Preparing Preservice Teachers in the Midst of a Pandemic

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Abstract: The COVID-19 Pandemic brought unprecedented challenges to education systems in the spring of 2020. This study evaluated the effects of the sudden, widespread school closures on participants of a yearlong elementary and early childhood teacher education internship program. This study included current program students, graduates of the program, and school partners of the program. Results showed the role of the intern changed as the priorities of the mentor teacher changed in response to the changing educational environment. Inequities in technology and resources were magnified, and schools took diverse approaches in their response to the school closures as a result.

KEYWORDS: Student teaching, COVID-19, teacher preparation, field experience, school partnership

NAPDS NINE ESSENTIALS ADDRESSED:
Essential Two: Clinical Preparation. A PDS embraces the preparation of educators through clinical practice.

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

Essential Nine: 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.

Preparing Preservice Teachers in the Midst of a Pandemic

Field experience through student teaching is a well-established, core component of teacher education (Anderson & Stillman, 2013). Practice teaching in a classroom allows preservice teachers the opportunity to connect theories they have learned with practical application in the classroom. Studies indicated teacher preparation that occurred exclusively at the university had a slight positive impact on teacher preparation while school-based preparation has been recognized as having a significant positive impact on teacher preparation resulting in it being a critical element of teacher preparation (Ingersoll et al., 2014; Knight et al., 2015; Leeferink et al., 2015; Sadler & Klosterman, 2009). Studies have also connected field experience placements with the confidence and success of teachers (Gurvitch & Metzler, 2009; Ronfeldt, 2015), and practice teaching with retention in the teaching profession (Ronfeldt et al., 2014; Whipp & Geronime, 2015). As evidence of the critical role student teaching plays in teacher preparation, most state departments require preservice teachers to spend a designated number of hours or days in a field placement in a partner school classroom to obtain initial state licensure (Thompson et al., 2020).

During field experience placements, mentor teachers, also termed cooperating teachers (Cornbleth & Ellsworth, 1994), facilitate classroom-based learning opportunities for student teachers by guiding them through authentic experiences teaching PK-12 students in the classroom (Ambrosetti, 2014). Student teachers gain experience cultivating a classroom community, organizing the physical space of the classroom, managing the behavior of students, and implementing instructional strategies. Prior to the spring of 2020, field experience placements occurred in physical classrooms within school buildings. These schools had walls, desks, and tables. Throughout the day, students interacted with each other. Many schools had dedicated space for elementary students to collaborate in groups, face-to-face (Thompson et al., 2020).

During the spring of 2020, student teaching was abruptly interrupted by the COVID-19 Pandemic and the associated wide-spread school closures. This unprecedented disruption occurred almost overnight, leaving educational systems at all levels struggling to determine what schooling might look like for the remainder of the school year (Thompson et al., 2020). Students, educators, and preservice teachers were left feeling disoriented as their familiar educational environment was gone (Fagell, 2020). In-person schooling was not an option due to shelter-at-home orders, forcing school districts to scramble to determine how to approach teaching and learning (Kaden & Martin, 2020).

The school closures caused by the COVID-19 Pandemic surfaced existing technological and economic inequities among students. Educators have been aware of these disparities for many years as school funding is not equitable. Schools with the highest rates of poverty and the highest populations of students of color often receive less funding. Schools with high populations of White students often receive high rates of funding (Augenblick et al., 1997; Ladson-Billings, 2006). Researchers and educators have called for school reform to address inequities, but the system continues to increase the educational debt (Ladson-Billings, 2006).

In the Spring of 2020, the transition to remote learning meant these inequities could no longer be ignored. As schools determined how to approach remote learning with their students and faculty confined at home, inequities among students were at the center of their decision-making process (Danese et al., 2020; Laster Pirtle, 2020). As many public schools worked to provide technology such as computers and internet hotspots so their students could transition to

online learning, this was not possible for all districts. Some districts, such as rural districts, did not have the physical infrastructure in place for students to engage in online learning. Bandwidth limitations, unreliable connectivity, and a lack of high-speed internet availability were factors preventing some students from being able to engage in online learning (Hannum et al., 2009; Kaden & Martin, 2020; Muilenburg & Burge, 2005). In other districts, technology resources were lacking, limiting the availability of district hotspots and devices. In these cases, districts prepared printed materials to provide to students (Kaden & Martin, 2020; Muilenburg & Burge, 2005). School closures affected students in urban and rural schools, and it affected students from high socioeconomic families and students from low socioeconomic families. However, not all students were facing the same challenges.

As communities transitioned to remote learning, schools met the non-academic critical needs of their PK-12 students, such as nutrition, childcare, and mental health, in new ways. Food insecurity was intensified by the school closures as students on free and reduced lunch programs were not at school to receive their meals (Borkowski et al., 2021; Kinsey et al., 2020; Van Lancker & Parolin, 2020). Some schools established processes to provide food to children and families in their communities and care for young children while parents were out of the home for work (Kinsey et al., 2020; Starr, 2020). Further, the mental health of students became a concern. For some children, schools were the only places they felt safe, and school closures resulted in increased anxiety (Power et al., 2020; Van Lancker & Parolin, 2020). To address the mental health needs of PK-12 students, many teachers communicated with their students to provide a sense of connection and consistency (Delamarter & Ewart, 2020).

With educational systems in a state of upheaval due to the school closures mid-semester, teacher preparation programs were tasked with determining how to approach field experience placements for the remainder of the semester (Kaden & Martin, 2020). The research-grounded student teaching model commonly implemented by teacher preparation programs was based on experienced mentor teachers guiding preservice teachers through learning experiences in a classroom with students present (Anderson & Stillman, 2013; Thompson et al., 2020). However, these experienced mentor teachers suddenly found themselves struggling to adapt to a new, unfamiliar educational environment. They became responsible for mentoring preservice teachers on virtual platforms and with instructional techniques they might not have used before. Many were performing a job under significant stress for which they were unprepared (Delamarter & Ewart, 2020). At times, preservice teachers were more comfortable with technology-based learning environments than the mentor teachers, ultimately reversing the roles for certain segments of the teaching and learning process (Thompson et al., 2020).

As student teachers navigated their changing roles, many felt uncertain about how to proceed because the structure of their placement had changed (Kaden & Martin, 2020). Some student teachers transitioned from planning and instructing critical lessons to preparing activities lacking academic rigor (Alford, 2020). Others took on more responsibility as they were more comfortable with the online learning platforms than their mentor teachers (Thompson et al., 2020).

In addition, teacher preparation programs were navigating changing expectations and constraints regarding state-required field experience hours and certification requirements (Piccolo et al., 2020). Teacher candidates worried about the effect of the school closures on their graduation and certification (Delamarter & Ewart, 2020). Ultimately, licensure and graduation requirements in many states were modified or waived (Kaden & Martin, 2020).

Purpose of the Study

The COVID-19 Pandemic provided a lens for evaluating the components of our yearlong internship program we had not previously considered. The purpose of this study was to investigate areas for program improvement specific to needs that emerged as a result of the spring 2020 school closures for an elementary and early childhood yearlong student teaching experience, also known as yearlong internship program, at a four-year university in the Midwest. This two-semester internship program encompassed the final two semesters for early childhood and elementary education students. Students placed in this yearlong internship program were known as interns. Interns were placed in a classroom with a mentor teacher identified by the building administration and were supervised by a teacher in residence. A teacher in residence was a district teacher who also worked as per course faculty for the university and served as an on-site supervisor for interns. During the yearlong experience, interns co-taught daily while integrating university coursework into the classroom experience. There was a gradual release of responsibility for planning and instructing throughout the two semesters. Co-teaching continued throughout both semesters, ensuring scaffolding and support throughout the placement.

The co-constructed yearlong internship program was guided by a stakeholder team that met monthly. The stakeholder team consisted of representatives from all partner schools hosting interns and included teachers in residence, as well as university faculty. This team was critical in the development of the program as it was co-constructed with university faculty and partner schools and continued to inform and influence the decision-making system. The stakeholder team meetings served as the structure for systematic two-way communication and was key in building trust with the partner schools as their voices and input were a valued part of the program (Tipton & Schmitt, 2020).

In the spring of 2020interns enrolled in the internship program, internship program graduates who were currently teaching, and internship program school partners were suddenly faced with difficulties due to the COVID-19 Pandemic school closures (Thompson et al., 2020). This study examined the experience of participants and identified areas for improvement in the preparation program of preservice teachers. The research team sought to examine the effect of the COVID-19 Pandemic school closures on interns in an attempt to improve future response to sudden changes to the student teaching placement.

This study explores three research questions:

- How did the extended school closure during the COVID-19 Pandemic affect interns, internship program graduates, teachers in residence, and teachers?
- What role did technology play in the impact of extended school closure on teachers, mentor teachers, interns, and P-12 students?
- How can the yearlong internship program better prepare teacher candidates for extended school closings or other unforeseen challenges?

Methods

Research Design

Researchers employed a mixed-methods design with a two-stage data collection effort. The research team consisted of the authors of this paper who fill the roles of the Director of Academic Services from one of the partner schools and the coordinator of the internship program at the University. Data collection included a survey (see Appendix A) and three semi-structured focus group interviews (see Appendix B). Surveys were emailed to interns who had participated

in the program from 2015-2016 through 2019-2020, the first five years of program implementation, and included interns affected by the COVID-19 school closures. Three focus group interviews were conducted with mentor teachers and teachers in residence who were involved with the yearlong teacher internship program in its first five years. The research protocols were developed by the research team in order to evaluate the effect of the COVID-19 Pandemic on the yearlong internship program participants by examining multiple perspectives.

The data collection instruments were designed to elicit different information from participants. Surveys were designed to gain the perception of individuals in isolation, while focus group interviews were designed to collect experiential data through discussion and group interaction (Krueger & Casey, 2000). The focus group interviews were facilitated by one of the researchers, recorded, and transcribed for analysis.

Data were analyzed and descriptive statistics are presented based on the responses to the survey (i.e. frequencies and measures of central tendency). Focus group interviews were analyzed using a constant-comparative method in an effort to identify themes across participant responses (Krueger & Casey, 2000). The research team coded the responses by theme and tabulated the frequency of occurrence.

Participants

This study utilized a convenience sample of yearlong internship program participants (Salkind, 2005). Research participants included public school teachers involved in the implementation of the yearlong internship program, either as mentors or as teachers in residence, undergraduate students who completed the yearlong internship experience, known as interns, during the 2019-2020 school year, and graduates of the program from 2015-2016 through 2018-2019 academic years. The 12 elementary partner schools were located within a 20-mile radius of the main campus or in an off-campus urban region 200 miles from the main university campus. Overall, a total of 51 interns and 11 mentor teachers and teachers in residence participated (N=62), representing the first five years of implementation of the yearlong internship program focused on elementary and early childhood certification.

Research participants were individuals who held a variety of roles in the yearlong internship program, including teachers in residence, mentor teachers, and interns. Teachers in residence were school district employees who also served as university per course faculty and acted as university supervisors for the interns. Teachers in residence maintained their district teaching position in a classroom or instructional coaching position while also supervising a cohort of interns. A teacher in residence was carefully selected for each school by the principal in collaboration with the university. Teachers in residence served on an internship program stakeholder team, meeting monthly with university faculty to develop and guide decisions of the program. Teachers in residence also provided support to interns onsite in the partner schools integrating coursework, providing professional development, conducting teacher observations, and providing feedback. Teachers in residence guided interns through reflective practices regularly throughout the internship program year.

Mentor teachers were school district employees teaching in an elementary or early childhood classroom. Mentor teachers each supported one intern in their classroom by co-teaching daily with the intern. Mentor teachers guided interns through lesson planning, building relationships, collaborative work, instruction, classroom management, data collection and analysis, and all other aspects of teaching. Mentor teachers were identified by principals and teachers in residence as teachers who were strong communicators, had an interest in preparing

preservice teachers, implemented research-based strategies in their classrooms, and were open to interns taking risks, trying new strategies, and growing in their classrooms.

All graduate participants were teaching during the Spring 2020 semester and experienced the effects of the COVID-19 Pandemic firsthand. As participants in this research, they were able to give an experienced perspective for our program evaluation. The intention of the research team was program improvement, so the input of graduates currently in the workforce included real-world application of the program's preparation of students. Additionally, they were teaching independently during the spring semester of 2020, meaning they were dealing with the difficulties of the school closures and pandemic personally in their own classrooms.

Table 1
Yearlong internship program graduate survey respondents sorted by participation year

Participation year	n
2015-2016	8
2016-2017	9
2017-2018	7
2018-2019	19
2019-2020	8

In May 2020 surveys were sent by email to 153 of the 168 internship graduates of the undergraduate program who participated in one of the first five years of the program. Emails were sent to all graduates for whom the program had working email addresses. The program was unable to send survey questionnaires to 15 graduates due to invalid email addresses. Fifty-one graduates of the internship program responded to the survey resulting in a response rate of 33%.

In addition to surveys, focus group interviews were conducted in May 2020 with teachers in residence and mentor teachers from partner schools in both regions of the state. Eleven mentor teachers and teachers in residence participated in focus group interviews. Eight of the participants were from the original region near the campus, and three were from the urban region away from the campus. Seven participants had served only in the mentor teacher or teacher in residence role, and four participants had served in both roles. In total, 62 people participated in the study.

Setting
This study was conducted at the conclusion of the Spring 2020 semester during the COVID-19 Pandemic that caused unprecedented school closures and impacted teacher preparation. In March of 2020, educators throughout the state were surprised by the sudden school closure. All partner schools in the internship program prepared for spring break assuming they would be face-to-face with their students after the scheduled week-long break. Interns were in the eighth month of co-teaching with their mentor teacher as they said goodbye to their students and classrooms for what would ultimately be much longer than the scheduled week.

Students would not return to school at all that school year. In some instances, it would be months into the following school year before students would return to their schools.

During the week of spring break for the internship program, the COVID-19 virus reached the state resulting in the waiving of clinical placement requirements and certification requirements for teacher candidates, school closures throughout the state, and a shift to remote learning for educators and students throughout the state. During this time, information changed rapidly, and uncertainty was common. Because the governor waived clinical placement requirements for teacher candidates and the State Department of Education waived certification requirements, current interns had the option to immediately conclude their internship or to continue as schools shifted to remote learning (Saenz-Armstrong, 2020). All interns in the program chose to continue their internship knowing their role would be changing as schools navigated uncharted waters.

Findings

Quantitative

The data in Table 2 were collected from interns participating in the yearlong internship program from 2015-2020. Eight respondents were concluding their internship program year, while the other 46 respondents were in their first through fourth years of teaching. These questions pertained to the effect of the yearlong internship program preparation on their confidence during the extended school closures in the Spring 2020 semester.

Table 2
Areas of Perceived Confidence during COVID-19 Pandemic

	M	sd	n
Continued connection to students and families	3.4	0.88	52
Academic supports for students	3.16	0.85	51
Collaboration with colleagues	3.45	0.8	51

Participants rated their preparation on a Likert scale of 1-4 with 1 indicating "Not at all," 2 indicating "Somewhat, 3 indicating "Adequately," and 4 indicating "Extensively." Participants were also given the option of "I don't know" if they were unsure of their response. Interns and program graduates in schools during the COVID 19 Pandemic responded that collaboration with colleagues and continued connection to students and families were the areas in which they felt

most confident during the Covid-19 Pandemic and related school closures. Additionally, the mean response regarding providing academic supports to students was 3.16, indicating students felt slightly more than adequately prepared in this area. It should be noted that one participant responded to the first question twice, resulting in a higher number of responses than the other items.

Qualitative

Data in Table 3 were collected from interns participating in the yearlong internship program from 2015-2020. Eight of the respondents concluded their internship program year in the spring of 2020, while the other 46 respondents were in their first, second, third, or fourth years of teaching. The researcher manually coded and themed the responses using a constant comparative method (Hewitt-Taylor, 2001; Salkind, 2005). The themes were tabulated for frequency.

Table 3
Areas for program improvement for extenuating circumstances

Theme	Frequency	N
Technology	30	51
Communication	12	51
Clear expectations	4	51

Technology

When considering what could be included in the yearlong internship program to better prepare for extenuating circumstances such as school closures, the theme that overwhelmingly surfaced was technology. As instruction largely shifted to technology platforms, teachers were learning online video conferencing platforms such as Zoom or Google Meets while also working to support student engagement in an online setting. They were creating virtual classrooms and relying on communication programs such as SeeSaw as their primary platform for communication with students. Some teachers relied on Google Classroom or Canvas for communication. Rather than using technology as an instructional tool, technology became necessary for every aspect of teaching. Communication, management, instruction delivery, student engagement, and personal connection were all dependent on technology. Teachers and students used technology in ways they had not used it before. One research participant expressed that she used technology for collaboration as well as instruction, noting she was not prepared for the complete shift to the digital educational world. Many respondents mentioned they created online classrooms and the time it took to create online lessons. One participant stated she had experience with Google Classroom at the high school level when she was a student but implementing it as a teacher at the elementary level was completely different.

In contrast, some teachers struggled with the lack of technology resources. One mentor teacher noted students in grades K-2 at her school did not have technology devices at home. Another mentor teacher noted that while her classroom had access to technology, the technology

was often unusable because it lacked current updates. She felt unprepared to begin teaching using Google Classroom when her school closed.

Communication

The second most common theme that occurred was communication. Communication was a struggle in rural districts that lacked internet infrastructure and technology resources. One mentor teacher said,

> The biggest impact of the COVID-19 school closure was trying to stay connected with my students. I work at a small rural school district where not everyone has internet access. I think it would benefit future interns to be able to learn strategies that they could use to stay connected with students using both technology and also non-technology options.

Maintaining parent relationships was the focus of another mentor teacher who expressed the need for strategies to engage reluctant parents in communication.

Clear Expectations

The third theme that emerged was the need for clear expectations. Respondents noted the sudden nature of the closures and the uncertainty surrounding the situations made it difficult to navigate their role without clear expectations as responses to school closures differed drastically from school to school. One teacher in residence suggested having established expectations for all interns to maintain, understanding that each situation was quite different for each intern. This respondent noted that it was impossible to plan for the Spring 2020 closures, but having experienced it, this might be valuable for future emergency situations. Another teacher in residence noted the differences from school to school and noted there needs to be individualization in the expectations and support for each intern.

Data in Table 4 were collected through focus group interviews with mentor teachers and teachers in residence who participated in the yearlong internship program in its first five years of implementation. Four themes occurred: support role, relationships, uncertainty, and changes in priorities.

Table 4
COVID-19 Pandemic Impact on Interns' Roles

Theme	Frequency	N
Support Role	30	11
Relationships	11	11
Uncertainty	6	11
Change in mentor teacher priorities	4	11

Support

When evaluating how the COVID-19 Pandemic and resulting school closures affected the role of interns, the theme that emerged most notably was that interns took on more of a support

role than that of a co-teacher. Although interns had been co-teaching in this classroom for eight months, the shift to remote learning resulted in their primary duties being that of a supporter rather than a co-teacher. Many interns reported they worked on SeeSaw, Class Dojo, or other non-instructional online platforms, recorded read alouds to post online, or created non-essential activities to give students a chance to interact with each other online. They attended meetings but did not play an active role in the collaborative planning process with team members. Interns distributed food, school supplies, and technology devices to students. While the majority of interns maintained high levels of motivation and initiative, others were greatly impacted by the additional stress of COVID-19 in their personal lives, resulting in the need to pull back from responsibilities. One intern's fiancé was suddenly deployed, resulting in a quick marriage immediately before he left. Another was preparing to move to another state and was struggling with family pressures at home.

Relationships

The next theme that appeared when studying changes to the interns' role was relationships. One mentor teacher stated, "In the beginning, the governor says everybody passes. Nobody has to do anything. Then, the intern – mentor teacher relationship came into play. The interns felt ownership. They didn't want to be done." Because the governor had waived the field placement requirement, interns did not have to finish their year. They could have ended their internship immediately in March. However, they were connected with their students, mentor teachers, and schools. One teacher in residence said,

> We had two interns come back in person to help deliver school supplies to cars. They wanted to be there in person to do those things. They said goodbye to the kids. Several parents posted pictures of their child, MT and intern from the car. They wanted to maintain those relationships.

Another teacher in residence said, "One of our interns drove back three hours to the school supply pick up at the end of the year. She wanted to give her kids a book and have closure with the students. This was her class, too."

Uncertainty

Uncertainty was another theme that emerged from the responses of the participants. Mentor teachers were uncertain about what was expected of them and how they were going to achieve it. Mentor teachers went from face-to-face teaching immediately into remote learning, either through digital or paper formats. One mentor teacher said, "It was a wonky feeling. I didn't know how to help my intern. Everyone had a unique situation. It was very challenging, and I didn't know what to tell her at times."

Mentor Teachers' Priorities

The final theme that appeared when evaluating how the intern's role changed was a change in mentor teacher priorities. One teacher in residence explained it this way,

> Our mentor teachers were all of the sudden completely digital. Mentor teachers had an extreme sense of not knowing what they were doing. It made it difficult to communicate with the interns because they had this massive thing put on their plates. Interns were moved to the back burner because the mentor teacher had to figure out their expectations and how to do it.

A mentor teacher commented, "There was pressure on the mentor teacher to get it right, and I didn't want my intern to feel that stress, too."

Data in Table 5 were collected through focus group interviews with mentor teachers and teachers in residence who participated in the yearlong internship program in its first five years of implementation. Two clear themes appeared as districts responded to student needs with technology or non-technology resources.

Table 5
District responses to student needs

Theme	Frequency	N
Technology resources	17	11
Non-technology resources	7	11

When investigating how districts met the needs of their students, the theme that emerged most frequently was through technology resources. Many districts identified student technology needs and provided necessary devices to meet these needs. Chromebooks were provided for students to use at home. Internet hotspots were provided for families lacking adequate internet. Some districts partnered with internet providers who offered increased data usage to students who received free or reduced lunch. Work packets were provided online, and online platforms were used to interact, instruct, connect, communicate, and engage.

Along with technology resources came some difficulties in their usage. Participants indicated hotspots and Chromebooks were unreliable at times. Some students never joined their class online. Video conferencing was also a challenge with children. Students in the class were able to see and hear what happened in the background in their peers' homes. One mentor teacher said,

> We never knew what kids were going to say or show us. Students think of their computer like a one-way tv rather than a two-way camera broadcasting what we could see and hear to all other meeting participants. We had to remind them we could see the background and hear what was being said.

In other districts, technology resources were not an option. Non-technology resources were also mentioned, largely from rural districts lacking internet infrastructure or funding. One teacher in residence said,

> Our district is smaller and rural so our internet is spotty – sometimes even at the school. Hotspots were not an option for us. Accessibility isn't here yet. Even in town it isn't great. We created packets weekly and families could access them online at home, or they could pick them up. Parents had too much on their plates, so we tried to keep stress on parents at a minimum by keeping a consistent format, content that was reviewed, and materials they would have access to.

Further highlighting the inequities in technology and resources, a teacher in residence from another district said,

> Our interns did not see online learning. My district wanted to make the most equitable choice for our elementary student population. Our students don't have take-home

devices. Through the end of March and all of April, our responsibility as teachers was to love our students well and make sure they were safe and had meals.

Conclusions

The extended school closure due to the COVID-19 Pandemic changed the educational environment for interns enrolled in the internship program, internship program graduates who were teaching, and teachers in partner schools. Educators could no longer go to school and teach their children. They could not simply employ the instructional strategies with which they were experienced, but rather they had to convert to online teaching if they were to engage in instruction at all. Teachers could not simply speak to a student when needed but were required to navigate communication methods through the computer or phone. Partnering with parents was a challenge as parents were also faced with immense changes and high levels of stress. In spite of these difficulties, interns and program graduates felt prepared to collaborate with colleagues and remain connected with students and families.

As a result of these changes for schools, the role of interns changed significantly. Interns moved from co-teachers to a support role. They were no longer engaging in essential lesson design, collaboration, instruction, and assessment. Rather, interns were commenting on student work via social platforms, observing meetings, and preparing non-essential activities designed to help students feel connected to each other. Some interns did not engage with students instructionally at all. They provided food and a sense of connection through methods that did not use technology such as phone calls. Interns and program graduates stated they would have benefitted from better preparation in using technology to teach remotely and as a means of communication.

The responses of partner schools to the extended school closure due to the COVID-19 Pandemic were diverse due to technology and resource inequities. In districts with strong infrastructure and technology resources, technology was used to connect with students and provide instruction. By stark contrast, other districts focused on providing food and checking on the mental well-being of their students.

Given the lived experiences during the onset of the COVID-19 Pandemic in the spring of 2020, the yearlong internship program can better prepare teacher candidates for extended school closings and other dramatic changes by being more intentional about the use of technology for and in instruction. A deliberate plan for two-way communication and individualized support for participants is necessary. Moreover, flexibility is mandatory as participants are likely to be in a wide variety of situations.

Implications

Implications for Research

The most effective way to prepare preservice teachers for an elementary online learning environment is not well-established. Additional research is needed to ensure teachers can achieve adequate active student engagement of elementary students through online platforms. Additionally, research is needed to determine how teachers can assess elementary students effectively, and how they should provide responsive instruction.

In addition to this, future research should investigate what effect a shift to online learning might have on the mental, social, and emotional development of elementary students. In addition to decreased social interaction, resource scarcity can have a negative impact on the mental health

of children (Van Lancker & Parolin, 2020). As schools fulfill needs for students beyond academics, further research might explore how a shift by some students to online learning might affect the feasibility for schools to provide nutrition, dental health, health services, and intervention supports for under-resourced families when students are not on campus.

Implications for Practice

When considering the significance of the changes schools encountered almost overnight, it is understandable responses were varied resulting in varied experiences for interns. The responses of partner schools ranged on a continuum from prioritizing only the health and mental well-being of students and families at one end to having all students provided with devices and internet access so they could participate in synchronous, daily online learning at the other end. Moreover, partner schools were scattered throughout the continuum between these two extremes. As the purpose of this study was for program improvement, it is important to note when a program such as the yearlong internship program faces momentous, sudden changes and diverse responses, it is necessary to be flexible with expectations and abundant with communication. It is not reasonable to expect all program participants to have similar experiences in the face of so much sudden change and uncertainty. A one size fits all approach is not reasonable in such a severe situation. However, a deliberate approach to communication and support are reasonable and necessary. A system for ongoing two-way communication with participants, both interns and school partners, is critical. The current situation for each participant needs to be considered, and a tailored approach to support participants should be developed and implemented.

When partner schools, mentor teachers, and teachers in residence are grappling with how to meet the needs of students and prepare instruction for the day, the energy typically dedicated to co-teaching, supporting, and guiding interns is directed to the students in the class. This results in a change of role for the intern. Not every mentor teacher will have the extra time or capacity to continue to support interns in co-teaching during dramatic changes to the educational environment. In this event, interns must accept their change in role. Their new role should be to actively engage in learning through the situation. Interns must be proactive about noting the process in which their mentor teachers and teachers in residence are engaging. They should note the priorities established and the non-negotiables. They should identify the critical thinking process that is occurring as these experienced educators adapt to the changes. It is unknown if these interns will face another global pandemic in their education career, but it is certain they will face significant changes to education. Interns will face conditions when they must establish priorities and non-negotiables. They will face circumstances where they need to think critically as they adapt to changes around them. In the future, interns may or may not face the same challenge educators faced in the spring of 2020, but they will face challenges that require the skills they witnessed in the spring of 2020.

This research is consistent with previous accounts of inequities of technology and resources, magnifying these inequities in light of the extended school closures due to the COVID-19 Pandemic (Delamarter & Ewart, 2020; Kaden & Martin, 2020; Ladson-Billings, 2006; Van Lancker & Parolin, 2020). The widespread shelter at home orders brought on by the COVID-19 Pandemic rushed schools in the state onto an online platform for learning. However, researchers feel it is likely this online platform will continue to be a part of education moving forward, even when the nation moves past the pandemic (Kaden & Martin, 2020). The inequities in internet infrastructure and technology availability are an issue that must be addressed. Further, teacher preparation programs must increase their technology integration in order to prepare

preservice teachers to be ready for an elementary online learning environment complete with active student engagement, assessment, responsive instruction, and effective communication.

Implications for Policy

Inequities in internet access not only have implications for educators but also for policy makers. Resource and funding inequity is not a new issue (Adamson & Darling-Hammond, 2012; Augenblic et al., 1997; Ladson-Billings, 2006), but the COVID-19 Pandemic has shined a spotlight on it. Students in the state are measured against the same standard, but they are not all working with the same opportunities and resources. In this study, one district did not instruct students during the second half of March through May 2020. Another district provided all students with hotspots and devices and provided instruction every day of the closure. The educational experiences of these sets of students are vastly different, but the students will be evaluated using the same assessment.

As the internet becomes increasingly necessary for education, policy makers should examine the systems in place for providing this service. Policy makers should look for ways to make reliable, high-speed internet access a public utility available to all homes. Equity should be a top priority as the infrastructure and price for the internet as a utility are established. All students should have equitable opportunities to engage in educational experiences through technology.

References

Alford, K. (2020). Not quite the end of the world: Two student teachers grappling with COVID-19. *Writing Teacher Education in Extraordinary Times, 9*(4), 1-5.

Ambrosetti, A. (2014). Are you ready to be a mentor? Preparing teachers for mentoring preservice teachers. *Australian Journal of Teacher Education*, 39(6), 30-42. https://doi.org/ 10.14221/ajte.2014v39n6.2

Anderson, L. M., & Stillman, J. A. (2013). Student teaching's contribution to preservice teacher development: A review of research focused on the preparation of teachers for urban and high-needs contexts. *Review of Educational Research, 83*(1), 3-69. https://doi.org/10.3102/0034654312468619

Augenblick, J., Myers, J., & Anderson, A. (1997). Equity and adequacy in school funding. *The Future of Children, 7*(3), 63-78. https://doi.org/10.2307/1602446

Borkowski, A., Ortiz Correa, J., Bundy, D., Burbano, C., Hayashi, C., Lloyd-Evans, E., Neitzel, J., & Reuge, N. (2021). COVID-19: Missing more than a classroom. The impact of school closures on children's nutrition. *Innocenti Working Papers*, UNICEF Office of Research. https://www.unicef-irc.org/publications/1176-covid-19-missing-more-than-a-classroom-the-impact-of-school-closures-on-childrens-nutrition.html

Cornbleth, C., & Ellsworth, J. (1994). Teachers in teacher education: Clinical faculty roles and relationships. *American Educational Research Journal, 31(1)*, 49-70. https://doi.org/10.3102/00028312031001049

Danese, A., Smith, P., Chitsabesan, P., & Dubicka, B. (2020). Child and adolescent mental health amidst emergencies and disasters. *The British Journal of Psychiatry*, 216(3), 159-162. https://doi.org/10.1192/bjp.2019.244

Delamarter, J., & Ewart, M. (2020). Responding to student teachers' fears: How we're adjusting during the COVID-19 shutdowns. *Northwest Journal of Teacher Education*, *15*(1), 1-10. https://doi.org/10.15760/nwjte.2020.15.1.3

Fagell, P. L. (2020). Career confidential: Teacher wonders how to help students during coronavirus shutdown. *Phi Delta Kappan*, *101*(8), 67–68. https://doi.org/10.1177/0031721720923799

Gurvitch, R., & Metzler, M. W. (2009). The effects of laboratory-based and field-based practicum experience on pre-service teachers' self-efficacy. *Teaching and Teacher Education*, *25*(3), 437-443. https://doi.org/10.1016/j.tate.2008.08.006

Hannum, W., Irvin, M., Banks, J., & Farmer, T. (2009). Distance education use in rural schools. *Journal of Research in Rural Education, 24*(3), 1-15.

Hewitt-Taylor, J., (2001). Use of constant comparative analysis in qualitative research. *Nursing Standard, 15*(42), 39-42. https://doi.org/10.7748/ns2001.07.15.42.39.c3052

Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? *PRE Research Reports.* https://repository.upenn.edu/cpre_researchreports/78

Kaden, U. & Martin, K. (2020). COVID-19 school closure experiences in rural Alaska and reimagining the roles of education and teachers. *Northwest Journal of Teacher Education, 15*(2), 1-11. https://doi.org/10.15760/nwjte.2020.15.2.11

Kinsey, E., Hecht, A., Dunn, C., Levi, R., Read, M., Smith, C., Niesen, P., Seligman, H., & Hager, E. (2020). School closures during COVID-19: Opportunities for innovation in meal service. *American Journal of Public Health, 110*(11), 1635-1643. https://doi.org/10.2105/AJPH.2020.305875

Knight, S., Lloyd, G., Arbaugh, F., Gamson, D., McDonald, S., Nolan Jr., J., & Whitney, A. (2015). School-based teacher learning. *Journal of Teacher Education, 66*(4), 301-303. https://doi.org/10.1177/0022487115596828

Krueger, R., & Casey, M. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Sage Publications.

Ladson-Billings, G. (2006). From achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher, 35*(7), 3-12. https://doi.org/10.3102/0013189X035007003

Laster Pirtle, W. N. (2020). Racial capitalism: A fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States. *Health Education & Behavior*, *47*(4), 504-508. https://doi.org/10.1177/1090198120922942

Leeferink, H., Koopman, M., Beijaard, D., & Ketelaar, E. (2015). Unraveling the complexity of student teachers' learning in and from the workplace. *Journal of Teacher Education, 66*(4)*,* 334-348. https://doi.org/10.1177/0022487115592163

Muilenburg, L., & Berge, Z. (2005). Student barriers to online learning: A factor analytic study. *Distance Education, 26*(1), 29-48. https://doi.org/10.1080/01587910500081269

Piccolo, D., Tipton, S., & Livers, S. D. (2020). Transitioning to online student teaching. In R. E. Ferdig, E. Baumgartner, E. R. Hartshorne, R. Kaplan-Rakowski, & C. Mouza (Eds.). *Teaching, technology, and teacher education during the COVID-19 Pandemic: Stories from the field* (pp. 297-301). Association for the Advancement of Computing in Education (AACE). https://www.learntechlib.org/p/216903/

Power, E., Hughes, S., Cotter, D., & Cannon, M. (2020) Youth mental health in the time of COVID-19. *Irish Journal of Psychological Medicine, 37(*4), 301-305. https://doi.org/10.1017/ipm.2020.84

Ronfeldt, M., Schwartz, N., & Jacob, B. (2014). Does pre-service preparation matter? Examining an old question in new ways. *Teachers College Record, 116*(10), 1-46. https://eric.ed.gov/?id=EJ1033556

Ronfeldt, M. (2015). Field placement schools and instructional effectiveness. *Journal of Teacher Education, 66*(4), 304-320. https://doi.org/10.1177/0022487115592463

Sadler, T. D., & Klosterman, M. L. (2009). Transitioning from student teacher to teaching professional: Evolving perspectives of beginning science teachers [Unpublished manuscript]. School of Teaching & Learning, University of Florida. https://files.eric.ed.gov/fulltext/ED506764.pdf

Saenz-Armstrong, P. (2020, April 16). Student teaching and initial licensure in the times of coronavirus. *National Council on Teacher Quality*. https://www.nctq.org/blog/Student-teaching-and-initial-licensure-in-the-times-of-coronavirus

Salkind, N. (2005). *Exploring research* (6th ed.). Pearson College Division.

Starr, J. P. (2020). On leadership: Responding to COVID-19: Short- and long-term challenges. *Phi Delta Kappan*, *101*(8), 60–61. https://doi.org/10.1177/0031721720923796

Thompson, A., Darwich, L., & Bartlett, L. (2020). Not remotely familiar: How COVID-19 is reshaping teachers' work and the implications for teacher education. *Northwest Journal of Teacher Education*, *15(*2), 1-10. https://doi.org/10.15760/nwjte.2020.15.2.2

Tipton, S., & Schmitt, V. (2020). *Missouri State University Internship Academy graduate follow-up study* [policy brief]. Missouri State University.

Van Lancker, W., & Parolin, Z. (2020). COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet. 5*(5), e243– e244. https://doi.org/10.1016/S2468-2667(20)30084-0

Whipp, J., & Geronime, L. (2015). Experiences that predict early career teacher commitment to and retention in high-poverty urban schools. *Urban Education, 52*(7), 799-828. https://doi.org/10.1177/0042085915574531

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Appendix A

Missouri State Teacher Internship Academy: Measure of Preparation as Perceived by Interns

What year did you participate in the Internship Academy?
- 2015-2016
- 2016-2017
- 2017-2018
- 2018-2019
- 2019-2020

The following questions pertain to the extended school closure in the spring of 2020 due to the COVID-19 Pandemic.

I believe my participation in the Missouri State Teacher Internship Academy prepared me to remain confident during 2020 state-wide school closures in the following ways...

	1 - Not at all	2 - Somewhat	3 - Adequately	4 - Extensively	I don't know.
Continued connection to students and families	●	●	1)	●	●
Academic support for students	●	●	●	●	●
Collaboration with colleagues	●	●	●	●	●

Given your experience with the COVID-19 Pandemic, what could be included in the Internship Academy better prepare for extenuating circumstances such as lengthy school closures?

Appendix B

Missouri State Teacher Internship Academy
Focus Group Interview Protocol

Date of Interview:

Location:

Number of Participants: _____ Total

Participant Profile: (Narrative describing participant group, per completed forms)

Part 1 Introduction
(Script)
Thank you for attending this focus group and giving me the opportunity to talk with you about the Missouri State Teacher Internship Academy you have participated in this school year. Before we begin, I would like to take a few minutes to introduce myself and members of our research and evaluation team. (Introductions)

The purpose of this particular focus group is to collect information regarding your perceptions of the Missouri State Teacher Internship Academy, and its impact on the preparation of interns. Your participation is important to help us determine the impact the Missouri State Teacher Internship Academy is having on teacher preparation.

A focus group is a data collection method that allows for group interaction in an interview format. This method is preferred over individual interviews when the intent is to encourage discussion and exchange of ideas. Therefore, I want you to respond not only to the questions I pose but also to what others say in the group. My job as the facilitator is to "focus" the group on the task at hand, to provide a few questions for your consideration, and to collect the essence of our discussion by recording the information.

Our discussion will last no more than 45 minutes. It will be recorded, and I will be taking field notes throughout our discussion.

All comments are confidential, and no one will be identified by name. If at some point you would like for us to turn the recording off, we will do so. By agreeing to participate, you are giving your consent for your responses to be included as a part of this study. Do you have any questions before we begin? (*If no questions, proceed to leading questions.)*

Part 2 Leading Questions

1. How did you become aware of the Internship Academy being offered through Missouri State University?

2. What are some strengths of the yearlong internship approach as implemented by the Internship Academy this school year?

3. What are some challenges of the yearlong internship approach as implemented by the Internship Academy this school year?

4. How has the Internship Academy affected you or your interns in regards to being prepared in the area of:

a.   the beginning of the school year

b.   building relationships in the classroom

c.   classroom management

d.   lesson design

e.   high quality instruction

f.   student differentiation

g.   encouraging critical thinking in students

h.   student engagement

i.   formative and summative assessments

2.   What are the best and worst parts of the yearlong internship approach?

3.   Based on your experiences this year, how can the Missouri State Teacher Internship Academy be improved going forward?

4.   Is there anything else you would like to share regarding the internship program?

Impact of COVID-19 School Closure

1. How has the role of the intern changed during the extended school closure?

2. What impact do you believe the "timing" of this school closure will have on students moving forward? What is your level of confidence in meeting student needs moving forward?

3. What approach has your district taken to assist students during the closure? How did your district arrive at this decision?

4. What inequities in technology exist in your district? How do these inequities impact planning for "learning from home" strategies?

5. What steps has your district taken to plan for learning gaps during the next school year?

6. Will summer school options help address these learning gaps?