationships with elementary students was more challenging virtually compared to face-to-face experiences in the classroom stating, “When we were in the classroom physically, you were able to interact with the students a lot more. So, virtually, it was a little harder.”

During interviews, teacher candidates also highlighted the alignment of assignments in the university courses and the internship responsibilities in a PDS school site. One teacher candidate stated, “They should look at reducing the number of assignments, especially when we’re virtual. We’re on the computer all day for classes and then have to be on the computer to do assignments.”

**Summary Findings**

We have identified five themes that mentor teachers and teacher candidates reported in the surveys, focus groups, and interviews. Table 1 offers a summary of our findings.

**Table 1**

*Summary of Findings*

Themes	Summary of Findings
Classroom Management	<ul style="list-style-type: none"> <li>• The virtual school environment is a barrier to developing classroom management skills in teacher candidates who are completing internships in an online setting.</li> </ul>
Relationships	<ul style="list-style-type: none"> <li>• Mentor teacher disposition is a significant influence on the teacher candidate’s development during the year-long internship.</li> <li>• Virtual schooling requires specific strategies to develop relationships, both between the mentor teacher and teacher candidate and between the teacher candidate and students.</li> </ul>
Communication	<ul style="list-style-type: none"> <li>• Frequent, regular, and focused communication using tools such as web conferencing and text message proved to be beneficial to mentors and teacher candidates during the year-long internship.</li> </ul>
PDS	<ul style="list-style-type: none"> <li>• Clear expectations and a cohesive program, as well as alignment of schedules, can help teacher candidates and mentor teachers successfully complete the year-long internship.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Teacher candidates need access to all school district resources, including digital tools, learning management systems, curriculum resources, and any online subscriptions.</li> </ul>

## Discussion

We used the intersection of the American Association of Colleges for Teacher Education [AACTE] Clinical Practice Report and the NAPDS Nine Essentials (Garin et al., 2018) to frame our discussion about our action research study.

The results of this action research study provided programmatic insights for strengthening our PDS partnership and clinical internship through boundary spanning roles and caused us to take a collaborative look at the elements of our teacher preparation program (AACTE 2018 p. 5-11). We believe that as a result of collaborative action research, the three authors, a university doctoral student, a university professor and a PDS teacher and adjunct faculty member, learned specific ways to support mentor teachers and teacher candidates in our PDS network while experiencing an emergency school closure and virtual school environment. We used this emergency situation as an opportunity for *ongoing assessment of an established partnership, including its effectiveness and impact to ensure efficacy and sustainability through the COVID-19 emergency and shutdowns* (AACTE, 2018 p. 28).

The Revised PDS Nine Essentials (NAPDS, 2019) use Essential 5: Research and Results to emphasize the engagement in collaborative research and the public sharing of these results. This Essential guided us to collaborate across different PDS roles to bring our experiences together to be able to answer our research questions and analyze our results using different perspectives (Garin & Burns, 2000). We were able to share our action research study with university faculty and supervisors, site-based PDS coordinators, principals, and mentor teachers, to reexamine our practices and make shifts to accommodate the emergency of a virtual clinical internship and associated courses. We were also able to circle back to our study participants to share how their voices helped us make many of the changes that they requested.

We used our action research study to improve practice for all learners. One such practice was to implement a back to school gathering to bring all members of the PDS together before the year-long internship began. Mentor teachers, PDS Site Coordinators, university faculty, and university supervisors were able to meet and discuss goals and plans for the clinical internship.

We shared our action research results in a variety of outlets. We shared our findings at the NAPDS conference with other PDS program leaders and with our PDS network at monthly network meetings. In addition, we included the findings and modified the program offerings in our Teach, Coach, Reflect course for mentor teachers. We used these findings to dig deeper into our PDS work at our annual PDS Network Summer Strategic Planning Retreat, facilitating discussions with mentor teachers and university faculty to develop ways to address the areas of teacher candidate development identified as not as effective when experiencing a virtual internship, such as classroom management and assessing student learning.

We used this action research study to collaboratively craft changes to our program. One such change involved redesigning the methods course assignments to be more aligned to the experiences of teacher candidates at the PDS sites and reduce redundancies. Another change in the methods courses included more opportunities to role play or practice instructional techniques in courses with peers.

Finally, we have revised the course offerings and support for teacher candidates during their Phase One and Phase Two semesters of their clinical internship to include additional instructional technology training including web conference best practices and digital tools to assess student learning. University and adjunct faculty who deliver the methods courses have sought guest experts from the PDS sites to provide lessons about the technology systems and expectations in the PDS schools.

Our action research highlights the importance of collaboration and working with all members of our PDS Network community by listening to the voices of our teacher candidates, mentor teachers, and university faculty to ensure that the clinical internship experiences, whether virtual or face to face, are able to prepare future teachers for the realities of teaching in schools. From aligning university requirements and assignments to school district technology, teacher candidates benefit from PDS partners working together.



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## **Adapting Partnership Work in Times of Uncertainty: A Case from a Rural School-University Partnership during the COVID-19 Pandemic**

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**Abstract:** For school-university partnerships (SUPs) to be sustained, members need to understand the dynamics of change—how and why it occurs, how it is managed, and what it means for all involved. The purpose of this study was to understand from the perspective of participants how the SUP between Auburn University faculty and the schools in Loachapoka, Alabama, adapted to changing conditions during the first wave of the pandemic. The authors designed a participatory action research study using self-study methodology to analyze adaptations to community-embedded summer programming offered in 2019 before the pandemic and, later, in 2020 during the pandemic. The main research question was: *How do school and university partners adapt their work to meet the needs of students, teachers, teacher candidates, university faculty, and the community?* The authors also wanted to know: *What does partnership work in a context of change and adaptation mean to individual partners?* Analysis of written reflections and other qualitative data yielded insights about the nature and meaning of adaptations in the context of partnership work. Three superordinate themes emerged across the data sets: inspiration, interconnection, and innovation.

**Keywords:** community engagement, professional development school partnerships, summer programming

### **NAPDS Nine Essentials Addressed:**

- Essential 2: Clinical Preparation – A PDS embraces the preparation of educators through clinical practice.
- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.

## **Adapting Partnership Work in Times of Uncertainty: A Case from a Rural School-University Partnership during the COVID-19 Pandemic**

Educational institutions and organizations are complex cultural systems influenced by political, social, and economic factors, and changing these systems is a notoriously slow, hard, nonlinear process (Fullan, 2016). Sometimes educational organizations implement change strategically through careful planning, while in other instances they are compelled to change in response to unplanned, external factors and crises. The COVID-19 pandemic that affected the entire world in 2020 is an example of the latter. By April, 2020, school closures around the world pushed more than 1.6 billion students out of their classrooms (UNESCO, 2020), including approximately 55 million students in the United States (Butcher, 2020). Since the pandemic began, school systems and individual teachers have confronted myriad challenges while finding creative ways to design and deliver instruction, strengthen school-university partnerships, and engage families (see, e.g., Hamilton et al., 2020; Hodges et al., 2020).

Successful school-university partnerships (SUPs) are complex systems that require collaboration among all actors as they adapt and change (Campoy, 2000; Walters & Pritchard, 1999). For partnerships to be sustained, members need to understand the dynamics of change—how and why it occurs, how it is managed, and what it means for all involved. The purpose of this study was to understand from the perspective of participants how the SUP between Auburn University faculty and the schools in Loachapoka, Alabama, adapted to changing conditions during the first wave of the pandemic. We designed a participatory action research study using self-study methodology to analyze adaptations to community-embedded summer programming offered in 2019 before the pandemic and, later, in 2020 during the pandemic. We aimed to use the findings from this participatory action research to inform future partnership work. Our main research question was: *How do school and university partners adapt their work to meet the needs of students, teachers, teacher candidates, university faculty, and the community?* We also wanted to know: *What does partnership work in a context of change and adaptation mean to individual partners?*

### **Context for the Study**

Loachapoka is a rural community in Lee County, Alabama, located approximately five miles west of Auburn University. Several entities at Auburn University have a history of engagement with the schools and community in Loachapoka, including the College of Engineering, the Office of University Outreach, and the School of Kinesiology; however, this article focuses on the SUP that has grown since 2017 between faculty in the Department of Curriculum and Teaching in the College of Education and faculty and administrators in the schools (Auburn University College of Education, 2019; McIlwain et al., 2020). The focus of this article is a SUP that differs from other university-led initiatives because of its intentional alignment with the nine essentials of a professional development school partnership (NAPDS, 2021). The adaptations we describe in this article were grounded in commitments to clinical preparation (Essential 2), professional learning and leading (Essential 3), and reflection and innovation (Essential 4).

A key feature of the work in our SUP has been a summer program designed to offer equitable opportunities for continuous learning throughout the year and to deepen community engagement. In 2019, we created two mini-camps for children in high-needs neighborhoods in the school catchment area. These camps were offered outdoors under pop-up tents in the yards of

volunteers and featured literacy and enrichment opportunities that were grounded in theories of funds of knowledge (González et al., 2005) and provocation pedagogy (Moss, 2016) and implemented by preservice teacher candidates.

Provocation pedagogy calls for teachers to set up the school environment in ways that encourage exploring, hypothesis testing, and explaining thinking to peers and teachers as they create within their existing world (Moss, 2016). Because the camps were embedded in the community, we were able to leverage community funds of knowledge to design provocations that enhanced student engagement and learning (González et al., 2005). The work allowed us to explore ways of extending the home visits used in the funds of knowledge studies to more sustained interactions with the parents and children in the community.

We had planned to extend the camps to four neighborhoods in 2020, and we already had volunteers ready to provide space in their yards. These changes would offer the program activities to more families, provide teachers and teacher candidates more opportunities for professional learning, and allow university faculty to deepen their understanding of how funds of knowledge can be tapped to enhance language and literacy achievement.

Though we had secured the necessary resources and had a clear trajectory for summer 2020, our plans once again required further adaptation. Because of university and school district COVID-19 protocols put in place in the spring of 2020, the summer program had to be offered at a distance. The partners worked collaboratively to revise the plan, which included work with both middle grades students and preschool children. The plan for middle grades students involved online reading enrichment groups and a unique oral history project. The oral histories helped to deepen family engagement with the partnership work, build vocabulary and literacy skills, and leverage and enrich students' capacities for storytelling. The plan for preschool children engaged preservice teacher candidates with six families of children ages four through six. The teacher candidates met with families and guided them through dialogic reading and provocation activities related to the interests of the families through "provocation boxes," adapting the early childhood provocation pedagogy to the rural issues of access by making it deliverable.

### **Methodology**

We designed a participatory action research study (Fraenkel et al., 2019) in which we used self-study methods to uncover the complexity of change in our partnership activities and to learn from our lived experiences so we could chart a course for the future (Ikpeze et al., 2012). Self-study is "an autobiographical process" (Fraenkel et al., 2019) characterized by collaborative inquiry that is situated in professional practice and oriented toward growth and improvement (Alan, 2016).

### **Participants and Positionality**

Our collaborative inquiry group included two teachers from the Loachapoka, three Auburn university faculty members, and two graduate students who were also practicing teachers at different schools. Each of the participants played a role in the planning and implementation of the summer programming described in the study. Krystal is a Hispanic woman who teaches high school Spanish and career education and has three years of teaching experience. Robbie is an African American woman who teaches special education in seventh and eighth grade and has 14 years of experience—11 as a homebound teacher and three as a classroom teacher at Loachapoka. David is a white male with six years of P-12 experience—three years teaching

middle grades social studies and three years in support roles—and 18 years in higher education—seven as an administrator and 11 as a professor. Jamie is a white female with 20 years of experience teaching English as a second language and English language arts in public school settings and eight year of experience as a professor in ESOL education. Mary Jane is a white female with 20 years of experience teaching in the public schools—four years in elementary classrooms and 16 years as an elementary reading specialist—and seven years of experience as a reading education professor. Kathleen is a white female who is a Ph.D. student in early childhood education and has 12 years of experience teaching kindergarten and first grade in the public school. Chad is a white male Ph.D. student in secondary social science education who has 10 years of experience in teaching and administration in both private and public settings.

### **Data Sources**

Data were collected from oral and written reflective narratives as well as archived communications, visual records, and documents. Each of the participants completed two iterations of writing reflective narratives guided by prompts that asked about (a) their perceptions of the adaptations partners made to meet the needs of constituents and (b) their perceptions of the personal meaning they derived from partnership work. Following each writing session, the participants reviewed one another's responses and then met as a collaborative critical friends group via videoconference to code the data.

### **Data Analysis**

Data analysis involved an inductive process of manual open coding and memoing followed by subsequent iterations of axial coding during which we identified patterns in the data (Miles et al., 1994). For example, our initial coding process identified meaningful units in the data such as “in tandem” and “merging communities” which were subsumed under the superordinate theme “interconnection” during subsequent rounds of axial coding. We concluded the analysis with three superordinate themes: inspiration, interconnection, and innovation. Ultimately, we aimed to generate local, grounded theory (Strauss & Corbin, 1998) about adaptations to our partnership work in the context of change.

### **Trustworthiness**

Like all research, participatory action research is vulnerable to threats to validity or “trustworthiness” (Lincoln, 1995), and because our study used self-study methods we had to attend carefully to potential bias in our analysis and reporting (Fraenkel et al., 2019). We used several strategies to enhance the trustworthiness of our study including triangulation of data types (e.g., narratives, documents, visual records), triangulation of data sources and perspectives (e.g., university faculty, school faculty, graduate students), and ongoing member checks.

### **Findings and Discussion**

Our analysis yielded specific insights from reflections of the graduate students, classroom teachers, and university faculty as well as overarching themes that cut across all sets of reflections. Three superordinate themes emerged across the data sets: inspiration, interconnection, and innovation.

## Inspiration

The COVID-19 pandemic disrupted the institutional and community contexts in which the partnership work occurred. Key factors that inspired the team members to move forward and adapt through these disruptions were commitments to ideas and values and the energizing effect of the successes they experienced.

Members of the team were inspired by commitments to assets-based conceptual and theoretical orientations to literacy teaching and partnership work. They aimed to leverage community funds of knowledge (González et al., 2005) as “a theoretically sound way to connect language and literacy through generationally charged reading, writing, speaking, and listening” (Mary Jane).

Chad explained that the summer outreach experiences showed “how important it is to use the community to extend learning opportunities for children.”

[The experience] opened my eyes to the importance of knowing students’ community and understanding their funds of knowledge. Thinking about community visitations like these coupled with provocation boxes really helps me think how educators can be asked to consider the individual and their context when making educational choices. – Chad

Kathleen described how this commitment evolved over the course of two iterations of implementation in the summers of 2019 and 2020.

Prior to my work in the summer of 2019, I would have never considered going out into neighborhoods, taking play experiences to the children. When I reflect on the children’s interests exhibited at the tents [in 2019], those interests were intertwined with their familial and communal interests; and it wasn’t until I was trying to help preservice teachers develop provocation boxes that were relevant to their family’s interests that the interconnectivity was made apparent. – Kathleen

David reflected on ways funds of knowledge might provide a conceptual lens for understanding how assets in each of the constituent groups in the partnership (e.g., P-12 teachers, university faculty, preservice teachers and graduate students) contribute to the organizational learning of the partnership as a whole.

For example, shifting to distance or remote learning due to COVID protocols was/has been daunting. Are there ways to leverage the technology skills and “cultural assets” of the university students who are “digital natives” and who may be able to make substantive contributions to the design and delivery of services based on those assets? We tend to think of the salience of the cultural assets in client communities, but in a PDS partnership, all of the partners are “clients” whose learning is important. – David

Constructivist (Vygotsky, 1978) and experiential learning (Kolb, 1984) theories inspired the way the team framed the summer partnership activities. For example, Mary Jane characterized the summer engagements as “constructivist play and exploration experiences” grounded in Vygotskian ideas about child learning and development. She also employed a constructivist lens as she reflected on adult learning—especially the need for “scaffolding the teachers, ... teacher candidates, and families” in doing the project work.

The team also drew inspiration from the “nine essentials” framework for professional development school partnerships (National Association for Professional Development Schools [NAPDS], 2021) and the “four pillars” of professional development schools articulated by the Holmes Partnership. The pillars are:

1. the improvement of P–12 student learning;
2. the joint engagement in teacher education activities;

3. the promotion of professional growth of all its participants; and
4. the construction of knowledge through intentional, synergistic research endeavors. (NAPDS, 2021, p. 6).

The pillars provided a multidimensional frame through which the team viewed and assessed the progress of the partnership work and enacted the essentials focused on clinical preparation for teacher candidates, professional learning and leading for teachers and faculty, and collective reflection. They served as a reminder to prioritize the learning and growth of all participants and to pursue knowledge construction to inform practice beyond the partnership.

The team was committed to justice and equity—key concepts that underpin PDS work (see NAPDS, 2021, pp. 10–14). A commitment to justice and equity inspired the team to persist through challenges during both pre- and post-pandemic implementation. For example, as the team implemented the pop-up summer camp in the Hispanic neighborhood in 2019, they learned that fear—fear of discrimination or possible deportation—was a major factor keeping families from participating. Chad described this as “the on-edge-ness about their lives.” The fact that members of the community lived in fear was an injustice that inspired the team to persist. As Mary Jane reflected: “I think the reality of it all pushed us—made us more determined to engage, especially because we had our undergrads with us on the journey.”

Finally, members of the team were inspired by the overall success of the program and the accomplishments of learners. The teachers expressed excitement as they discussed ways in which children developed as readers, writers, and storytellers. Krystal said, “It was great to see students grow in reading and comprehension in the target language using oral histories as the main reading technique.” She was especially inspired when a shy ESL student shared an oral history with the class.

All of the student’s oral histories were unique and very authentic, but the fact that she chose to share with us in her native language, I thought it was brave, it takes courage to do something like that. I believe that others sharing their stories encourage her to do the same; after weeks of her not participating, she then decided to tell her story and share her illustration with the class. I believe that the program helped [her] and the rest of the participants to build relationships because they were provided with a supportive environment. – Krystal

For Robbie, the summer partnership work during the pandemic “was a ray of sun in what seemed to be a place of doom and gloom at the moment.” The success of the projects in 2019 and during the pandemic in 2020 inspired her to look “optimistically” toward “this summer and many summers to come as a way to continuously fill voids, bridge gaps and break barriers that have for so long been a hindrance to the connect of the home and academic setting.”

## **Interconnection**

Interconnection was a recurrent theme in the data evident in discussions about interpersonal relationships cultivated through the partnership work and about connections among communities. The shift to a virtual mode in 2020 posed challenges to relationship building, but the team experienced some unanticipated successes in this domain.

The cultivation of interpersonal relationships was an important aspect of the summer programs in both 2019 and 2020. Webs of relationships connected children, teachers, university faculty, and preservice teachers. David recalled “see[ing] little kids, college kids, and adults from the neighborhood, university, and school all together doing stuff—art, games, literacy—just



being together, using language, building trust.” Kathleen shared a poignant anecdote describing how interpersonal relationships formed in sometimes spontaneous ways.

We were noticing that the children were enjoying music so one of the practicum students brought out her guitar one morning. She sat down on a blanket and started playing/singing “Old Town Road.” Within a minute, all the children were gathered around her singing. The next thing I see, all the children had formed a line behind our practicum student, and all were marching around the yard. In that moment, we were all one, one line of happy faces, loving each other’s company and the experience the music had afforded. – Kathleen

A noteworthy development during the virtual programming in 2020 was the extension of the webs of relationships into the home, as caregivers were engaged in the oral histories and provocation boxes. Krystal observed the ways relationships formed among the teachers and students through “sharing their own family experiences.” She attributed this, in part, to the “benefits of the summer reading programs” and the “supportive environment” the team provided. Krystal also noted how sharing personal experiences and background knowledge in the virtual environment helped to strengthen peer-to-peer connections. Mary Jane shared an anecdote about a student in the virtual program who reflected on ways he could help his peers who struggled with English. She recalled him saying, “Maybe I can help some Spanish students that might not know how to speak English and I can translate for them.”

Jamie and Mary Jane both reflected on the way interpersonal connections were sustained from the academic year in the classroom to the summer work in the pop-up tents in 2019 and online in 2020. Reflecting on the virtual programming, Jamie recalled: “Some of the students who joined were ones we already knew to some extent so we could build off of that relationship already established.” Sustaining interpersonal relationships is a key to successful SUPs, and the team was encouraged that durable relationships seemed to form even through the disruptions posed by the pandemic. Jamie shared an anecdote about an encounter she had with a student from the virtual program.

After the summer session, I ran into one of the students at a restaurant. Even though we both had masks on, she recognized me and introduced herself to me. She seemed really happy to see me and acted like she knew me. I was surprised because I thought the online environment wouldn’t lead to that kind of response out in the world. – Jamie

The interpersonal relationships established through the partnership were nested in a web of interconnections among communities—institutions, neighborhoods, families, businesses. In 2019, communities were interconnected through “being out in the community” (Jamie), being able “to work side by side” (Robbie) in authentic ways, and “building trust” (David).

Robbie used a bridge-building metaphor to characterize the centrality of the interconnections among communities to the purpose of the SUP:

Not only are we here to help the children academically but we are here to merge the Auburn University and Loachapoka communities together. To build bridges and form relationships that not only last during the summer but carry over to the fall when they return to the traditional academic setting. – Robbie

Robbie stressed the importance of sustaining the community connections, and she believed the success of the program coupled with the close-knit community in Loachapoka could be a key to doing this work “on a grander scale” in the future. She predicted: “It is my belief that individuals who have previously participated will encourage others to come and be a part of the program.”

## **Innovation**

Innovative practice is a core tenet of professional development school partnerships (NAPDS, 2021), and innovation was clearly evident in the design of the 2019 summer program and the adaptations engendered by COVID-19 restrictions and protocols. Kathleen, a veteran schoolteacher and doctoral candidate, shared her first impressions of the innovative pop-up tent literacy camps during the first summer.

We were going out into the community, setting up opportunities to play in people's homes and in their neighborhoods. We were invited into their safe spaces and trusted with their children. It was unlike anything I had ever done before and something I had never seen. – Kathleen

David, who was serving as head of the Department of Curriculum and Teaching when the program was implemented, recalled thinking “the idea for pop-up tents in the community ... was very innovative—at least by department standards.” He saw the initiative as a way to marry two major emphases in the department: (a) a strong commitment to outreach in the community enacted by many members of the department and (b) outstanding summer programming that provides summer learning for P-12 students and preservice teachers on campus. “To my knowledge,” he reflected, “a program like this had not been done in this way.”

If “necessity is the mother of invention,” as the proverb states, then COVID-19 certainly provided the necessity in 2020. As Chad summarized, “What needed to happen [in summer 2020] was avoiding crowds while still educating children. University and district protocols kept us from interacting face-to-face, so really, everything was innovative!” Mary Jane alluded to “the damn struggle” confronting the team as the uncertainty of the pandemic jeopardized the summer 2020 work. “We had no direct way to involve the families and community resources and we certainly ran the risk of stalling the relationship, which would adversely impact the partnership with such a vulnerable area.” She continued, describing the inventive response:

We hit it two-fold through our collaborative planning. We included oral histories with our middle school work and engaged our early childhood teacher candidates with families (including adolescent siblings) via Zoom. We guided our students in the latter to construct provocation boxes focused on cultural relevance and hoping to build on the family's resources. Kathleen and I delivered these boxes each week. – Mary Jane

Krystal expressed her impression that “overall the [2020] program was innovative.” She detailed the impactful integration of multiple strategies and pedagogical approaches that occurred:

The way we helped students build background knowledge by reading a text, drawing illustrations about their stories, providing students with examples of personal experiences, showing videos, introducing new vocabulary, explaining the differences of meaning of words, and using the study of oral histories before and after reading helped students acquire a better comprehension. The use of word walls was also a great strategy to help ESL students in the challenge that they experience when reading in a second language. We also taught them unfamiliar vocabulary after reading, worked in break out rooms/small groups to learn more of a specific material. I think that the way we use oral histories was very original and creative, also the idea of the word clouds as I mentioned earlier.

David suggested that another innovative aspect of the partnership was the way it had been funded. The programs in 2019 and 2020 required the purchase of teaching materials, pop-up tents, and snacks and funds for summer salaries for faculty and paid student assistants.

The team applied for grants and received some internal [university] support. The department also underwrote costs for the program. The fiscal gymnastics involved connecting the program to a revenue stream, which for an academic unit like [the Department of Curriculum and Teaching] is tuition.

Because the programs in Loachapoka provided field sites for required practica that were connected to summer courses that generated tuition, summer tuition revenue could supplement resources from grants, district resources, and in-kind contributions.

## **Implications and Future Directions**

### **Implications for Rural Teacher Preparation**

Our study highlights the promise of assets-based approaches to pre-service teacher preparation that embrace community funds of knowledge (González, 2005). Rural school systems encounter many barriers to the recruitment and retention of high quality teachers (Fishman, 2015), which makes sustained reform in these areas difficult (Lowe, 2006). Moreover, while children receive educational and support services during the academic year, summers present opportunity gaps for rural children because they no longer have access to schools (Slates et al., 2012).

One way to prepare high quality teachers for rural settings is through intentional field placements in rural schools (Azano & Stewart, 2016; Barley, 2009; Blanks et al., 2013; Evans, 2019; Proffit et al., 2004); however, such placements require careful attention to culture and place. Azano and Stewart (2016) discussed the importance of guiding teacher candidates away from deficit-oriented thinking and toward a deeper understanding of culture and place in education:

It is simply not enough to encourage teachers to build relationships with students and make the curriculum “relevant.” Instead, teacher educators must make concerted efforts to dig deeply into the concepts of culture and place to explore how individual differences influence teaching and learning. (p. 119)

The pedagogies we are creating offer opportunities for all partners—including teacher candidates—to better understand family and community funds of knowledge. In addition, our approach extends this work into year-round, culturally relevant learning opportunities that may help deter summer learning loss.

### **Learning and the Four Pillars**

Learning is at the core of the “four pillars” that define PDS partnerships (NAPDS, 2021, p. 6)—P-12 student learning, teacher candidate learning, professional growth and learning of all partners, and learning that results from the synergistic construction of new knowledge in the field. This learning occurs in a hybrid “third space” in which “binaries of schools and universities, theory and practice, academic and practitioner knowledge, and so on are integrated in new ways” (NAPDS, 2021, p. 12). Our study helps to define the contours of PDS as a “third space” by highlighting the roles of family and community assets in the process. We learned that many academic standards can be taught by tapping the experiences of the families and children, and teacher candidates started to recognize text selection and multiple modes of self expression are necessary to create provocations that build on families’ funds of knowledge. University faculty and graduate students learned that the most empowering place within the partnership is the community.

## **Future Directions**

The most important finding in our study is that *we learned we have more to learn* as we plan for the future. We need to create more scaffolded opportunities for our teacher candidates, recruit more families and teachers, continue documenting our learning, and generate sustainability. Our plans for the summer of 2021 and the following academic year include four sets of adaptations.

First, we are continuing with provocation boxes and family engagement both from within the school building and within the neighborhoods. Teacher candidates will Zoom with participating families once a week during our traditional summer school month and, each Thursday, the children will take a provocation box home for the extended weekend. The candidates will involve children in provocations at school that connect to the families, as well.

Second, traditional summer school will be followed by three weeks of work in four neighborhoods. Azano and Stewart (2016) found teacher candidates recognized “close-knit” (p. 114) as a benefit of the rural community, and in our study Mary Jane noted that rural isolation seems to facilitate very close knit neighborhoods. Yet, it is difficult to develop a systemic hub that connects these neighborhoods due to a lack of resources. If the school is to be that hub, then the SUP must be a presence in the neighborhoods. To leverage the impact of this presence, we plan to invite other outreach initiatives across our campus to join us in the neighborhoods.

Third, family Zooms and provocation boxes will become a part of the field work during the school year. Each teacher candidate with early childhood placements will reach out to one family from the classroom of the placement. The teacher candidate, teacher, and professor will be guided to find ways to bring the child’s interests and families’ funds of knowledge into aspects of assessments, planning, instruction, and reflection.

Fourth, oral histories will be included as project-based learning for older students and as potential provocation activities for early childhood students. Both oral histories and home-based provocations invite family engagement that is multigenerational, personally meaningful, and interconnected with school.

All of these adaptations are grounded in commitments to assets-based pedagogy, community funds of knowledge (González, 2005), and the nine essentials of PDSs (NAPDS, 2021). As we continue working with children and families, teachers, teacher candidates, and faculty, we will guide all constituents in recognizing assumptions about the communities we serve and inviting them to join us in learning more about the ways families’ assets can support innovative pedagogy.

## **Conclusion**

Our participatory action research yielded important insights about adaptation to changing conditions in the context of our SUP work. We learned the importance of rooting our partnership work in strong theoretical and conceptual commitments to community funds of knowledge, social constructivism, the Nine Essentials framework for PDS partnerships, and social justice. Our analysis revealed how grounding our work in commitments to these ideas inspired partners to persist through challenges. We also saw how celebrating mutual success can serve as an inspiration for our work. Over and over our analysis highlighted the salience of interconnection. Indeed, trusting, reciprocal relationships are at the heart of partnership work, and our collaborative, inclusive approach to the challenges of the pandemic were a key to successful adaptation to ever-changing conditions. Finally, we described many facets of innovation that

were evident in the data, and we came to understand how our ability to innovate and be resourceful during the pandemic required trust and a safe environment for attempting new things.

While the changes we describe were precipitated by the response to COVID-19 in spring 2020, the lessons we learned are applicable to other situations requiring adaptation, innovations, and change. Our observations suggested that all constituents benefitted from the adapted summer program, and we yielded increased understanding of cultural assets, thus validating the implementation of literacy practices occurring naturally in the homes of the families. Certainly, these findings are relevant to a myriad of situations calling for change, particularly how members within PDS networks interact with the on-going lived experiences of the communities within which they are situated.

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# Virtual Teaching and Learning: Navigating Uncharted Waters through School-University Partnerships

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**Abstract:** This article seeks to describe a virtual summer school field-based experience implemented through a school-university partnership during the COVID-19 pandemic where online platforms were utilized by the university-based teacher educator, school-based teacher educators, and the teacher candidates. A review of literature is woven throughout the article citing research on school-university partnerships and virtual learning environments. Qualitative data collected from the stakeholders, including open ended responses, journal entries, and final evaluations, were analyzed and summarized. These results reflected the reciprocal nature and mutual benefits of the teaching and learning partnership between the school and university. Additionally, the findings confirmed perspectives that would be vital to the success of future educators.

**Keywords:** clinical experiences, teacher education, virtual learning environments, summer field experiences

## **NAPDS Nine Essentials Addressed:**

- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.
- Essential 7: Shared Governance Structures – A PDS is built upon shared, sustainable governance structures that promote collaboration, foster reflection, and honor and value and participants' voices.

## **Virtual Teaching and Learning: Navigating Uncharted Waters through School-University Partnerships**

According to a statement from the National Council for Accreditation of Teacher Education (2010),

The education of teachers in the United States needs to be turned upside down. To prepare effective teachers for 21<sup>st</sup> century classrooms, teacher education must shift away from a norm which emphasizes academic preparation and course work loosely linked to school-based experiences. Rather, it must move to programs that are fully grounded in clinical practice and interwoven with academic content and professional courses. (p. ii)

Over a decade later, with the move to virtual learning, the need for the educator preparation program (EPP) at Texas A&M University-Corpus Christi (TAMU-CC) to shift its methods of instructional delivery became more than just a good idea. It was paramount. The removal of in-person preservice teachers from partnership districts in the midst of completing their clinical experiences due to the COVID-19 pandemic created increased opportunities for innovation and reflection.

This article seeks to describe a virtual summer field-based experience implemented between a school-university partnership during the COVID-19 pandemic where online platforms were utilized by the university-based teacher educator, school-based teacher educators, and the teacher candidates. A review of literature is woven throughout the article citing research on school-university partnerships and best instructional practices for virtual learning environments. Qualitative data collected from all stakeholders, including open ended responses, journal entries, and final evaluations, were analyzed. These results reflected the reciprocal nature and mutual benefits of the teaching and learning partnership between the school and university.

### **History of the University EPP**

TAMU-CC is a Hispanic Serving Institution (HSI), situated as the area's premier institution of higher education. The university is set in an urban area boasting a 317-acre campus. As part of the state system, it is included in a network of universities, state agencies, and a comprehensive health science center. As an HSI, it is a culturally and linguistically diverse college offering students the opportunity to study and collaborate with fellow students from racial and ethnic groups that are different from their own. The Educator Preparation Program was one of three finalists for the Christa McAuliffe Outstanding Educator Preparation Program in 2010 and was also recognized by the Center for Teaching Excellence for its school-university partnerships in 2012.

The Educator Preparation Program is housed within the College of Education and Human Development and offers initial teacher certification leading to a Bachelor of Science degree. The program allows students to seek certification in core subjects focusing on either a Reading delivery, a Bilingual Education delivery, a STEM emphasis, or a Special Education delivery track. Within the tracks, students can earn a BS in Bilingual Education, All-Level Special Education, 4-8 mathematics, All-level Music, and All-level Theater. The Texas Education Agency (TEA) requires two comprehensive examinations for initial certification. The Texas Examinations of Educator Standards referred to as TExES (ETS, 2014) has two parts: a Core Subjects examination and a Pedagogy and Professional Responsibilities examination (PPR). In the last ten years, 97% of the EPP's students have obtained teaching jobs within six months of graduation. This is largely due to the commitment that the university and college has to

excellence and to the effective collaborations between the EPP and its K-12 partners. While the practices of the program span across two clinical semesters and multiple courses, the program goal is to provide an integrated approach that allows the various boundary- spanning stakeholders of the partnership – such as the teacher candidates, school-based teacher educators, university-based educators, and administrators – to work toward a common set of goals and expectations for clinical practice that will enrich the experience of each member and ultimately result in a highly prepared teacher candidate.

### **School-University Partnerships**

The Partnership Proclamation in the American Association of Colleges for Teacher Education’s Clinical Practice Commission Report (2018, p. 22) and its evaluation of EPPs across the nation states that “clinical partnerships are the foundation of highly effective clinical teaching.” It highlights that the

clinical partnership, as distinct from clinical practices, is the vehicle by which the vision of renewing teacher preparation through clinical practice becomes operational. Effective clinical partnerships are gateways to developing reflective practice centered on preparing highly effective educators while simultaneously renewing teaching and learning in PK-12 classrooms. (AACTE, CPC Report, 2018, p. 22).

School-university partnerships are a critical component of TAMU-CC’s Educator Preparation Program. The success of the two clinical semesters relies greatly on the strongly established partnerships with surrounding districts and campuses. These authentic and successful partnerships with the area school districts provide a training ground for our teacher candidates for both clinical teaching as well as residency opportunities. Currently, eight school campuses serve as partner schools for Clinical Teaching I (known as the field-based experience) and 47 campuses for Clinical Teaching II (known as clinical or student teaching). During the fall and spring semesters, in Clinical Teaching I, teacher candidates have field experience for two days per week in the PK-12 classroom, while Clinical Teaching II places the teacher candidate in the classroom five days a week.

Teacher candidates collaborate with school-based teacher educators and university-based teacher educators within the partnership setting to plan, develop, teach, and reflect on teaching and learning so that they develop the skills and dispositions essential to ensuring their PK-12 students’ academic success. The EPP is committed to the practice of simultaneous renewal evidenced by its four-fold mission:

- I. To prepare future teachers in a field based program where they can benefit from the expertise of clinical teachers and direct observation of and work with students;
- II. To facilitate the professional development of practitioners using formal and informal strategies;
- III. To conduct inquiry, jointly with the school community; and
- IV. To assist with the renewal of curriculum and instruction.

In order for our candidates to develop the skills, knowledge and dispositions necessary to demonstrate a positive learning impact for PK-12 students, strong partnerships are integral.

In alignment with National Association of Professional Development Schools [NAPDS] Essential 7 and the shared governance structures in place in our EPP, each partnership campus is identified through a joint effort between university-based teacher educators, school-based teacher educators, and community members, all part of a clinical experience advisory committee (NAPDS, 2021). In collaboration with the university-based teacher educator and the school-

based teacher educator, teacher candidates plan, develop, and teach a myriad of lessons focusing on different subject areas. Furthermore, the connection with the partner school promotes student participation in events such as Family Math and Family Science Nights. Once a school is identified as a possible partnership site, the university personnel meet with the administrators at the school and both sides develop an action plan for a mutually beneficial partnership at the site. Partnership sites are continuously evaluated based on both the needs of the university and the schools. As a way to continually refine our partnerships, we send out surveys and meet with the administrators and mentor teachers at the end of each semester to ask questions about their roles as school-based teacher educators and share what worked well and what we need to continue to work on. Our university-based teacher educators meet monthly to share updates from their school sites, problem solve any challenges that have occurred, and brainstorm ways to meet the needs of the stakeholders with whom we work. In addition, stakeholders serve on an advisory board that meets with the goal of increasing the effectiveness of the EPP and its partnerships.

West Oso Independent School District (WOISD) is one of the intentionally chosen partnership districts where teacher candidates are placed for their clinical practice semesters. WOISD serves 1,977 students at four campuses including a pre-kindergarten to 2nd grade school, a third to fifth grade school, a 6-8 junior high, and a 9-12 high school. This district has an Early College High School program allowing 50 students per year to accelerate their learning through taking dual credit courses, with a portion of those students graduating with both a high school diploma as well as an Associate's degree. Ninety-three percent of the students in the district are considered economically disadvantaged. The student population is 88.3% Hispanic, 8.3% African-American, and 2.9% White. Twelve percent of the students are served in Special Education programs. The district has a strong sense of community pride and support. The vision of West Oso ISD is to *embrace real world education to ensure self-reliant and socially responsible citizens*. The mission is to *enrich and build a progressive school community through relevant and diverse opportunities*. WOISD believes in the strength of business, community, and higher education partnerships. The district has a PK-12 STEM initiative which includes a comprehensive curriculum, where all students have the opportunity to engage in interdisciplinary learning experiences that encourage problem-solving, creativity, and perseverance.

WOISD has a long history of partnering with TAMU-CC. In addition to serving as a site for Clinical Teaching I and II for teacher candidates majoring in EC-6 Reading, EC-6 STEM, and EC-6 Bilingual, the district has hosted counseling interns for several years. This school-university partnership has been the recipient of the Texas Education Agency (TEA) Grow Your Own grant for three years. This initiative provides teacher candidates the opportunity to participate in a 28 week full time clinical experience during their senior year. These teacher candidates are then hired by the district as in-service teachers. Recently, TAMU-CC, in conjunction with the WOISD partnership, received funding through the National Science Foundation Robert Noyce Teacher Scholarship grant, which incentivizes math and science majors to become grade 7-12 teachers. The partnership's proposal for the Noyce grant has a strong social justice component, with a goal of preparing teacher candidates to be equity-focused. Recent societal events, including the pandemic, have heightened awareness of systemic inequities in our educational system that this grant and our school-university partnership aims to address (NAPDS, 2021; Zenkov et al., 2013; Zygmunt & Clark, 2016). In addition, undergraduate EC-6 Reading students gain field experience during their reading diagnostic course by working with students at the district's grade 3-5 elementary campus. Other collaborations include a volunteer tutoring program organized by a university professor who

provides training to her tutors as well as free professional development to the district's K-2 teachers. At the high school level, English Learners participate in a program, Learn from the Experts, where a university Spanish professor brings both Spanish I students as well as Spanish majors to the high school campus. The university students are matched with an emerging bilingual high school student. The undergraduate students help the high school students with their English while the LEP students help the university students improve their Spanish literacy skills. These collaborations allow the university faculty to continue to stay current with needs and priorities in the K-12 district, while the district benefits from innovative research-based practices coming from the university.

### **Clinical Practice and the Summer Field-Based Experience**

Clinical practice provides a framework for TAMU-CC's guiding principles; it serves as a central framework through which all teacher preparation programming is conceptualized and designed. The EPP aims to provide teacher candidates with a sequenced and scaffolded program designed to support them as they develop as an educator and continue to sharpen their content and pedagogical skills while enrolled in the EPP. Throughout the program and coursework, candidates are regularly engaged in authentic classroom settings culminating with, and designed to, prepare them for a year-long field-based and clinical teaching experience. The course work is carefully developed, re-evaluated, and re-invented every semester to align itself with the needs of national educator standards as well as the omni-present changes of the partnership campuses and growing diverse populations. The strong collaboration and communication vehicles in place allow for a consistent exchange of ideas and strategies between the EPP and the school partnerships.

One of these field-based experiences where candidates apply theory to practice while fully immersed in a classroom setting within a partnership district and campus(es) occurs during the summer and is known as ASCENT. The ASCENT – Adjusted Scheduling and Curriculum in Education for Non-Traditional Students – program is designed to help public school paraprofessionals and nontraditional students complete the field-based hours they need to begin clinical teaching in a condensed and more intensive program than the 15-week field-based (Clinical Teaching I) semester offered during the regular academic year.

### **Developing a Virtual Summer Field-Based Experience**

When COVID-19 hit in March 2020, West Oso ISD was not prepared to deliver virtual instruction, nor did they have the resources to provide students with the technology they needed to participate fully in remote learning. When it became apparent that COVID-19 and distance learning were here to stay, the partner district, along with the university EPP faculty, began identifying professional development topics and making plans to provide teachers with the support they needed to implement high quality online instruction which included collaborating with the university on new partnership possibilities with virtual instruction for the upcoming summer. Traditionally, the partner district offered a June summer school with a focus on providing intervention for students who did not pass state exams. With state testing requirements lifted, the partner district had the freedom to design a summer program that met the learning needs of students.

The first step in beginning to build capacity and ensure equitable access to quality remote instruction was the purchase of 200 Chromebooks, so that all students in WOISD would have technology to participate in synchronous instruction. There are many factors that contribute to

quality remote teaching and learning including hardware, software, learning environment, and quality of instructional resources, but “compared to the other factors, the preparation of the teacher by far outweighs any other factor in this system” (Bull et al., 2016, p.117). A national survey by the Rand Corporation’s American Educator Panels (Hamilton et al., 2020) found that teachers in high poverty school districts were even less prepared than those in more affluent districts to provide high quality virtual instruction. In fact, 44% of teachers surveyed stated that their greatest need was to receive professional learning on strategies to keep students engaged.

The school district and university field-based experience coordinator began collaborative discussions about the possibility of a virtual partnership with teacher candidates enrolled in the ASCENT program. Upon realizing the ASCENT students would not be able to complete the requirements for the field-based experience at its regularly scheduled summer school site, the university-based teacher educator, Dr. Lopez (pseudonym), began planning for virtual daily class sessions, which would consist of lesson planning, instruction, technology tools, and assessment using approved state videos. The plan shifted when an agreement was reached with the partner district as they expressed interest in moving forward with a virtual summer program beginning in mid-July and would allow the ASCENT students to become part of their Google® Classroom environment. This level of collaboration was possible due to the long established relationship characterized by strong communication and trust. This relationship allowed for creative collaboration during these times of uncertainty.

The district chose to move the summer program to July in order to provide ample professional learning and planning time for both the in-service teachers and teacher candidates in June, tenets of the reciprocal approach to the continuous development of innovative teaching skills and strategies in our school-university partnership (NAPDS, 2021). The WOISD Curriculum and Instruction department utilized the TPACK model (Koehler & Mishra, 2009) to address all the knowledge needed to deliver high quality remote instruction. This model recognizes that in order for technology integration to be effective, educators need to have knowledge in three areas: content, pedagogy, and technology. While the in-service teachers tended to have greater pedagogical knowledge, the teacher candidates had the benefit of recent coursework in instructional technology. Best practices for remote learning (Morgan, 2020) include time spent collaborating with both students and colleagues. The International Society for Technology in Education (ISTE, 2017) identifies collaboration as a key component of impactful technology education. Collaboration needs to be intentional and ongoing. During the month of June, in addition to structured professional learning opportunities, teaching teams were provided with dedicated planning time where they were able to unpack a needs assessment for the upcoming virtual July program.

The district utilized both in-house instructional technology staff as well as consultants from the local educational service center to provide training. Training was differentiated to meet the needs of all educators. Prior to the global pandemic, approximately 25% of the district’s secondary teachers and none of the elementary teachers utilized Google Classroom. Training topics included: Google Classroom for Beginners/Intermediate/Advanced, Google Meet, Nearpod, Flipgrid, Peardeck, Jamboards, Google Forms and Tracking Student Progress, Virtual Manipulatives, and Best Practices for Coteaching remotely. In addition to teacher training, the district provided asynchronous and synchronous virtual training for parents as well. The parent training focused on navigating in Google Classroom.

The summer programming in the district included classes for both struggling students as well as STEM enrichment. ASCENT teacher candidates were assigned to both the accelerated

instruction as well as enrichment classes. In addition to providing students with devices, each student was provided with a supply bag in order to engage in at-home, hands-on learning activities. Supplies varied by course and grade level. They included small dry erase boards with markers, scissors, rulers, calculators, journals, Unifix cubes, sight word cards, math flashcards, and leveled readers. District personnel made home deliveries to families who were not able to pick up materials from the schools.

The ASCENT teacher candidates added both depth and breadth to the interdisciplinary STEM teaching team. The school-based teacher educators included a grade 4-8 generalist as well as a Career and Technical Education (CTE) teacher with a concentration in instructional technology. The two ASCENT teacher candidates included two kinesiology majors, one with a biology minor and one with a history minor. The team decided to focus on the topic of COVID-19 and pandemics. They investigated the history of pandemics, how viruses reproduce, and how scientists model the spread of these diseases. The students at home as well as the instructors created 3D models of the coronavirus. They also were able to have a virtual guest speaker from TAMU-CC. This professor was on the local COVID-19 taskforce responsible for modeling data and making recommendations to government officials regarding strategies to minimize the spread of this fatal disease. One advantage of remote learning is that it creates more opportunities for communication with experts outside of the classroom (Fulton, 2020). Many guest speakers wouldn't have the time for in-person visits but are willing to share remotely without having to travel (Lambert & Rennie, 2021). As was evidenced by the feedback from parents, students, teacher candidates, and school-based teacher educators, this relevant, collaborative experience resulted in powerful learning for all.

Since the partner district's summer school did not begin until the middle of July, Dr. Lopez conducted virtual daily classes with the teacher candidates from 9:00am-12:00pm for two consecutive weeks. The daily schedule consisted of introducing the components of lesson design, researching effective ways to implement and formatively and summatively assess their lessons with their school-based teacher educators, as well as ensuring the teacher candidates had adequate knowledge of the teaching competencies. From the perspective of Dr. Lopez, these ten days were intense but were extremely vital to the success of the field-based experience. Each teacher candidate was then assigned a school-based teacher educator that most closely matched their certification area. The teacher candidates attended the virtual summer school class Monday-Thursday from 8:00am-12:30pm for twelve consecutive days. Depending on the content area, each virtual summer school class looked different. However, the expectations were obvious: all students had their cameras on; all students participated in the lesson, either by having oral discussions with the teacher or placing responses and/or comments in the chat box; and all students completed tasks given to them daily. Additionally, the partner district allowed full access for Dr. Lopez to enter any designated virtual classroom in order to observe the teacher candidates. In order to meet the expectations for completion of the field-based component, each teacher candidate was expected to teach two virtual lessons. Before any teacher candidate was approved to teach the lesson, they had to have a coaching session with Dr. Lopez and the school-based teacher educator. These coaching sessions were conducted virtually at a mutually convenient time. This added to the accessibility and flexible nature of the course. In addition to having the opportunity to observe and participate in delivering instruction, teacher candidates often stayed online after class ended in order to plan for the next day. According to the candidates, this helped create a sense of ownership and fostered a relationship between the candidate and school-based teacher educator.



Because the partner school's virtual summer program was Monday through Thursday, Dr. Lopez was able to hold class virtually with the teacher candidates on Fridays from 9:00am-12:00pm. During this Friday class, the candidates had time to reflect on their week by considering the challenges and opportunities associated with teaching virtually, behavior patterns, and lesson delivery. Without this unique opportunity, the teacher candidates would have entered clinical teaching with minimal virtual teaching experience. These five weeks prepared the teacher candidates for a successful transition to the virtual classrooms that they would encounter during their Clinical Teaching II semester in the fall.

### **Participant Perspectives**

The ASCENT participants were a diverse group both in terms of background experience, ethnicity, and future aspirations. The group included six teacher candidates who were earning certification in EC-12 (one SPED, one music; one Kinesiology/English, one Mathematics/Kinesiology, one Biology/Kinesiology; and one Social Studies/Kinesiology) and six teacher candidates who were earning certifications in EC-6 Core Subjects. The candidates represented diverse perspectives. The group included students who attended college directly after high school, as well as several teacher candidates that came to teaching as a second career. There were candidates that had their own children, while others were still living at home. Candidates identified as Hispanic, African-American, White, and Biracial. This diversity allowed for a wide array of perspectives, resulting in more robust data. Qualitative data collected from all stakeholders – Dr. Lopez, the teacher candidates, the school-based teacher educators, and the partnership liaison – included open-ended responses, journal entries, and final evaluations.

### **University-Based Teacher Educator Perspective**

Dr. Lopez has twenty years of experience in the education field: fifteen years as a public education teacher; two years as a school administrator; and three years of experience in higher education. However, despite the abundance of experience, she felt uncomfortable entering the uncharted waters of remote teaching, because her virtual teaching experience, up to that point, had been extremely limited. In order to best meet the needs of her students and to grow professionally, Dr. Lopez immersed herself in all relevant meetings with the partner district, as well as attending the professional developments offered by the district to the teaching staff. Dr. Lopez noted that preparing for the experience was, “much more work than I had done in my previous roles as an educator and administrator. However, the relationship that exists between the university and district made the entire process both meaningful and thoughtful.”

Once the summer school session began, Dr. Lopez was given access to each teachers' and teacher candidates' Google classroom. Teacher candidates were aware Dr. Lopez would be observing the virtual classrooms. Every virtual classroom was visited every single day for approximately ten minutes. These visits were unannounced and discreet with the camera and speaker turned off. Dr. Lopez noted in her observations occurring during these visits that there were meaningful and interactive discussions taking place between the school-based teacher educator, the teacher candidate, and the students. Dr. Lopez stated the following: “It was obvious that all teacher candidates started the day with an enthusiastic demeanor and ended the day knowing they were making a difference in the lives of students during a time of a lot of uncertainty.” All students were visible with their cameras on and were engaged in the discussion and learning that was taking place. The grades represented ranged from kindergarten to eighth grade. There was an array of different technology tools being used, including but not limited to

Jamboard, Nearpod, and Seesaw. There were a few students that needed to be redirected, which was done by either the school-based teacher educator or teacher candidate without disruption to the rest of the class. The chat feature was utilized in several classrooms which offered students the opportunity to “voice” their answer or “choose” the correct answer.

Overall, the presence of two adults in the virtual classroom, the school-based teacher educator and the teacher candidate, appeared to have an extremely positive effect. While the school-based teacher educator taught, the teacher candidate was there to ensure students’ questions were being addressed. These two sets of eyes were clearly beneficial for all students. When the teacher candidate was delivering their lessons, the roles were reversed. During these occasions, the school-based teacher educator was now the one acknowledging students’ questions. This played out in every classroom observed. The school-based teacher educator relied on the teacher candidate and the teacher candidate relied on the school-based teacher educator.

### **Teacher Candidate Perspectives**

The teacher candidates offered their perspectives regarding the virtual summer school session. These perspectives were collected through open-ended questions, journal entries, and their final course evaluations. The responses provide a detailed account of how the teacher candidates felt about participating in a virtual field-based experience.

For example, when teacher candidates were asked to respond to how this field-based experience pushed them out of their comfort zone, seven out of the twelve teacher candidates responded positively. One teacher candidate stated, “I was able to come out of my shell and give my [school-based teacher educator] pointers of what I believed we could do better. I also got the opportunity to form different warm-up (discussion) questions with the students and (provide opportunities for them to) discuss their thoughts.” Another teacher candidate emphasized that she was pushed out of her comfort zone by having to create all plans virtually and by having to find ways to keep kids engaged online rather than face-to-face in the classroom. This sentiment was echoed by other teacher candidates as well. Many expressed their hesitancy with having to record themselves teaching online lessons. They reported feeling out of their comfort zone when having to go back and watch the lesson they taught online.

Teacher candidates were also asked how their perspectives changed regarding online instruction after having had this virtual experience. Eleven out of twelve teacher candidates reported that this virtual experience positively changed their perspective. In fact, one teacher candidate wrote, “It changed positively; it showed me that teachers are capable of teaching a lesson and engaging the students online if they just adjust to virtual online learning and change up their lessons.” Additionally, another teacher candidate stated she was skeptical at first, but, “overall I had a positive experience. We were still able to monitor the students and work with them where they needed it.” Several teacher candidates acknowledge that this experience gave them more confidence going into their clinical teaching semester, especially if this model was going to be their new norm. One of the secondary teacher candidates wrote the following about his perspective: “Through all of this I learned that online learning has every chance of being as effective as in-person classes if given the chance and teachers having the right kind of training.” Similarly, a primary teacher candidate shared her viewpoint by saying,

My perspective of online learning has changed in the sense that it is important for the students to have knowledge of computer skills and vocabulary so that it is easy for you to explain how to get places and make their learning more interactive.

There was one teacher candidate whose perspective did not align with the other teacher candidates. This teacher candidate stressed the fact that not all students and families have reliable internet service and/or devices that make online learning possible. The candidate also acknowledged that not all students have positive support systems at home, thus making it difficult for mastering learning objectives.

Teacher candidates were also asked to reflect on technology. They were asked if they had taken the lead on implementing any new technology into the virtual summer school class. Several teacher candidates reported they had the opportunity to not only implement new technology, but also create engaging and interactive activities utilizing technology. One candidate stated she had created her first Google form, along with interactive slides with website links that allowed for students to “transition smoothly from lessons and reviews to assignments and homework.” This same candidate expressed her enthusiasm when she was able to create an instructional screencast video to show students how to maneuver throughout their Google accounts and classroom: “I had so much fun leading this task. It made me feel like I was already a true teacher.” Another candidate made an effort to stay online after the virtual day concluded in order to show and teach her school-based teacher educator different ways to incorporate technology, such as integrating a Kahoot game and interactive websites, such as Nearpod and Epic Books for Kids.

When asked to reflect on what the most powerful takeaway from the virtual partnership was, teacher candidates had many positive perspectives. All teacher candidates agreed that learning how to teach in an online environment was the most beneficial takeaway. A teacher candidate expressed himself by writing the following: “Never give up. Teachers are some of the most determined and caring individuals in the world. In this time of uncharted waters, teachers everywhere are providing everything they can to keep students learning.” A similar sentiment was echoed by another teacher candidate:

One huge takeaway I had was knowing that I can still impact a student’s life over a video session. I can still be myself and be a great online teacher. Yes, you will have to get creative and at times technical difficulties will be present, but if you are patient and flexible you will be successful. Staying positive, being empathetic, and instilling a love of learning were also some of the powerful takeaways reported from teacher candidates. On the last day of virtual summer schools, teacher candidates were asked to share what advice they would give to future field-based experience teacher candidates who are about to have a similar experience in a virtual setting. They expressed that they would let others know that asking for help is not a sign of weakness; navigating the virtual learning world does not happen overnight. Additionally, they would want future virtual teacher candidates to stay flexible and make sure to research the online programs they plan on using in order to create engaging lessons that students will enjoy. One teacher candidate summed it up by encouraging future field-based teacher candidates to be engaging and not afraid to make mistakes: “We learn from the mistakes and improve with every mistake. If you are scared and do not attempt to try, you will never get comfortable and familiar with this environment.”

The teacher candidates identified several challenges in their reflections. These included building relationships in a virtual environment, student engagement, and creating a warm and inviting physical environment when teaching remotely. They also shared that they were self-conscious about being recorded and having to see themselves on camera. By far the greatest challenge expressed was difficulties with technology, both their own and their students’ access and WiFi speed. When problems arose, it was hard to keep the lesson moving and the students

learning. At these times, they were especially grateful to have another adult to troubleshoot.

In summary, these perspectives represent a diverse group of teacher candidates who were able to make the best out of their field-based experience. Much of these viewpoints were reaffirmed and repeated on Fridays when Dr. Lopez conducted a virtual class with the teacher candidates.

### **School-Based Teacher Educator Perspectives**

At the conclusion of the virtual summer session, school-based teacher educators were asked to provide their personal perspectives regarding their experience working with teacher candidates in a virtual learning environment. Their responses were gathered through a Google form.

One of the first questions asked was related to their confidence level: Did their confidence level change in regard to mentoring a field-based teacher candidate in a virtual setting? Several school-based teacher educators noted they were adjusting to this new normal and would be making mistakes alongside their teacher candidate; if mistakes were made then, together, they would learn how to fix them. One elementary school-based teacher educator reflected on her confidence level as follows:

I was very apprehensive about mentoring someone while I was at the early stages of navigating through the virtual classroom myself. I wondered if it was possible to help someone when I, myself, was experiencing this new reality. I was honest about my lack of experience with technology at this level. We had great discussions daily about what worked well and what didn't. I shared my experiences as best as I could, as well as my concerns regarding new obstacles. It was a learning experience for both of us, and my candidate was amazing. My confidence definitely changed in a positive way.

The consensus among the school-based teacher educators showed their confidence level improved as the virtual summer session progressed.

The school-based teacher educators were also asked what their most powerful takeaway from this virtual partnership was with their teacher candidate. A handful of school-based teacher educators stated that having the opportunity to learn side-by-side with their teacher candidate was powerful. It showed they were both on the same "playing field." Having the ability to learn new technology platforms together helped foster a great relationship, noted one secondary school-based teacher educator. If the lesson was not successful, both the teacher candidate and school-based teacher educator worked together to reflect, adjust, and try again.

As far as what their most positive aspect was of this type of virtual experience with their teaching candidate, school-based teacher educators reiterated the power of two adults in the virtual classroom. While the teacher candidate shared about technology, the school-based teacher educator was able to make connections about the similarities and differences of teaching in a remote versus face-to-face classroom. They shared that this experience gave them time to prepare for the upcoming year of uncertainty. One school-based teacher educator summarized her thoughts by saying, "building this positive relationship will definitely go beyond these three weeks."

Finally, the school-based teacher educators were asked what advice they would give to future field-based teacher candidates who were going to complete the clinical teaching experience in a virtual classroom. Several indicated the importance of the teacher candidate being patient with their teaching partner, especially around the use of technology. They stressed again the importance of building relationships both with the students and the school-based

teacher educator. They felt it was important to remember that everyone is learning and they want the teacher candidate to ask questions. In these times of uncertainty, the veteran school-based teacher educators were experiencing many of the same insecurities that the teacher candidates felt. The school-based teacher educators wanted the teacher candidates to take risks in sharing ideas and remain open to feedback. One school-based teacher educator summed it up by saying, “I guess the advice I would share is that it’s all trial and error in this virtual world. Make it as fun as possible.”

### **Partnership Perspectives**

According to the qualitative data collected from the partner district during the professional development sessions and preplanning done in the beginning of the summer, the administrators and school-based teacher educators felt the teacher candidates overall had more technological knowledge and skills than their school-based teacher educators. This emphasized a greater need for a coteaching model, based on research emphasizing continual collaboration and the gradual release of responsibility over time between the school-based teacher educator and the teacher candidate, to be implemented as a mutually beneficial high impact practice during the short amount of time the summer session would be taking place (Bacharach et al., 2010; Heck & Bacharach, 2016; McIntyre et al., 2018). This coteaching model allowed one teacher to focus on delivering instruction, while the other teacher was able to troubleshoot technology issues, support students that were struggling, monitor progress, and provide feedback. Together the teacher candidates and their school-based teacher educators became problem-solving partners through the use of new platforms where they addressed issues of planning, engagement, formative and summative assessment, and navigating virtual classroom environments.

Not only were the elementary and secondary students able to benefit academically from the coteaching model, having two adults in the classroom meant an extra set of eyes and ears to attend to the emotional and social needs during this time as well. Several of the teacher candidates and school-based teacher educators used interactive tools such as Peardeck to check in with their students daily regarding how they were doing emotionally. If a student’s response to the check in raised any red flags, either the teacher candidate or the school-based teacher educators was able to follow up individually with that student, while the other continued teaching the rest of the class. Individual contact could occur through a private Google Meet or phone call. Many of these students’ families were impacted economically by the global pandemic, creating more instability and stress in the household. While the educators were concerned about academic learning loss, they also knew that building relationships with the students was critical. According to Morgan (2020), “during stressful times, heart and passion may be more important than the content needing to be covered” (p. 137). Having two adults modeling healthy relationships through their interactions and being available to listen to the students’ thoughts and concerns brought a bit of stability to the lives of these students during these times of uncertainty.

### **Future Implications**

COVID-19 has forced schools and universities to reimagine how programs can continue to be successful despite uncertainties.

## **Preparation for the Unknown**

COVID-19 was a strong reminder of the importance of preparing our students for what has not yet transpired. While most EPPs, as set forth by their state teaching standards, provide clinical experiences to their candidates, many are designed and carried out in a traditional setting involving the candidates assigned to respective campuses with respective mentors. However, when one element of the equation is missing, the EPP program has to have a continuation plan in place and be prepared to put in motion a seamless intervention in order to avoid a break in teaching and learning which may result in staggering student academic achievement gaps.

## **Virtual Learning Affords Opportunities**

While all of the virtual classrooms benefited from having two sets of eyes and ears, the STEM classroom recognized additional opportunities afforded by this team teaching distance learning model. The teacher candidates brought expertise in science and history that the school-based teacher educators did not possess. In this case, both the students and teachers took on the role of learners. The learners were able to benefit from going on virtual field trips and being visited by cutting edge scientists that were influencing local decisions regarding the city's response to the COVID-19 virus. Even if the global pandemic was not a reality, connecting with these experts and going on these field trips face to face would be difficult due to constraints of time, money, and other logistics. Virtual learning forced teachers everywhere to think outside-of-the-box. As a result of this creative thinking, students were able to communicate with people outside the four walls of their school. These experiences will remain with both the students and teachers long after COVID-19 is eradicated.

## **Conclusion**

The Education Preparation Program at TAMU-CC has cultivated university and community partnerships and operationalized clinical practice in order to develop a strong EPP program. It is through this cultivation and sharing of resources, funds of knowledge, first-, second- and third spaces, human capital, and the decision-making process that we have been able to build and sustain a program rich in reciprocity and mutually beneficial partnerships (NAPDS, 2021). Our students have been able to utilize the clinical settings at our partnership campuses to provide them with real-world, site-based classroom experiences congruent with the student populations and school climate and culture of what will likely be their first few years of teaching. These authentic clinical experiences are mutually planned, developed and executed between the various members of the partnerships, such as the boundary-spanning school-based teacher educators, university-based teacher educators, teacher candidates, and administrators, in order that an authentic experience takes place. The collective efforts of the partnerships helped address the preparation shortcomings that became apparent due to COVID-19, but most importantly, provided a platform for redesigning and implementing a program that was now able to meet the needs of a virtual and online teaching and learning environment.

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## Appendix A

### Mentoring during Virtual Schooling Survey Open-Ended Comments

#### *Mentor Teacher Responses*

- Engagement Ideas: Teaching interns to open the chat for Qs then closing to avoid playful behaviors. Utilize active participants by thumbs up, holding up fingers, etc.. Allow students to unmute when counting or oral reading at times. Use of equity sticks for calling on students. Encouraging cameras on for those that have not opted out of video. Use of transition movement activities (e.g., Go Noodle, Interactive slides). [Materials that are] colorful, engaging!
- Lesson planning courses would help in addition to the reading methods classes. A separate class to focus solely on student engagement and differentiation would benefit the transition to virtual learning.
- As a mentor, you are used to having your intern with you and having conversations as things happen. In the virtual world, it's a difficult thing to do. Taking time out to plan when you yourself need those minutes can be challenging.
- Overall, the experience is great, my intern works very hard, is motivated, reliable and loves children. I am preparing her as much as possible, but I also understand that she is not receiving the day-to-day "real time" classroom environment experience that she needs.
- It is a bit more challenging compared to before. Difficulties with technology use, use of materials, and using virtual textbooks and games.
- Some things are different, but we adjusting well. As a teacher, you have to be flexible and reflective. You have to learn about your students' needs and how to connect with them. My intern has learned how to do these things. She has great time management skills, so it makes her internship and workload easier as well. There are some things that are lacking because we are not able to be in person like (guided reading and centers), but I will give her resources and other ideas I received from the meeting today.

#### *Teacher Candidate Responses*

- Accommodations within the college of education program need to be made to fit the virtual classroom setting, and there needs to be more communication between the staff.
- Please revamp this program according to the virtual world.
- The program requirements should be modified to take into consideration the amount of time spent on the computer.
- Revise the program because it doesn't work during this virtual learning.
- If candidates are being departmentalized, then they should be assigned two mentors so that there isn't confusion when it comes to teaching different content.
- Please adjust the program to fit the virtual environment. Communication is not effective.

## Appendix B

### Focus Group and Interview Questions

#### *Mentor Questions*

1. When we asked mentor teachers the question, “Overall, how well is mentoring during Covid-19 going?” using a scale of 1-5 with 5 being very well, every mentor who took the survey responded with a 3 or higher score. What does going well mean to mentor teachers right now?
2. The intern responses were much more varied to this question. For instance, the majority of intern respondents score their responses a 3 or lower. Why do you think there is a difference between how mentors are viewing this internship versus how the interns are viewing it?
3. Mentor teachers reported lower scores for their responses to the question asking them to compare the effectiveness of this mentoring experience to pre-covid internships than they did for the overall question. Many mentor teachers indicated that the internship was not as effective as in person internships. Why do you think mentors report the internship is going well while not being as effective at preparing interns for future teaching careers?
4. Mentor teachers were asked to rate the effectiveness of different aspects of teacher preparation that are developed during the teaching internship experiences. Three areas, content knowledge, creating a positive classroom environment, and designing effective instruction were all rated as being effective or more effective during their virtual teaching internships. Why are these areas able to be as effective or more effective during Covid-19 school closure teaching internships?
5. Two areas of intern development were rated by mentor teachers as not as effective during the virtual teaching internship: assessing student learning and meeting the needs of diverse learners. What do you see as the barriers to successfully mentoring teaching interns in these areas? Why are these areas less effective in the virtual internship?
6. What are your suggestions for how PDS partnerships can provide support for areas that are not effectively preparing interns during Covid-19 school closures?

#### *Teacher Candidate Questions*

1. The question, “Overall, how well is mentoring during Covid-19 going?” using a scale of 1-5 with 5 being very well, Phase One and Phase Two students had a wide range of responses with some interns selecting each possible response from 1-5. Why do you think interns are having such different experiences with the virtual internship?
2. The mentor responses to this question were less varied and no mentor teachers selected the response of 1 or 2. Why do you think mentors see this virtual internship experience as going better than the interns?
3. Phase One and Phase Two students were asked how effective the virtual internship experiences are at preparing them for future professional teaching positions. About 80% of respondents select a score of 3 or lower on a scale with 1 being not effective at all and 5 being as effective as in person internship experiences. What do you think is a major reason that Phase One and Phase Two students are not finding the virtual internship to be effective?

4. Phase One and Phase Two students were asked to rate the effectiveness of the internship in several areas. Two areas offer an interesting comparison. Look at the number of responses for each score selected below. Why do you think there is a difference between building a positive classroom environment and building relationships with K-12 students?

Score Range	Number of Respondents for the question “How effective has your year long internship been at preparing you in the area of creating a positive classroom environment?”	Number of Respondents for the question: “How effective has your year long internship been at preparing you in the area of building relationships with K-12 students?”
1 or 2 - Not as effective as in person	3	8
3 - Mid way between not effective and as effective as in person	5	7
4 or 5 - Almost or as effective as in person	15	8

5. Phase 1 and Phase 2 students also responded strongly that the year long internship was not effective at developing their skills in content knowledge with the majority of respondents selecting a score of 3 or lower. However, the mentor teachers responded that the development of content knowledge was as effective or more effective than face to face internships have previously been. Why do you think there is a difference between how mentor teachers and Phase One and Phase Two view the effectiveness of developing their content knowledge during this virtual internship?
6. What are suggestions for how PDS partnerships can provide support for areas that are not effectively preparing interns during Covid-19 school closures?

*First Year Teacher Questions*

1. Since this is your first time as respondents in our study about virtual teaching internships, can you each tell us your experiences during your student teaching internship placements and your current roles and positions this school year?
2. We have surveyed several mentor teachers and teaching interns this semester who are all completing their Phase One or Phase Two internship experiences in a virtual setting. Based on your experiences previously and your experiences as first year teachers teaching in virtual classroom, we are interested to hear your insights into some of the responses we have found. First, mentor teachers and interns both indicate that the virtual internship is not as effective as face-to-face internship experiences. What do you think is the reason that virtual internships do not seem to be as effective?

3. Both current interns and mentor teachers responded that assessing student learning was an area that was not being effectively addressed during the virtual internship. Based on your experiences, why do you think this is the case? What could PDS partnerships do to help better prepare interns in this area?
4. Both current interns and mentor teachers responded that the area of creating a positive classroom environment was effectively being developed in interns during this virtual internship. What do you think this means for teacher candidates during the internship? What skills are they developing? How do you see this translating to the experience of first year teachers?
5. What other, if any, insights can you offer for PDS partnerships to prepare teacher candidates when completing their internship or first year of teaching in a virtual environment?

# **The Development of Scenario-Based Simulation Modules for Online Field-Based Experiences in a School-University Partnership**

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**Abstract:** Due to the COVID-19 pandemic, field-based instructional content was needed in a scenario-based and simulated online delivery format with our university students and school partnerships. Learning to implement teaching practices in classrooms is intricate work, requiring teacher education programs that are carefully designed in ways that help teachers learn to skillfully enact teaching practices. The goal of the pilot study described in this article was to assist the online learning life-cycle (pre-admission, enrolled, and alumni) for field-based experience student cohorts to prepare for deeper, practical engagement within a remote learning experience and facilitate greater content to application preparation to enhance online teaching and content application within our school-university partnerships.

**Keywords:** clinical experiences, teacher education, online teaching and learning, metacognitive strategies, cognitive load

## **NAPDS Nine Essentials Addressed:**

- Essential 3: Professional Learning and Leading – A PDS is a context for continuous professional learning and leading for all participants, guided by need and a spirit and practice of inquiry.
- Essential 4: Reflection and Innovation – A PDS makes a shared commitment to reflective practice, responsive innovation, and generative knowledge.

## **The Development of Scenario-Based Simulation Modules for Online Field-Based Experiences in a School-University Partnership**

In order to establish a framework for what all Educator Preparation Programs (EPPs) need to consistently prepare and develop teacher candidates into successful and accomplished classroom teachers, the American Association of Colleges for Teacher Education [AACTE] and the National Association of Professional Development Schools [NAPDS] have both published reports in recent years that operationalize clinical practice, illustrate exemplary models in the field, and identify the mutual benefits of school-university partnerships (AACTE, 2018; NAPDS, 2021; Thorpe, 2014). The efforts of the Clinical Practice Commission [CPC] Report (2018) and the 2<sup>nd</sup> edition of the NAPDS Nine Essentials (2021) aspired to elevate innovative practices, to identify needs and generate knowledge to help solve problems and use the digital environment as an inquiry-based component, and to provide a variety of contexts for embedding teaching, learning, and reflection within clinical practice and school-university partnerships for all boundary-spanning stakeholders. Due to the COVID-19 pandemic and the disruption of face to face, in person clinical experiences at Texas A&M University-Corpus Christi (TAMU-CC), a new and innovative framework had to be developed to help rethink the established practices and contexts of clinical practice in our EPP. These new practices had to be mutually beneficial for the stakeholders in the school-university partnerships, including both the university-based and the school-based teacher educators. They also needed to be sustainable throughout the pandemic and able to be maintained and replicable when clinical practice contexts were again in person. With the change to a virtual context for the field-based experiences courses, field-based instructional content was needed in a scenario-based and simulated online delivery format with our university students and school partnerships. The CPC report (2018) and the NAPDS Nine Essentials (2021) served to help us rethink the process and journey teacher candidates typically follow as they prepare to become successful teachers during this time of uncertainty. The development of the scenario-based simulation modules for our field-based experiences and the following pilot study occurred due to the boundary-spanning, third space (Bhaba, 1994) that evolved when the need for our clinical experiences rapidly moved online and a partnership formed between a professor in Instructional Design and Educational Technology (IDET) and two professors in the Educator Preparation Program at TAMU-CC.

The goal of the pilot study described in this article was to assist the online learning life-cycle (pre-admission, enrolled, & alumni) for field-based experience student cohorts to prepare for deeper, practical engagement within a remote learning experience and facilitate greater content to application preparation to enhance online teaching and content application within our school-university partnerships. The use of an immersive scenario-based environment creates an authentic learning environment and supports learner engagement. The simulation modules are able to take the simulated place and role of the face-to-face experience by incorporating real world and authentic simulated experiences crafted from face-to-face experiences and pedagogical practices that are designed to provide the learner with an alternative learning experience virtually when a face-to-face experience is not available.

As the demands upon teachers have evolved, grown, and the scrutiny increased, so have the expectations for EPPs and teacher candidates. Now more than ever, we expect our teachers to be knowledgeable, decisive, reflective, and able to promote critical thinking and problem-solving in every child (Cochran-Smith & Villegas, 2014), while explicitly contributing to our nation's economy by reducing dropout rates and developing a skilled workforce (National Commission

on Teaching and America's Future, 1996). Within this context, a gaining momentum toward improving EPPs across the nation has materialized as a way of formulating and identifying a common lexicon for EPPs in order to help produce top-quality and highly prepared teachers ready to meet the needs of an ever-growing diverse student population and with the preparation and competencies to teach in online and virtual settings appropriately and effectively.

### **TAMU-CC's Educator Preparation Program and Clinical Experiences**

Federally designated as a Minority-Serving Institution (MSI) and Hispanic-Serving Institution (HSI), TAMU-CC is a doctoral granting university with an enrollment of more than 12,000 students (95% from the state, 48% from the region). More than 70% of students receive financial assistance, 75% work full or part-time, and 63% graduate in 6 or fewer years. As part of a broader University System, seven state agencies, and a comprehensive health science center, the university houses Research Institutions for Gulf of Mexico Studies and a Center for Gulf Coast research and policy.

TAMU-CC's guiding conceptual model for high-quality teacher preparation is centered on clinical experiences and focuses on pedagogical practices. Teacher candidates in the College of Education and Human Development seeking teacher certification, enroll in a sequence of professional development courses that consists of two semesters of clinical experience during their senior year. In the first semester, known as the field-based experience (FBE), teacher candidates are assigned to a campus in their respective grade levels and content areas where they are involved in educational endeavors through immersion in the school setting two days a week. During this semester, the teacher candidates are concurrently enrolled in a 6-hour course titled Planning, Teaching, Assessment, and Technology where both the teacher candidates and the university-based teacher educator are embedded at a partnership school. This field-based experience has a two-fold purpose: teaching seminars led by the university-based teacher educator where research-based pedagogical practices and skills are modeled and discussed and lessons in the field with their school-based teacher educator are planned and implemented. The second semester of clinical experiences culminates in a one semester clinical teaching experience where the teacher candidate is assigned to a partnership school setting five days a week. Through the collaboration of the university-based teacher educator, the school-based teacher educator, and the teacher candidate, and in alignment with PDS Essential 4: Reflection and Innovation, teacher candidates can develop effective teaching skills during this final year of clinical experiences (NAPDS, 2021).

This year-long clinical experience allows teacher candidates to demonstrate appropriate pedagogical practice in teaching key subject areas and to receive feedback from university-based and school-based teacher educators while applying theory to practice when fully immersed in a classroom setting within a partnership district and campus(es). Teacher candidates add pedagogical strategies to their repertoire relevant to the level of instruction, informed by professional feedback, to facilitate the delivery of content learning and meeting the needs of learners. Teacher candidates apply The Pedagogy Proclamation, in the AACTE's CPC report, that states "pedagogy is the science of teaching, the intentional integration of pedagogical training into an educator preparation program is the cornerstone of effective clinical practice" (AACTE, 2018, p. 16). One of this proclamation's tenets goes on to say that "the presence of strong, embedded pedagogical training is the hallmark of effective clinical educator preparation. Pedagogy serves as a guidepost for shared professional standards of best practices in teaching that in turn guide the development of clinical practice models" (AACTE, 2018, p.



16). The year-long clinical experiences of the teacher candidates in the TAMU-CC EPP is, perhaps, where the strongest presence of embedded pedagogical training takes place.

Due to Covid-19, the guiding conceptual framework of the EPP did not change, but the need for an innovative way to deliver this same level of preparation focusing on clinical experiences and pedagogical practices did. School buildings were closed, and our field-based experience course moved to a virtual platform where teacher candidates would no longer be able to be in a classroom with a cooperating teacher and school-aged students. These pedagogical competencies, and the fact that the students simultaneously take a Classroom Management course during their first semester in the field, led to the impetus of the content of our simulation module developed first for the pilot study. Although post-pandemic, teacher candidates would be back in the field in a face-to-face context, we chose to develop these online scenario-based simulation modules to allow for continued experiences in a virtual context where pedagogical practices could be developed and practiced in an online environment, knowing also that these modules could potentially meet the needs identified by stakeholders in the school-university partnership moving forward as well.

### **Literature Review**

The scenario-based simulation modules were designed to foster strong connections with the current literature on promising practices for clinical experiences and what it means to be an effective educator preparation program within a professional development school context in a school-university partnership. There is evidence in the literature to support the assertion that online learning simulation-based environments can impact student self-efficacy and can be adapted to longstanding testing and foundational practices measuring cognitive load. Novel iterations of simulation-based learning education can also be updated to be mobile friendly, aid in enriching student feedback, and provide information on the overall learning experiences of the online learning student (Clark & Mayer, 2016). Additionally, in alignment with the recently unveiled second edition of the NAPDS nine essentials (NAPDS, 2021), key research-based concepts from Essential 3: Professional Learning and Leading and Essential 4: Reflection and Innovation were intentionally woven throughout the context, development, and implementation of the scenario-based simulation modules and are discussed throughout the article.

### **Student Self-Efficacy**

The mechanism for agency to exercise control over one's own learning experience may indeed influence users' beliefs and influence cognitive, motivational, affective, and student self-efficacy during the learning process (Bandura, 1993). Effective cognitive load reduction frees up more mental processing power to focus on learning tasks. While additional research is needed with online simulation specific implementations in education and learning environments in general, it is possible to hypothesize that a user response to a simulated classroom environments and customized role-play environment may reduce cognitive load and promote student self-efficacy potentially positively impacting associative information processing in the process. For students to effectively adapt to procedural knowledge in near transfer, and changing knowledge scenarios in far transfer, cognitive load measurements help to shed light on simulated learning's impact on effective online learning (Clark & Mayer, 2016). By examining students' learning experiences, and cognitive load with simulated online learning environments, the proposed study herein measures if learners remember what they learned, if they can recognize and apply what they learned more effectively in their online classrooms, and if learner's utilization of a

controlled failure environment has an impact on their self-efficacy and motivation. The option to facilitate choice in the learning process may lead to greater student engagement within the online learning environment (Clark & Mayer, 2016).

### **Cognitive Load**

Effective cognitive load reduction frees up more mental processing power to focus on learning tasks (Kirschner et al., 2019). While additional research is needed with online simulation specific implementations in education and learning environments in general, it is possible to hypothesize that a user response to a simulated classroom environment and customized role-play environment may reduce cognitive load and promote student self-efficacy, potentially positively impacting associative information processing during the learning event (Westlake, 2019). For students to effectively adapt to procedural knowledge in near transfer, and changing knowledge scenarios in far transfer, cognitive load measurements help to shed light on simulated online learning's impact. By examining students' learning experiences, and cognitive load with simulated online learning environments, the data collection measured if learners remember what they learned, if they can recognize and apply what they learned more effectively in their online classrooms, and if learner's utilization of a controlled failure environment has an impact on their self-efficacy and motivation (Janssen et al., 2009; Kirschner et al., 2019).

### ***NASA TLX Instrument***

The National Aeronautics and Space Administration's Task Load Index test, adapted from Hart and Staveland (1988) was administered to measure a multi-dimensional rating procedure and to derive an overall cognitive workload measurement. The NASA TLX instrument measures cognitive load and the impact on effective working memory utilization (Hart & Staveland, 1988). The TLX instrument is based on an average rating of user subscales: mental demands, physical demands, temporal demands, own performance, effort, and frustration (Byrda & Caldwell, 2011). The researchers have adapted this instrument and updated the index to be mobile and cross platform responsive, operating on most devices, for online learning students to provide immediate self-reported feedback upon their online simulation module completion. The TLX instrument is noteworthy because it offers a bridge that may shed light on online learning simulation-based user experiences when transforming face-to-face performative task to online digital exercises and how these adaptations may influence student participation, frustration, self-efficacy, and overall learning outcomes. Users self-report on their cognitive load by detailing their experience and immersion within a simulated online learning module and their overall interactions in the enabled context. Student subjects are then directed to rate categories to measure cognitive load including mental demands and frustration levels based on the participants reported experiences and document their experience using a modified Likert scale (Hart & Staveland, 1988). The researchers utilized an adapted NASA TLX instrument for the pilot study to measure cognitive load.

### **eLearning Modules/Simulations/Integration with Content**

Online learning content curated and integrated for classroom instruction by experienced subject matter experts shares the common theme that it is pedagogically driven, learner centered, systematic, sustainable, accounts for instructor preparation, and considers the environment of adoption along with the practicality of implementing the technology (Knowles, 1997; Clark &

Mayer, 2016). There is no one size fits all solution for online learning, and an effective technology implementation is contingent on the andragogical, and pedagogical, constructs used to sustain instruction, learners' pre-existing knowledge, along with the instructional goals of the appropriate stakeholders. Online learning offers a vehicle to connect learners around the world wide web, and in other circumstances these same learners might not be able to meet in a traditional face to face context due to the evolving nature and uncertainty of our times. Due to the accessibility and inherent nature of online learning, students have the ability to access a compendium of curated learning content available to them anytime and anywhere from multimodal devices, learning management systems, websites, and bespoke software platforms (Clark & Mayer, 2016). Simulation based learning technology is not a new technology, and yet the teaching and learning affordances simulation-based learning can produce within an instructional setting are continuously evolving in various iterations.

### **Designing Pedagogical Agents**

As a part of the development of the scenario-based modules, a storyboarding process was implemented to design the module. To begin this step, the teacher candidates had to create a pedagogical agent, the figure (or teacher) in the module that would deliver the content. This required them to reflect on what a teacher looks like and describe them to the instructional designer. Many have created avatars before online but knowing this would be a model for others to view and a representation of themselves led them to take more time in generating their creation. For the pilot study module, our pedagogical agent, the second grade math teacher, was a combination of the characteristics of the majority of the teacher candidates in the field-based experience course. See Figure 1 below for an example of a pedagogical learning agent.

**Figure 1**

*Pedagogical Agent*



*Note.* Example of a pedagogical learning agent.

Previous studies on instructional representation via pedagogical agents have illustrated that there is little to no difference in learning outcomes when the online pedagogical agent appears with facial features and gestures (Clark & Mayer, 2016). Furthermore, the agent can be a cartoon or facsimile representation provided that the simulation includes human affectations that can direct the learner to the learning content and online lesson, initiating an instructional learning event (Clark & Mayer, 2016). However, by teacher candidates creating their own pedagogical agent, based on their individual identity and culture, this allows for a relatable face in the online environment, a human component some fear will disappear with the use of simulation modules and online learning. This innovative, reflective approach (NAPDS Essential 3) to teacher candidate involvement in the design process of these modules heightens their self-efficacy and ownership in their teaching and learning (Bandura, 1993; NAPDS, 2021).

### **Overview and Context of the Pilot Study**

This research project began as a part of a LIGHT (Learning Innovations Going Higher Team) committee organized by the Dean of the College of Education and Human Development at TAMU-CC as a way to address the upcoming lack of field-based experiences during COVID-19 with professors across discipline areas in the college. The co-creation model for these modules started as a collaboration between an Instructional Design professor and two professors teaching in the field-based experience courses for undergraduate students. The first pilot module was co-created by professors to focus on authentic learning experiences for our teacher candidates to simulate instructional choices they would encounter in the field using virtual reality and “Day in the life of ...” scenarios. As the storyboarding model was put in place, the plan evolved to have teacher candidates co-create simulation modules based on the course content and their work with their school-based teacher educator in their partnership districts. They were then able to collaborate with graduate students in instructional design who helped with the technological tools and implementation of the storyboards. These modules are based on authentic, real-life scenarios gleaned from the course by the teacher candidate and experienced by the P-12 school-based teacher educators in our school-university partnership sites.

The researchers were shown commercial tools that could simulate clinical experiences in an innovative, creative, and different form. The team decided it would be better to design their own, need-based, and standard-based modules from their years of working with the content knowledge needed and the scenarios their teacher candidates struggled with in the field. From previous needs-based assessments data collected from stakeholders in the school-university partnership districts and university-based teacher educators, the team knew that classroom management was an area where our teacher candidates, first year teachers, and even some of our school-based teacher educators struggled. Due to the history of collaboration and commitment to “simultaneous renewal,” professional learning and leading (NAPDS Essential 3) occurred authentically for all involved in this pilot study and a module was created that would be mutually beneficial for all stakeholders during the pandemic and afterwards (Goodlad, 1994; NAPDS, 2021).

During the field-based experience semester where these simulation-based modules would first be introduced during the pilot study, classroom management was taught in its own three-hour course as well as embedded within the Pedagogy and Professional Responsibility Standards TAMU-CC taught as a part of the six-hour Planning, Teaching, Assessment, and Technology course. The first module designed as a part of this pilot study focused on a classroom management technique for gaining students’ immediate attention during a math lesson. Besides

being identified as a need by the partnership districts, the university-based teacher educator noticed this was an area that teacher candidates had struggled with on lesson evaluations during the field-based experience semester in the past.

Because these modules employ gamification components and choice, as well as components of calculated risks and constraints, the experiences are personalized and adaptive to the needs of each student as they complete the module. These modules can be shared with both university teacher candidates and our P-12 partners. They are asynchronous so are done at an independent time and pace. They are also accessible from multiple platforms and devices, including phones, tablets, laptops, and desktop computers. Our main purpose for this pilot study was to design effective scenario-based, online modules that met both our EPP's guiding conceptual framework, our school-university partnership needs, and our required course student learning outcomes that could be utilized both pre and post pandemic. The online scenario-based simulation module created for this pilot study can be found at [fbe.tamucc.edu](http://fbe.tamucc.edu). See also Appendix A for examples of pilot study module pages.

The three main research questions in this study were:

- How do participants think or feel about simulation based online learning and is it an effective medium for teaching and learning?
- How do participants in the sample explain motivation and cognitive impact on classroom engagement, and associative information processing?
- How does the quantitative application analytics data from the module, Qualtrics self-reported survey data, and qualitative open-ended response data converge to shed light on online learning simulation-based modules impact on associative information processing and cognitive load?

The research measured and reported on an entry level scenario based professional development online learning scenario-based module. In the era of COVID-19 online instructional resources are rapidly adjusting to an online learning reality. This research was designed to measure and report on the impacts, if any, that an immersive scenario-based learning module may have to help orient field-based teacher candidates with practical controlled failure simulated scenario-based learning. "Level 1" versions of the online module's content design will allow new and intermediate teacher candidates levelled interactions with the a Captivate developed "day-in-the-life" online orientation module. The research team investigated the overall effectiveness of the modules to prepare field-based teacher candidates for deeper, practical engagement within their remote learning experience time; provide distance-based teacher candidates greater content to application preparation at their remote settings; to enhance teaching presence by moving university-based teacher educators from content remediation to active and flipped-classroom engagement with online teacher candidates.

Participants in the pilot study who completed the simulation-based module were also awarded badges ([https://tamucc.co1.qualtrics.com/jfe/form/SV\\_b3C9v5Alp8vbJJ3](https://tamucc.co1.qualtrics.com/jfe/form/SV_b3C9v5Alp8vbJJ3)). These micro credentials were a way for the university-based teacher educator to identify and track responses of the teacher candidates enrolled in the field-based experience course as well as provide a certificate that teacher candidates and school-based teacher educators could use for documentation of professional development training.

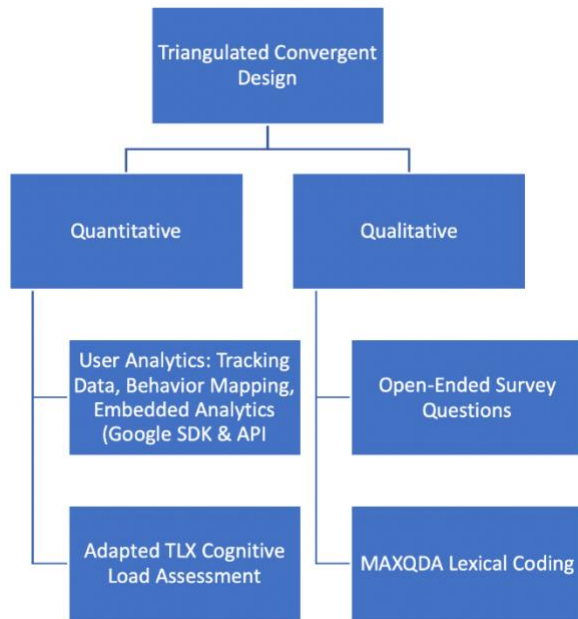
## **Methodology**

The methodology for this study was based on a convergent mixed-method design to integrate quantitative and qualitative collections in order to better generate a more

comprehensive picture for a phenomenon by comparing multiple methodological intensities within a single research study (Creswell & Clark, 2017). The convergent mixed-method design was employed to supply an inclusive degree of triangulation: Quantitative and qualitative results are combined into a more complete understanding of a phenomenon and aid in comparing multiple levels of a phenomena within a study (Creswell & Clark, 2017). Purposeful qualitatively supplemented mixed methods research can help to capture the multifaceted nature of educational research (Hall & Ryan, 2010). Mixed method inquiry that communicates both quantitative survey data and qualitative data may aid in triangulation. A convergent design was selected to complement the quantitative data collected via surveys, TLX assessment data and the and embedded Google analytics user tracking software (Google, n.d.). A convergent sequential mixed methods design was employed for data collection to measure participants quantitative descriptive statistical user analytics data first, and then to clarify the quantitative results with in-depth qualitative open-ended survey data (Creswell & Clark, 2011). The values that qualitative inquiry encompasses acknowledges a triangulated paradigm and provides a mechanism for detailing and relating participant’s personal insight into the thoughts, ideas, and complex expressions that learners have when experiencing and engaging with new learning environments and learning technologies.

**Figure 2**

*Methodological Approach Convergent Design*



The mixed-methods research design included a Qualtrics Survey on:

- Cognitive Load: Adapted from NASA’s Cognitive Task Load Index (TLX) instrument (Hart & Staveland, 1988). See Appendix B.
  - Do you remember what you just learned? Can you apply what you just learned?
  - How hard was the task to learn?
  - How insecure, discouraged, irritated, stressed, and annoyed were you?
- Student Self-Efficacy:
  - Was this online simulation training effective? Or not? Please explain:
  - Do you believe that you can be successful when carrying out the simulated task in an applied setting?
  - Did you feel more or less motivated when completing the module?
- Online Modules:
  - In the era of COVID-19 do you feel supported by the online module training?
  - What are the benefits of the online training simulation?
  - What are the limitations? Please explain:

The survey can be accessed at

at [https://tamucc.col.qualtrics.com/jfe/form/SV\\_7VA9xhHvKRhu01T](https://tamucc.col.qualtrics.com/jfe/form/SV_7VA9xhHvKRhu01T).

### **Participants**

From August 1<sup>st</sup> through December 1<sup>st</sup>, 2020, approximately 150 users accessed the pilot study module from the learning innovation website ([fbe.tamucc.edu](http://fbe.tamucc.edu)). The website was purposely not password protected and was shared on the university website, social media pages, in multiple courses, at our School-University Partnership Conference on Education (SUPCE), and with our school-university partnership districts to allow the researchers multiple data collection points concerning accessibility, mobility, and user flow. Of these 150 users who accessed the module, we were able to collect pilot study data from 33 participants who completed an optional online survey hosted on Qualtrics after the module was completed. 24 current FBE teacher candidates, 2 prospective teacher candidates, 5 TAMU-CC alumni, and 2 community partners (n=2) started the survey. Of the initial 33 participants, 29 participants completed the entirety of the survey questions. For the survey measurement items, response rates varied from approximately 29 to 30 participants. This same rate of responses, 29 to 30, occurred for the open-ended questions on the survey as well.

### **Findings**

#### **Accessibility of Module Content**

Boundary-spanning partnerships (NAPDS, 2021) between experts in instructional design and university-based teacher educators in clinical experiences allow space and time to generate knowledge around the needs of the stakeholders in our school-university partnerships and solve problems through a variety of digital outlets. This can lead to an increasingly organic method of accessing data and information and lowers barriers in school-university partnerships to foster an “anytime/anywhere” culture for creating an innovative environment (Bolaji & Fakomogbon, 2017; Terras & Ramsay, 2012).

Data showed that users accessed the site through a direct URL (n=172) and through the process document page S3 (n=24). The typical user flow accessed the online module directly (n=174) with some user interactions progressing to module resources and back. Multiple users

accessed the site repeatedly included with the “sessions” tracking data. Approximately 199 user sessions were recorded from August through December 2020 accessing and viewing 245 URL page views. Most users’ sessions (n=174) consisted of accessing the simulation module landing page and clicking rapidly on the eLearning module. Based on the data collected, users accessed the online learning module and the online learning environment website frequently and effectively. Data indicates that the modules were easy to access from diverse platforms and from multiple locations and devices. See Appendix B for charts showing device usage and user behavior.

**Quantitative Findings**

Data collected about self-efficacy showed that the participants overwhelmingly (96% positively yes or probably yes) felt confident that they would be successful in carrying out the simulated task/experience in an applied face to face setting. Similarly, the cognitive load data indicated that the majority of participants found the task easy (53.3% extremely easy, 33.3% moderately easy, and 6.6% slightly easy). The question asking about level of support for the online module training during COVID-19 also had a positive response, with 97% agreeing (24% Strongly Agree, 38% Agree, and 34% Somewhat Agree) that they felt supported. 90% of participants felt slightly (28%), moderately (34%), or extremely (28%) motivated after completing the module, with only 10% motivated or unmotivated.

Data was also collected from 3 Likert scale questions ranging from a minimum of 1 to a maximum of 10. When asked, Do you remember what you just learned from the Simulation Module you completed?, the mean score was an 8.53 with 10 being you remember everything. When asked, Can you apply what you just learned?, the mean score was an 8.93. Figure 4 shows the findings when the participants were asked to rate how insecure, discouraged, irritated, stressed, and annoyed they were.

**Figure 3**

*Survey Data Cognitive Load Results*

On a Scale of 1 through 10 – 10 being very insecure; How insecure, discouraged, irritated, stressed, annoyed were you?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Insecure	0.00	8.00	1.60	2.14	4.57	30
2	Discouraged	0.00	8.00	1.23	2.04	4.18	30
3	Irritated	0.00	9.00	1.23	2.25	5.05	30
4	Stressed	0.00	10.00	1.73	2.85	8.13	30
5	Annoyed	0.00	10.00	1.13	2.35	5.52	30

**Qualitative Findings**

Open-ended qualitative questions were recorded to allow participants to include additional feedback in their own voice. Magnitude coding aided the refinement process of the



open-ended survey data by outlining learner's verbal responses based on frequency and lexical word searches conducted with the mixed methods software for qualitative data analysis tool MAXQDA (VERBI Software, 2021).

Questions centered around the themes of effectiveness of the online training, motivation, and COVID support. Overall, the participants commented that the training was effective. One participant stated that "it allowed us to visually learn what is expected or can be done in a classroom setting." Another said, "The content is pertinent to my life work right now. Also, when I chose the wrong answer for the second question, it really got my attention, and I became more interested." Multiple participants shared that they learned what attention getters to use, and which ones were most effective. Two participants made the point that it reinforced what their professors had explained in class. Three participants wanted more examples given including one who would have liked a video. One participant thought the module was confusing.

When asked about motivation, many of the participants shared that after completing the module, they wished they were able to be in a classroom setting this semester. They felt motivated to try it, with one saying that she was "even more excited now to implement it in my own classroom." Another participant stated that the "module made getting the student's attention seem a lot less intimidating and manageable." Three participants connected the content to their learning from their classroom management course. Two participants said that they knew the content already and knew what to do in their classroom so were not motivated by it.

Many of the conversations during the pandemic have been about support during COVID and the concern about in person training and coursework. The data collected from the question asking of the participants felt supported by the online module training in the era of COVID-19 was mostly positive. One participant said, "Yes, I feel supported because the training is for students who cannot go to in person training or does not feel comfortable going to a training." Another shared, "I am a visual person, so this module did help me." Three participants shared their frustrations with online training, including not being able to see real teachers in person using the examples and the many different virtual learning environments they encounter with students. Two participants commented on the interactive and differentiated nature of the module saying, "this is exactly the sort of learning modality we need now."

## **Discussion**

Using the data that we collected, we were able to glean a few things about the participants. It appeared, according to the data that the participants felt a positive impact and/or elevated sense of empowerment within and around the following areas:

- Positively impacting their professional growth and development.
- A welcoming attitude toward a different type of professional development.
- Their levels of frustration were low, citing a friendly and easy to use platform.
- An elevated level of motivation as they saw themselves in the avatar and appreciated the immediate response and feedback.
- Retention and application were both high, respectively.
- A greater sense of empowerment and support in a COVID-19 era where they felt that aspect of their learning had been greatly compromised
- An ease in applying what they had learned in the simulations to a face-to-face environment in a quick turnaround period.
- Instant gratification was present with the immediate feedback, which appeared to elevate confidence and efficacy levels

- Generated new knowledge in a boundary-spanning environment that for some simulated the face-to-face experiences.

The findings suggest that online simulation-based learning is an effective and affective medium for teaching and learning. Students responded in the affirmative that this type of instructional environment was supportive and conducive to their learning while teaching and learning in times of uncertainty. However, online learning is not a panacea and effective high-quality subject matter expertise from experienced field-based experts and pedagogical specialists is a necessary requirement for any online learning initiative to be sustainable, successful, and effective. Researchers note that this type of simulated learning when converted effectively into online training was supportive, motivating, and conducive to learning, especially during times of uncertainty.

Cognitive load is a requisite metric highlighted herein because it combines the diverse multifaceted learning nature and learning science behind completing teaching and learning tasks in an unfamiliar learning environment. Learners responded very positively to simulated online learning and related that frustration levels were low while engagement and information processing levels were high. Data indicated that the training was effective, motivating, helpful, and easy to understand in an online simulation-based format. Learners appear to be engaged with the learning and the online learning was easy to digest, but not so easy as to be ineffective.

While there are numerous examples of effective online learning finding and triangulating the necessary elements of for productive online training and learning is not as simple as collecting user analytics. Therefore, the research team sought to incorporate as many data points as possible into the collection cycle to help shed light on the impacts, if any, that a novel online learning environment may have when converting from a traditional face-to-face learning environment.

## **Future Implications**

### **School and University Based Teacher Educators and Partnerships**

As universities and districts continue to strengthen their partnerships, so must the reciprocal nature of the partnership grow in capacity. The professional development must be mutually identified and mutually beneficial. A true partnership should have a collective vision and understanding of the goals and aspirations of all members of the partnership. In order to do so, partners have to be included in discussions, development and design and decisions related to the EPP. The input gathered from each partner should be integrated into areas such as course design, student learning outcomes, and even classroom pedagogical practices. COVID-19 provided us with a genuine opportunity to take a closer look at what each member of the partnerships needed and desired in order to support candidates and students in an effective teaching and learning virtual/online environment. From this type of advising and discussions, EPPs are able to work collaboratively with school partnerships to develop professional development training, such as simulated modules to fill in the technological gaps as noted in NAPDS Essential 3 (NAPDS, 2021) and the AACTE Developmental Proclamation (AACTE, 2018).

### **The Era of Online/Virtual Teaching and Learning**

One of the difficult lessons we as educators learned from COVID-19 was the hard fact that our students were not adequately prepared or ready to teach effectively in a virtual

and online platform. In other words, they felt comfortable *using* technology as aids, such as power points, Prezis, etc., but to employ technology as a partner in teaching (i.e., pedagogical practice) was something most fell well short of doing. Therefore, we had to find ways to not only provide candidates with the tools to assist in their teaching, but also with the training on how to employ those tools in an appropriate and effective way to meet the needs of the diverse populations they were working with, primarily in the area of online and virtual student diversity and competencies.

### **Interpretation and Integration of Technology Standards**

The interpretation of technology standards has arguably been an area of discussion and debate. To this day, a number of technology standards, across the country, focus on the technical components of technology such as copyright rules, hardware, and learning management systems. While these aspects of technology are important, COVID-19 provided us the opportunity to realize that they cannot be taught in a vacuum, but rather integrated into effective application practices to better prepare candidates for the demands of effective technology integration and true application of the standards.

### **Conclusion**

Currently, the clinical experience component of the TAMU-CC EPP provides an experiential platform to help ensure all our students are learning the essential elements necessary to become a highly-prepared teacher. Teaching seldom involves working with one student but requires that teachers design and manage classroom environments that must enable a broad range of students to learn in both face to face and online contexts. Thus, learning to use teaching practices in classrooms is intricate work, requiring educator preparation programs that are carefully designed in ways that help teachers learn to skillfully enact teaching practices. Overall, this training involves “seeing examples of each task, learning to dissect and analyze the work, watching demonstrations, then practicing under close supervision and with detailed coaching aimed at fostering improvement” (Loewenberg Ball & Forzani, 2009, pp. 497-498). Although these scenario-based simulation modules were developed to support the need for online field-based experiences, the benefits of this innovative virtual approach to learning and teaching demonstrates the need for continued use of the accessible online eLearning modules as a way to build pedagogical practices and clinical experiences throughout the EPP and the school-university partnership.

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# Appendices

## Appendix A

### Examples of Pilot Study Module Pages



Get students on task in a live classroom

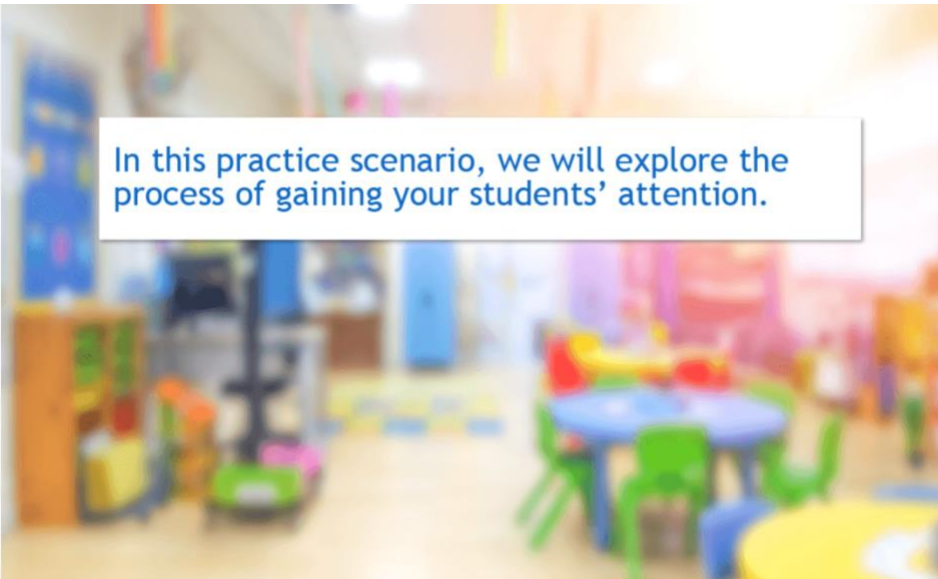
01

Apply immediate attention getting actions

02

Impact student behavior by focusing a busy or loud classroom environment

03



# Appendix B

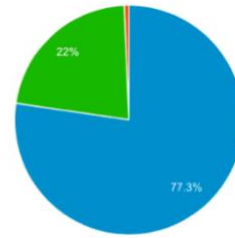
## Module Access

Primary Dimension: Device Category

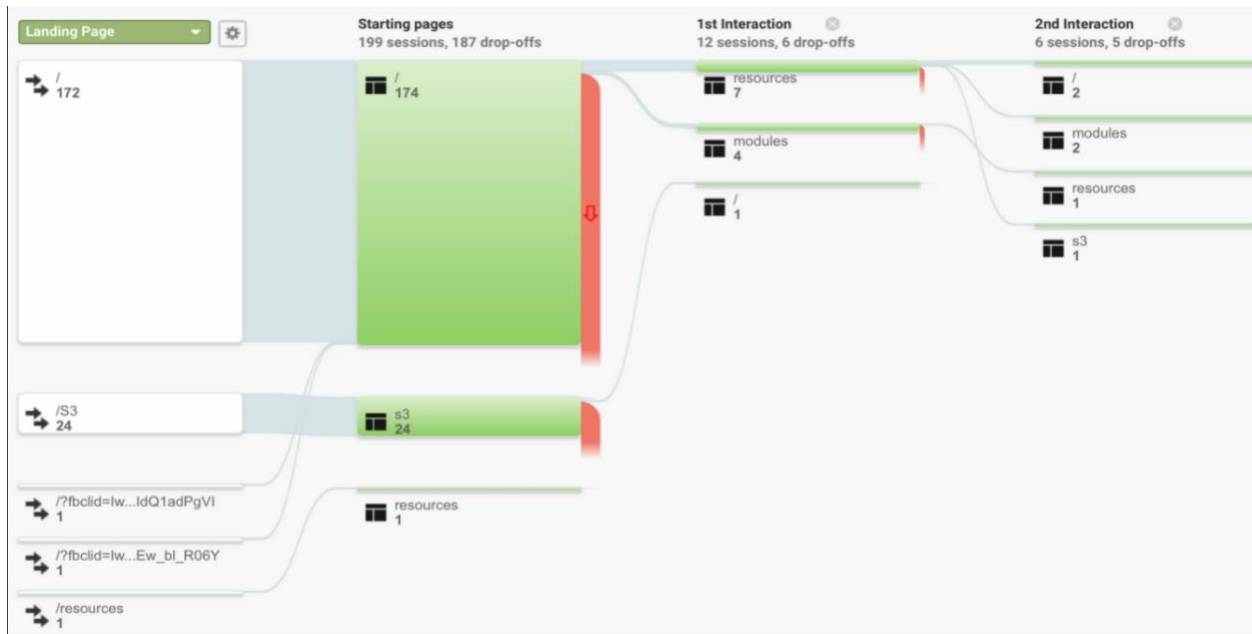
Plot Rows Secondary dimension Sort Type: Default

Users Users Contribution to total: Users

Device Category	Users	Users	Contribution to total: Users
	150 % of Total: 100.00% (150)	150 % of Total: 100.00% (150)	
1. desktop	116	77.33%	
2. mobile	33	22.00%	
3. tablet	1	0.67%	



## User Behavior Map



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# **Becoming: The Story of First Year Teachers' Student Teaching in Times of Uncertainty and its Impact on their Future Teaching**

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**Abstract:** Teaching in the past year and a half has been unpredictable, uncertain, and nerve wracking for many seasoned teachers. For novice teachers, whose student teaching experience drastically changed, this already difficult first year of teaching was made even more challenging. In this study, we utilized narrative inquiry to tell and retell the story of two first-year teachers who did not get a complete student teaching experience due to the COVID-19 pandemic. We highlight their student teaching adventure, their relationship with the triad, and their first year of teaching. What we find is that the complexities of teaching, especially now, requires specific and targeted continued mentorship to support the demands of teaching.

**Keywords:** teaching in COVID-19, triad, clinical experiences

## **NAPDS Nine Essentials Addressed:**

- Essential 6: Articulation Agreements – A PDS requires intentionally evolving written articulated agreement(s) that delineate the commitments, expectations, roles, and responsibilities of all involved.
- Essential 8: Boundary-Spanning Roles – A PDS creates space for, advocates for, and supports college/university and P-12 faculty to operate in well-defined, boundary-spanning roles that transcend institutional settings.

## **Becoming: The Story of First Year Teachers' Student Teaching in Times of Uncertainty and its Impact on their Future Teaching**

Student teaching can be considered the most pivotal time in a novice teacher's career, allowing for the smooth connection of theory to practice (Zeichner, 2014). However, in one of the most unpredictable times in education in the last few decades, teacher candidates in the spring of 2020 were abruptly halted from their experience and cast into an unknown scenario. These same teachers, who were unable to complete a typical student teaching experience, faced their first year of teaching in the middle of still uncharted territory. In the midst of what can be classified as the hardest year of any teacher's career, the odds are further stacked against this group of novice teachers; teaching their first year while not completing a proper student teaching experience in the middle of a virtual or hybrid teaching year.

In this study, novice teachers were given the space and voice to share how the shortened student teaching experience impacted their first-year of teaching. More specifically, these teachers shed light on the clinical experience (Dennis et al., 2017), the relationship of the triad (comprised of the teacher candidate, the university supervisor, and the school-based cooperating teacher) (ATE, 2000, CAEP, 2015) during the uncertain time, and how each affected their first-year teaching. Drawing on Connelly and Clandinin (1990), we employed a narrative inquiry approach to examine these teachers' experiences through their stories of teaching during such an unprecedented time.

### **Literature Review**

#### **Complexities of Education Preparation Programs**

With the underlying unpredictability and ambiguity in teaching (Duffy 2005; Fairbanks et al., 2010; Putnam & Borko, 2000), teachers already feel pressure balancing the many hats they must wear. The multifaceted nature of the classroom necessitates the desire for teachers who are highly equipped to meet the demands of today's complex world (Duffy 2005; Fairbanks et al., 2010). With the continued influx of English Language Learners and special education students, teachers need to be prepared to work with even more diverse learners and help close the achievement gap (AATCE, 2011; The Education Schools Project, 2006; Zeichner, 2014). Even more so, anxiety, depression, and suicide rates are at an all-time high among children (CAHMI, 2017; Jennings, 2018), making social-emotional learning a high priority (Elias et al., 1997). Education preparation programs, EPPs, are charged with supporting the development of teachers who are prepared to take on these many tasks, along with implementing that academic rigor (Dillon et al., 2011).

Current trends show that over 200,000 teacher candidates graduate from an EPP yearly (NCTQ, 2013). Education preparation programs continue to grapple with how they can best prepare teacher candidates for the complexities that come along with teaching (Ball & Forzani, 2010). More specifically, developing structures, curriculum, coursework, and experiences are highly questioned in the field (Duffy et al., 2009; Fairbanks et al., 2010), as researchers continue to search for the best practices for EPPs. What is known, however, is that conceptual and pedagogical knowledge develops over a continuum and no program can ever truly provide enough context to prepare teachers for what they will encounter when they begin their careers (Scales et al., 2014).

## **Clinical Experience**

Many researchers believe that knowledge is socially constructed, with experiential learning at the forefront (Putnam & Borko, 2000). The opportunities afforded to teacher candidates that allow them to practice the skills in which they are learning can support their continued development (Ball & Forzani, 2009). In fact, these experiences allow for candidates to connect theory to practice (CAEP, 2015; Darling-Hammond, 2014, NCATE, 2010). “Clinical practice is central to high quality teacher preparation” (AACTE, 2018, p. 13). Clinical experiences, which are critical for the success of teacher candidates, have allowed for a shift to bringing learning closer to practice (Zeichner, 2014). As suggested, these clinical experiences allow for guided practice and engagement, which strengthen intellectual interpretation (Darling-Hammond et al., 2005) reflectively teacher adaptability (Duffy, 2004).

Darling-Hammond (2014) suggests that strong programs include three key components: tight coherence and integration of clinical work, extensive and intensely supervised clinical work, and strong relationships with schools. Candidate’s understandings are often clouded by their apprenticeship of observation or the reliance on their own schooling experience. This can often be a hindrance to candidates’ understanding of effective pedagogy (Zeichner, 2005). Through clinical experiences, EPPs can challenge those and provide candidates a reflective space to consider alternate research-based approaches (Leland, 2012).

Targeted clinical experiences, especially in the case of student teaching, are most impactful on teacher candidate development (CAEP, 2015; Darling-Hammond, 2014). Student teaching is the time for candidates to apply all of their learning and knowledge and make in-the-moment decisions (Lantolf, 2000). This time becomes a reference point for students during their first year of teaching and allows them to further connect theory into practice (Darling-Hammond et al., 2005). Clinical experiences such as student teaching are situated as the heart of the overall experience, allowing for pedagogy and content to build from that (AACTE, 2018). The mentorship that stems from that experience is unparalleled throughout a teacher candidate’s time in the program (Duffy, 2005; Lantolf, 2000).

## **Triad**

In most contexts, the stakeholders involved in the success of the candidate include the teacher candidate, the university supervisor, and the school-based cooperating teacher (ATE, 2000). Often known as the triad, it is imperative that all three stakeholders view the partnership as mutually beneficial, multidimensional, and evolving as the experience progresses (Rust & Clift, 2015).

The school-based cooperating teacher, practitioner, or mentor (Rust & Clift, 2015; Zeichner & Bier, 2015) works with the teacher candidate on a day-to-day basis. During these interactions, this stakeholder’s role is to ensure they support the teacher candidate, provide opportunities for learning and experimentation, and communicate with the teacher in training (Linton & Gordon, 2015). Similarly, while the exact role of the university supervisor may differ among EPPs (Burns & Badiali, 2016), they are also expected to support teacher candidates throughout the experience while concurrently communicating with the cooperating teacher to provide critical feedback on the teacher candidate’s performance. During this time, the university supervisor often provides in the moment feedback for the candidate and makes themselves readily available to the candidate (Slick, 1998). Both the university supervisor and the school-based cooperating teacher are integral parts of the learning experience for the teacher candidate.

## **First Year Teaching and COVID-19**

The first year of teaching is a learning curve for all teachers. Many teachers suffer reality shock when they began teaching and did not feel fully prepared for all the details and demands of teaching (Freeman and Knopf, 2007; Buckley, Schneider, & Shang, 2005; Veenman, 1984). For most first-year teachers, it is the first time to have complete control of a classroom without the supervision or guidance of a cooperating teacher (Womack-Wynne et al., 2011). The most common struggles that first-year teachers have identified are classified into four categories: (1) instructional challenges such as classroom management, planning and implementing instruction, managing curriculum expectations, evaluations, preparing students for high-stakes tests, and demonstrating student achievement; (2) relational challenges such as in relations with parents, administrators, colleagues; (3) adaptation challenges such as in adapting to the school, environment, profession and; (4) challenges in physical infrastructure and facilities of the school such as insufficient social facilities and absence of the necessary teaching materials (Chelsey & Jordan, 2012; Ergunay & Adiguzel, 2019; Freiberg, 2002; Houston, 1993; Smeaton & Waters, 2013; Wodlinger, 1986; Womack-Wynne et al., 2011). In addition, first year teachers often lack training in effectively implementing technology in their classrooms (Batane & Ngwako, 2017; McKinney et al., 1999).

In March of 2020, most K-12 schools in the US had to close their doors due to coronavirus (COVID-19), and their classrooms shifted to remote learning. Some districts brought students back into buildings in fall 2020 while others remained online. For the first-year teachers as well as experienced teachers, the pandemic has added more stress to an already high-stress profession. Concurrently, challenges such as new teaching formats, students lacking access to technology, and stringent COVID-19 safety protocols have further added to the typical first year teaching struggles.

These difficulties and frustrations have impacted teacher attrition in the US (Darling-Hammond, 2014b; Dilbert et al., 2021). Ingersoll et al. (2018) studied nearly three decades of federal data on teachers from 1987 to 2016 to explore what changes have taken place over time. One of their key findings is 40-50% of new teachers leave the profession within their first five years of teaching (Ingersoll et al., 2018). According to a study of 113 first year teachers, Womack-Wynne et al (2011) found that 43% felt like they had made the wrong career choice after four months in the classroom, and 63% said that they did not see themselves teaching in 10 years. Dilbert et al. (2021) reported that:

Although it is too early to say whether the overall number of teachers leavers will go up because of COVID-19, early signs indicate that it will, which will put additional strain on the already daunting prospects for the 2021–2022 school year.... The teacher leavers in our survey left for both COVID-19–specific reasons and because of longer standing structural problems with the profession that the pandemic has exacerbated. (p. 15)

These past studies and recent reports have provided general pictures of the trends and struggles that first-year teachers face. As such, it is clear that providing a space for first-year teachers to share their stories, experiences, and perceptions is imperative.

## **Methods**

Hearing these stories from the teachers themselves gives us a clearer understanding of just how valuable clinical experiences may be (Clandinin & Connelly, 2000; Hyden, 2010). Congruently, the research on teacher attrition makes it clear that first-year teachers need more intensive, targeted mentoring to better support them in their inaugural year in the profession. For

this study we sought to provide those supports in the way of a yearlong, first-year teaching mentorship that included regular meetings with university teacher education faculty, reflective blogging, journaling, and swift access to a university mentor. After collecting data along the way, we sought to more deeply understand how their clinical experiences during the pandemic affected their first year of teaching.

To share the stories of the participants, we employed a narrative inquiry approach. Narrative inquiry gives space for the telling and retelling of stories (Clandinin et al., 2011), which allows for the teachers to share their journey in such an unprecedented time. In what follows, the teachers are able to shed light on their own experiences (Gubrium & Holstein, 1997; Ming & Kwok, 2011) and share their personal perspectives of their first-year teaching in spite of a proper student teaching experience.

According to Clandinin and Huber (2010), “Narrative inquiry follows a recursive, reflexive process of moving from field (with starting points in telling or living of stories) to field texts (data) to interim and final research texts” (p. 1). We allow the voices of the candidates to tell their story and share the feelings and thoughts they had throughout their first-year of teaching. Simply put, narrative inquiry is the process of meaning making (Bruner, 1996). Through the lived experiences of the teacher candidates, we get a better understanding of the trials and tribulations of first year teachers attempting to begin their careers in the midst of a challenging time in US history (Connelly & Clandinin, 1990).

Narrative inquiry does not necessarily ask questions, but looks at a research puzzle or dilemma (Clandinin, 1989). Our inquiry focuses heavily on the idea of teaching during COVID-19 (Craig, 2011). This approach allowed us to collaborate with the first-year teachers to better understand their lived experiences (Clandinin & Connelly, 2000). To guide this study and to help us in our meaning making process, we examined the following questions:

1. What impact did the change in student teaching have on the relationship of the triad?
2. How did the abrupt stoppage of student teaching impact the first year of teaching?

## **Participants**

The cohort of beginning teachers we worked with initially included seven first-year teachers, all of whom had graduated from a small university in the Midwest. Three faculty from that university served as mentors and facilitators, each of whom had worked with the members of the cohort in various capacities while they were in the teacher education program at that university. The participants were hand selected by the three mentors with no specific criteria, with the notion that they aspired to have a cohort with some grade level, geographic, and content area diversity so as to have a broader sampling of teachers. The cohort met with the mentors virtually once every month in the evening for an hour to an hour and a half to check in, discuss issues or successes, and to preview upcoming blog post topics they would write for the Tales from the Classroom blog’s “Tales from the First Year” series. Members of the cohort often referred to these meetings as “teacher therapy sessions,” illustrating their belief that they were getting something that they needed from this group that they were not getting elsewhere. Because of differing circumstances not related to this project, two first-year teachers ultimately left the project, leaving the cohort with five members, two of whom are highlighted in this study.

The two participants in this study both identify as white women. One of them was a traditional undergraduate student while the other was a second career professional with extensive postgraduate career experience in a non-education related field. Both of them received early

elementary school licenses in grades PK-5. Carrie Wright is a 4<sup>th</sup> grade elementary school teacher in a public school who was hired as a yearlong substitute teacher of one particular class. Similarly, Brooklyn Shea is a 2<sup>nd</sup> grade elementary school teacher in a private religious school. Both teachers took their first-year positions in schools that were not their student teaching placement school.

Of the three faculty mentors, all three are tenure line teacher education faculty with extensive experience teaching, coaching, and leading in K-12 settings. One is an elementary and literacy specialist, one is a mathematics education specialist, and the other is a curriculum specialist with a background in Language Arts teaching.

### **Data Collection and Analysis**

Data for this study were collected at a number of different points. To support the credibility of the findings, triangulation of the data (Baxter & Jackson, 2008) was used by collecting data in three forms: (1) blog posts; (2) journal entries; and (3) interviews. First, as described above, the teachers in the cohort were asked to write blogs on a consistent basis each month, which were posted publicly on the Tales from the Classroom blog. Those posts were used as the initial point for understanding the stories. Next, each teacher was asked to complete a journal entry specifically for the purposes of the study and not to be posted on any social media platform. This allowed for teachers to be honest, transparent, and share their thoughts in confidence. This entry included four questions:

1. How is your first year of teaching going?
2. What is challenging about your first year?
3. What is going well in your first year?
4. How are you feeling about teaching?

Teachers were not given any direction as to what this should look like or how to complete it. The purpose of the journal entries was to supplement the third data collection method, the interviews. All the semi-structured interviews (Stake, 1995) were conducted individually by one of the faculty mentor educators, to allow for consistency and openness for the teachers.

Analyzing and interpreting data in narrative inquiry has been a point of discussion for researchers for some time. The question of neutrality or objectivity in narrative inquiry has been a source of debate for some, to which we would explicitly state that we did not intend to be objective or neutral in the writing of this study. As we negotiated the data among the three researchers as well as with the two participants, it became clear that our individual perspectives, schema, histories, interpretations, etc. were salient to how we told and retold the story. Clandinin and Connelly (1988) explain this phenomenon this way: “Collaborative research constitutes a relationship. In everyday life, the idea of friendship implies a sharing, an interpretation of two or more persons’ spheres of experience” (p. 281). Further, Josselson (2006) reminds us that narrative research is inherently interpretative at every stage of the process, including data collection, data analysis, and writing the narrative. Riessman (2008) goes as far as to proclaim that researchers engaging in narrative inquiry are not merely neutral observers who tell objective stories of their participants. Rather than assuming a neutral stance, we embrace having our own perspectives, schema, histories, biases, etc., and explicitly sought to draw on our relationships with the participants to help us in telling and interpreting their stories.

To disseminate these stories, we drew on Connelly and Clandinin’s (1990) framework for narrative inquiry storytelling, which they refer to as restorying, the process of gathering stories from participants, analyzing them, and then rewriting the story in the researchers’ own form of

narrative. Connelly and Clandinin's framework include: 1) broadening; 2) burrowing; and 3) restorying. Broadening refers to when researchers generalize about a participant or research site's character, way of life, context, etc. Connelly and Clandinin warn researchers to avoid making broad generalizations and as such, we heed their warning in this text. Burrowing refers to when the researcher digs into the narrative stories of the participants, or an event observed by the researcher to examine them more deeply. Finally, we aim to restory the participants' experiences by considering present and future implications of their experiences while exploring how they make meaning of those experiences now as well as how they think it might influence them in the future.

## **Findings**

In the following section, we present the findings in a similar format as Connelly and Clandinin (1990). We provide the stories of the two participants. These two participant's stories are intentionally presented in order to allow the reader to get a deeper understanding of their experience and journey from their student teaching experience to their first year of teaching. We utilize an inductive approach, allowing the teachers to tell their story. Each story presented demonstrates the components of narrative inquiry analysis: broadening, burrowing, and restorytelling (Connelly & Clandinin, 1990). We first present each participant's student teaching experience, then their experience working in the triad, and end with their first year of teaching.

### **Carrie Wright**

#### ***Student Teaching Experience***

Prior to COVID-19, Carrie felt like she was having an exceptional student teaching experience. During her time in the school, she was gradually taking over many aspects of the instruction and implementation of curriculum. She felt as though she was collaborating not only with her mentor teachers, but also with other specialist teachers that came into the classroom to support students. Carrie discussed extensively that she was given the freedom and opportunity to develop her own lesson and unit plans. She was given the creative space to decide how she wanted to teach various content without too much interruption from her mentor teachers. In the moment, she often felt a bit alone with this freedom and craved more support. However, as she reflected on the experience post-student teaching, she now appreciates the freedom she had. For her, she sees that this was the way her mentor teachers were allowing her to practice becoming a teacher and allowed her to get out of her comfort zone.

Right before COVID-19 changed life as we knew it, Carrie had completely taken over all aspects of the classroom. Not only was she the sole instructor in the classroom, but she was also participating in all the other components of teaching, which included morning meetings, attendance, lunch counts, etc. She felt like a real teacher at that point. One of her mentor teachers was leaving the classroom most days and allowing her full control. With the ambiguity of COVID-19, things drastically changed for Carrie. What they thought would just be an extended spring break turned into online teaching for the remainder of the school year and her student teaching experience. Carrie no longer was in control of the classroom or the instruction. When she once felt like the teacher, she now felt like an outsider looking in. Or as she calls it, an observer.

Carrie's new role, in the COVID-19 teaching era, was to create word study activities, take attendance, and give feedback on writing assignments. Carrie deeply talked about her need

to advocate for herself during this time and to continue to ask to do more. Secretly, she wanted more responsibility and instructional time. She felt as if she was so close to becoming that teacher and that COVID-19 greatly inhibited that process. She never felt like she gradually was able to give back the instructional power to her mentor teachers, but rather abruptly went from teaching it all to practically teaching nothing.

### ***Experience with Triad***

Carrie was uniquely positioned in a grade where teachers departmentalized their instruction. Two teachers would team up and switch their students halfway through the day and only teach two of the content areas. Carrie was able to stay with one classroom and just switch content areas she taught. She describes her mentor teachers as outstanding educators who included her in the planning process. She often felt valued for her opinions and her thoughts. She received plenty of quantitative and qualitative feedback from her mentors and enjoyed the relationship they had. While she sometimes struggled with their method of support, she now reflects on being grateful for them pushing her and having her struggle a bit in order to build her confidence and abilities. She appreciated that they allowed her to be part of all aspects of teaching and extended invitations to her for team meetings, lunches, and planning sessions.

When talking about her relationship with her mentor teachers post-COVID-19, Carrie often felt the need to preface her comments with the understanding that even they were navigating uncharted waters. Although she knew she wasn't, she felt like a burden to her mentor teachers during COVID-19 and no longer felt like she was part of the planning process. While they still met with her daily via online platforms, she commented that they would have already planned, and this was more of their way of touching base with her. She knew that they were still trying to be inclusive, but they recognized they weren't being fully available or supportive. She felt they no longer had extra energy to spend on her, but rather their energy was being spent learning how to navigate the new online teaching. She knew while they were great at providing her feedback pre-COVID-19, they would no longer have the bandwidth to do that. Communication dwindled a bit. Regardless, she still felt like she had a good relationship with her mentors.

Carrie talked about having a good relationship with her university supervisor. She felt valued by the supervisor and comfortable enough to bring any questions to them. She felt as though her supervisor was advocating for her and was supportive. Carrie felt as though her supervisor saw her as a teacher. Post-COVID-19 she continued to feel the same way about her university supervisor. While the communication between the triad became less of a focal point, Carrie still felt as though her university supervisor was there to support her and ensure she was successful. In her interview, she discussed that she continued to be in consistent contact with her supervisor and met with her to ensure she was still progressing as a teacher. More importantly, Carrie felt reassured by her supervisor that she would still complete the program, despite the lack of time in the student teaching placement.

### ***First Year Teaching***

Carrie deeply reflected on the important role her student teaching experience played in her first year of teaching. For Carrie, working online during her second half of student teaching allowed her to feel prepared to use technology tools. She already had practice and done the experimenting before her first year so that it allowed her to feel more comfortable. The



experiences she had pre-COVID-19, taking over the entire teaching load, allowed her to also feel confident doing those things her first year of teaching.

Carrie often feels like her first year of teaching is a bit of a whirlwind. “One of the challenges about my first year is that there is no pause button. Everything is new - lesson planning, responding to parents, navigating all the behind-the-scenes tasks such as IEP meetings, class placements, planning class parties with my home room parent, and responding to emails.” She reflects often on the complexities of teaching and how much goes into teaching, beyond the instruction that is done. She began her first year of teaching in quarantine, due to close contact with someone who was exposed to COVID-19. She commented that her students went to school before she even did. She felt like she never got off on the right foot because of this.

Carrie did not mention much in terms of support from her school during her first year. While she relied on her grade level teammates for some support and to help her understand the school culture, she never commented on getting mentorship or guidance from members of the school. When thinking ahead to her second year, Carrie talked about feeling a bit of anger and resentment. To her, she feels as though she will have a second first year of teaching. Much of what she developed for this year may not transfer over, due to her designing much of her instruction for online and hybrid learning. She understands that her first year was “one in a million” and that she will hopefully have a more traditional first year during her second year of teaching.

## **Brooklyn Shea**

### ***Student Teaching Experience***

Brooklyn Shea felt as though before COVID-19 hit she was having a wonderful student teaching experience. She had developed, what she imagined, as the perfect co-teaching model. While she never felt like she was getting to fully take over the classroom, she liked how co-teaching allowed her the ideal amount of time to practice her skills and also continue to learn from her mentor teacher. During her time, she enjoyed being in a classroom that had a “perfect” group of students with little behavior problems that allowed her to develop her instructional practices more readily. For her, the constant back and forth teaching with her mentor teacher allowed her to teach varying content areas and try out different programs the school had adopted. Being able to do read aloud daily allowed her to work on her read aloud abilities and get comfortable doing that with other adults in the room. She appreciated that both of them were able to teach mini lessons and pull small groups throughout the day.

When Brooklyn thinks about her experience after COVID-19 hit, she described it as exhausting. For her, she felt a weight and stress that she had not felt before. To sum up her experience student teaching after COVID-19, Brooklyn reflected, “My role during student teaching after COVID-19 was to take over for the first time during a pandemic remotely.” She explained how she felt as though she was leading the class after COVID-19 hit. She extensively discussed how she was spending all day recording videos, meeting with students, teaching lessons, and answering questions. She continued to pull small groups during this time, even if her mentor teacher was not. So for her, the exhaustion came from her feeling like she was fully taking over for the first time in the midst of a pandemic nobody knew how to handle.

### ***Experience with Triad***

Pre-COVID-19 Brooklyn reflected on her relationship with her mentor teacher as being one that was relatively good. Besides the challenge in her teacher to give up full control, Brooklyn knew that she was provided with great experiences and an excellent co-teaching experience. She felt as though she had an open relationship and was comfortable coming to her mentor teacher with any questions or concerns she had. Her teacher seemed to value her opinion and would ask for her input on instruction. During this time, her mentor regularly shared resources, allowed her to be part of conversations, and gave her as much feedback as she could.

When describing her relationship with her cooperating teacher post-COVID-19, she described their relationship as non-existent. More specifically, Brooklyn felt abandoned by her mentor teacher and felt as though she disappeared. She empathetically understood that her mentor was also just trying to deal with the pandemic and her own children being at home with her as well. However, she knew that she was putting in more effort than her teacher and felt as though she was doing the heavy lifting. In her eyes, her mentor teacher was doing the bare minimum and having her do all the work. From her perspective, she felt as though her mentor teacher was over reliant on her to carry on most of the teaching duties on account of not knowing how to make the adjustments required for teaching during the pandemic. In conjunction, Brooklyn felt as though all communication, which they had pre-COVID-19, was now gone. She never felt like her mentor teacher reached out to check on her, ask her how things were going, or ensure things were getting done. The only time she would hear from her mentor was when she would text her a question. In her eyes, it felt as though her mentor no longer cared for her.

Contrastingly, Brooklyn felt a strong connection with her university supervisor both pre-COVID-19 and post-COVID-19. For her, the university supervisor was her saving grace. She felt constantly cared for and valued by her university supervisor. Her supervisor checked in on her often, throughout both experiences, and offered valuable feedback. For Brooklyn, her supervisor reminded her of the realities of teaching and how sometimes teachers must do things they may not always agree with. She often appreciated the advice she received.

### ***First Year Teaching***

Brooklyn reflected on her first year of teaching openly and with what seemed like a bit of disappointment and angst. She commented, "I love teaching, and this is where God put me, but I am also like, 'I know my worth and I know that God created me to be so much and I think the system prohibits that from happening.'" Brooklyn struggled with thinking about her long-term goals of teaching, as she does not know how feasible this stress and workload could be when she eventually settles down to have children. For her, the burden that comes with teaching is more than any human should have to bear. She now has a better understanding of the idea of teacher burnout. She commented that she will need to figure out how to "develop a backbone" in order to better cope with the pressures of teaching.

She has felt overwhelmed from her first year of teaching and it has felt like nothing short of a roller coaster ride. While she understood going into teaching the flexibility needed to teach, she never expected this inconsistency and uncertainty that she dealt with this year. Brooklyn commented that she did not feel the school provided her much in terms of a first-year experience. While she worked with her grade level teammate to plan some of her lessons or get ideas, she often commented that her pedagogy did not align with her colleagues. For her, this further placed her in a state of isolation feeling as though she did not have any resources or support at the school.

Despite her worries, Brooklyn still feels a great sense of pride and passion for teaching. She has learned so much, good and bad, from her first year of teaching. Her work this year has not only allowed her to find confidence in her abilities, but it has also helped her find her voice. Brooklyn spoke of being able to speak up for herself and share her thoughts with others. If nothing else, she is still steadfast in her desire to teach. She commented, “I knew even as a young teen that God called me to be a teacher and was preparing my heart for the challenges of teaching through some of the more challenging life events I faced.” She very much understands there is a lot of judgement placed on teachers and that she will need to adjust to this and learn how to cope with the exhaustion that comes with the career.

### **Discussion**

In both of the experiences shared, it was clear that the pandemic had a dramatic impact on both teacher candidates’ clinical field work. First, the relationship between the teacher candidates and the cooperating teachers were drastically altered once instruction became exclusively remote. Given the critical nature of the teacher candidate-cooperating teacher relationship (Zeichner & Bier, 2015), Carrie and Brooklyn both felt as if they no longer were being mentored. This led to a bit of uncertainty for both novice teachers as to what to expect in their first year of teaching. There was an adverse effect on the level and nature of support provided to both teachers. In fact, both women felt as if they no longer were given day-to-day feedback, valuable experience working with a colleague, or even necessary communication (Linton & Gordon, 2015). As a result of an abruptly short student teaching mentorship experience, more intensive mentorship could have been helpful during the first year to combat the lack of experience afforded during this critical learning time (Ball & Forzani, 2009).

These feelings of abandonment from their cooperating teachers appeared to carry over into their first year of teaching where both felt overwhelmed, somewhat underprepared, and in desperate need of more support. As Putnam and Borko (2000) suggest, these ideals are imperative to address during student teaching in order to develop well-rounded teachers. Interestingly, despite feeling as though they were well supported and cared for by their university supervisors, each still felt a lack of emotional support from their cooperating teachers once the pandemic hit, though both shared that they understood their cooperating teachers felt overwhelmed as well. This emotional gap did not seem to be filled during their first year of teaching, as both still felt as though they were alone in their pursuit of effective teaching and instruction. There is an emotional gap (Elias et al., 1997) that may well be worth exploring in other teachers with similar pandemic clinical experiences, particularly if such gaps were already leading to attrition.

One other such shared implication of student teaching during COVID-19 is that both had a drastically altered teaching experience once schools went remote, leaving each devoid of many critical experiences beginning teachers need to be most successful (Darling-Hammond et al., 2005). In Carrie’s case, she went from being in control of most things a classroom teacher would be charged with to being a passive observer in an online platform. The feedback she received from her cooperating teachers went from being rich and helpful to being nearly nonexistent. Conversely, Brooklyn was in a situation where she could try out various strategies, curricular approaches, and classroom management approaches to being put in charge of the online course creation and delivery with little to no support. Not only did she not get to experience the rich conversations with her cooperating teacher that are so valuable to beginning educators, but she

also missed out on developing her classroom curriculum, instruction, and classroom environment skills.

### **Strengthening Partnerships and Supporting Novice Teachers**

While engaging in a professional internship during a pandemic is certainly a unique occurrence, some critical lessons can be learned. University supervisors might first consider taking a more proactive role in advocating for teacher candidates when there is a breakdown in communication or the teacher candidates are feeling as though they are left to their own devices. Item number eight of the National Association for the Professional Development Schools (NAPDS) (2021) nine essentials suggests, all stakeholders in the partnership must take on “boundary-spanning roles.” With the current complexities facing teacher candidates and K-12 schools, university supervisors must be prepared for the advocacy that may be needed to ensure teacher candidates receive the most of their internship experiences. While working in this Third Space (Gutierrez, 2008; Kozleski, 2011), where teacher candidates begin to identify how their pedagogical thinking fits into the classroom context, we recommend that all stakeholders reevaluate their role, the structure of the experience, and how COVID-19 will continue to impact the student teaching experience.

More importantly, we urge partnerships to re-establish their shared work together to better meet the needs of all stakeholders in the current school context. For this, we recommend reviewing the articulated agreements and shared governance structures of the partnership as suggested by the nine essentials (NAPDS, 2021). Even more proactively, EPPs in conjunction with partnering schools and administrations, might reconsider the process of identifying cooperating teachers to ensure teacher candidates are having a rich experience when student teaching. More specifically, identifying cooperating teachers who are equipped to handle the current teaching climate and the responsibilities of building a successful student teaching experience. Developing partnerships that include a more select pool of teachers who can be better educated on the philosophies, beliefs, and practices of the EPP with whom they are working might prove beneficial. Concurrently, EPPs can come to better understand the school contexts in which they are sending their teacher candidates and seek to understand how their work can better serve their partnership school.

While re-evaluating and strengthening partnerships is essential (NAPDS, 2021), schools and EPPs must consider how novice teachers are being supported beyond their program. While we do not know the impact of COVID-19 on teacher turnover, early signs do indicate that the added pressure may cause more teachers to select to leave the profession (Dilbert et al., 2021). More effort must be placed on bridging the first few years between leaving the program and beginning to teach. EPP must consider ways to support their graduates beyond their programs. Similarly, school districts must re-evaluate the supports, resources, and mentorships they offer novice teachers in order to lower the ever-growing teacher attrition rate (Darling-Hammond, 2014b). Mentorship programs that seek to provide space for teachers to voice their concerns and receive appropriate mentorship would be beneficial (Daoud et al., 2021).

### **Conclusion**

While we in no way seek to generalize the experiences of these two teachers, one would be hard pressed to deny that teacher candidates in their clinical experiences during the pandemic were lacking in the preparation they need to best set them up for success as teachers (AACTE, 2018; Darling-Hammond et al., 2005; Zeichner, 2005). Compounding this reality is that most if

not all of these teachers had a tumultuous, inconsistent first-year experience where they were remote, hybrid, face-to-face with restrictions, and sometimes all of the above. As both participants astutely pointed out, these teachers will in essence be having a second first year where they are going to be developing skills that they would have been working on during a traditional student teaching experience (Ball & Forzani, 2009). It seems clear that these teachers will need (and did need) extra support to help foster their growth as educators. Concurrently, if the teacher attrition numbers continue in their downward trajectory, it would seem most essential to provide greater support to those who have been learning to teach during the pandemic. The level of stress from teaching that led so many to leave the profession before the pandemic was invariably magnified by teaching during a pandemic. As such, it would be wise for teacher educators, school administrators, professional developers, and policy makers to consider these realities when considering how to approach supporting new teachers going forward.

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