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# Field experiences for pre-service teachers post-COVID-19: structures required to support mental health

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This study investigates a supplemental field experience taking place on a university campus in the summer of 2021. The program includes linguistically, culturally, and socioeconomically marginalized children performing below grade level in reading. Pre-service teachers (PSTs) work with the children for 4weeks, focusing on science-based literacy instruction. The initial findings of this case study were that lesson planning, teacher dispositions, and willingness to accept feedback are critical for PSTs. Additionally, a major concern in the findings is the increased evidence of mental health concerns for the children and PSTs. The findings indicate a need for focused training on social–emotional learning with special care relating to stressors caused by COVID-19. There must also be additional training for PSTs on explicit and detailed lesson plans, adjusting their dispositions, and science-based literacy instruction taught in literacy blocks.

#### KEYWORDS

pre-service teaching, COVID-19, mental health, elementary schools, field experiences

# 1. Introduction

In teacher education, the types of field experiences offered across the United States vary widely (Sorensen, 2014). Experiences range from "sit and get" models of learning for preservice teachers to Professional Development Schools where partnerships and communities of practice are formed (Braden et al., 2019; Mulvihill and Martin, 2020; Jakopovic and Gomez-Johnson, 2021). Most studies indicate that a combination of approaches works best for training preservice teachers (Darling-Hammond, 2015; Sleeter, 2018). Therefore, a classroom-based field experience combined with several supplemental field experiences would be a powerful combination for training preservice teachers (Sleeter, 2018). A supplemental field experience is typically not conducted in a school or classroom, but instead takes place in a community-based setting (Sleeter, 2018; Jakopovic and Gomez-Johnson, 2021).

Field experiences are key in developing PST's knowledge about students and teaching in general. The utilization of a supplemental field experience on a college campus, allowing children to attend a campus-based summer program, was ideal (Afterschool Alliance and Edge Research, 2021). A supplemental field experience allows a PST to work with children outside of the typical parameters of clinical teaching experiences (Sorensen, 2014; Sleeter, 2018). Supplemental field experiences have been cited frequently in the literature as powerful community engagement (Sleeter, 2018). In teacher education, field experiences are often noted as the most critical and impactful component of the program of study (Sorensen, 2014; Darling-Hammond, 2015).

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Further, supplemental field experiences are critically important for preservice teachers from minoritized backgrounds (Ladson-Billings, 2021a). Studies indicate that PSTs of color are racially marginalized throughout their programs (Kohli and Pizarro, 2016; Kohli, 2019) and eventually leave teaching at a higher rate than White teachers (Ingersoll and May, 2011; Casey et al., 2015).

The summer of 2021 was a unique time for field experiences in education. Following COVID-19, many undergraduate students had limited experience in the field. Additionally, families were eager to allow children to participate in summer programs given the loosened COVID-19 guidelines (Afterschool Alliance and Edge Research, 2021). Families also began to see areas where their children were experiencing learning gaps. During these summer programs, some children were engaged in person for the first time in many months, and many preservice teachers were entering a classroom setting in person for the first time. In this study, preservice teachers (PSTs) were experiencing teaching live for the first time. This study took place on a college campus during the summer of 2021 and investigated the evidencebased teaching strategies utilized by the PSTs and their lesson planning.

# 2. Review of literature

#### 2.1. Field experiences

Field experiences in teacher education play a pivotal role in the development of pre-service teachers, particularly as it relates to teaching students from culturally and linguistically diverse backgrounds (Zeichner, 2010; Maddamsetti, 2020). Field experiences typically begin with more supervised models. As students progress through their programs, they typically require the student to take on more responsibility. Well-planned field experiences are key in teacher preparation programs (Lacina and Block, 2011). This study utilized two specific field experience models-sequential teaching and station teaching (Simons et al., 2020). In sequential teaching, activities to be completed by students are divided among the teachers, and each teacher is responsible for a different phase of the lesson (Simons et al., 2020). In station teaching, the activities are again divided, however, each peer is responsible for teaching a specific activity to a smaller group of students at a station or center (Simons et al., 2020). Typically, in station teaching, groups rotate between stations or centers. There are positive results noted in the literature for each of these models. Some of these benefits include increased engagement, a smaller studentteacher ratio, the potential for differentiated instruction, and ease of classroom management (Bacharach et al., 2010; Simons et al., 2020).

## 2.2. Lesson planning

The instructional decisions that teachers make are considered one of the most important roles of teaching (Jones et al., 2011) Therefore, learning to plan lessons is of less consequence than adapting lessons to the needs of students. This is a challenging concept to teach college education majors. During COVID-19, this was particularly challenging due to the compromised mental health of college students. "The overall wellness of college students can significantly depend on how that college student uses coping strategies to alleviate stress" (Turner, 2021, p. 3). In this study, the college students and the children were all from culturally and socioeconomically marginalized communities. Those students "experience greater levels of stress than their more affluent White counterparts" (Turner, 2021, p. 3). Therefore, the college students in this study were living with their culturalized stress, stress from COVID, and stress from learning to teach while also taking on the stress of the elementary children that they were working. One way to minimize stress in field experiences is a team-teaching approach, particularly in planning and implementing lessons (Bacharach et al., 2010; Simons et al., 2020).

While research continues to indicate there is no one answer to teach literacy (Literacy Research Association, 2021; Semingston and Kerns, 2021), "research raises further questions about the specific needs of... struggling readers representing marginalized groups" (Smith, 2019, p. 2). What training do preservice teachers need, then, to prepare evidence-based literacy-focused lesson plans? Warren (2014) suggests that preparing preservice teachers to design those plans-with all children in mind-depends upon more than training. Warren insists that "culturally diverse students deserve teachers who understand and appreciate their home lives and personal experiences" (p. 399). Further, Warren suggests that to be culturally relevant, teacher educators must develop empathy in preservice teachers. This is critical to assist "teachers... to successfully close 'perception gaps" (Warren, 2014, p. 399). Therefore, the suggestion is that preservice teachers must be culturally relevant before planning lessons and with students in mind at all stages of planning. This is aligned with many other experts in culturally relevant pedagogy (Paris, 2012; Sleeter, 2018; Ladson-Billings, 2021a,b).

# 2.3. Teacher dispositions and their usage in education

Teacher disposition instruments are tools that can be used to document observable teacher behaviors (Katz and Raths, 1985; Burant et al., 2007; Nielsen, 2015). One of the first studies to document teacher dispositions referred to teacher dispositions as "summaries of act frequencies" or "trends in behavior" (Katz and Raths, 1985, p. 301). Dispositions refer to what is observable. The use of dispositions became more prevalent during the 1990s when the Interstate New Teacher Assessment Support Consortium (INTASC) added the term to the teacher preparation standards (Villegas, 2007). That growing movement highlighted the need for tools that would measure these trends in behavior. The use of disposition instruments has "create[d] ample opportunities early in the program for candidates to examine critically their taken-for-granted beliefs about classroom actions" (Villegas, 2007, p. 374). Disposition instruments are now a crucial way to understand teacher beliefs and how those beliefs impact actions in classrooms. More recent research has focused on the use of dispositions to learn about the attitudes of teachers toward teaching all students equitably (Kerr and Andreotti, 2019).

# 3. Methods

The researchers selected the supplemental field experience occurring in the summer months on a university campus as the site of the study; it is a bounded system, and all actions of the participants and researchers occur within that system (Stake, 1995). The focus of this research is to investigate how preservice teachers utilized data to make instructional decisions. Additionally, based upon initial observations and discrepancies in lesson plans, issues of teacher dispositions, particularly the willingness to take feedback and adjust instruction, became of particular importance.

#### 3.1. Background and context of the study

This study investigates a supplemental field experience. This is an innovative approach where children in the community receiving free or reduced-priced lunch and performing below grade level in reading attend a summer program for 4 weeks on a university campus. Most of the children are from linguistically marginalized communities and all of the children are socioeconomically marginalized. During the program, PSTs work as a team with faculty and each other to design and implement a literacy-based summer camp. The data for the summer of 2021 included lesson plans utilized by each team of teachers. Utilizing lesson plans and observations to determine the evidencebased practices of the PSTs has been done in many studies (Cochran-Smith and Villegas, 2016; Stigler and Miller, 2018; Konig et al., 2020). By analyzing the lesson plans and researcher observations, it was clear that the supplemental field experience was a site for development in multiple areas. The preservice teachers ranged in ability from beginning (novice) at planning and community engagement to expert. Therefore, a comparative method of analysis was utilized to highlight the strengths and weaknesses evident in the data.

For the past seven summers, starting in 2015 the authors have conducted a summer literacy program on a university campus designed to serve students who qualify for free or reduced lunch and who are reading below grade level. These students are partnered with pre-service teachers (tutors) who are also from marginalized communities; in 2021 all tutors were students of color. The purpose of the program is to mitigate what has been termed as the summer slide or summer learning loss (Allington and McGill-Franzen, 2018). In 2021, the summer slide was compounded by "COVID slide" (Kuhfield and Tarasawa, 2020). For this summer program, students are invited to come to campus for 4 weeks in the summer. Preservice teachers served as lead teachers and tutors who work in small groups with the students. Preservice teachers are paid through America Reads funding, a federal work-study program that was established to have college students work with students in the areas of literacy (Edmondson, 2000). This indicates that all tutors were also from socioeconomically marginalized backgrounds.

During the summer of 2021, the researchers partnered with a local school district for this summer program. Partnering with a school district provided several benefits. The benefits included bus transportation for the students, which eliminated the transportation barrier for families. Another benefit was the breakfast and lunch that were provided by the district. One of the biggest benefits was that the school district selected the students who attended the summer program based on data collected by the teachers. This allowed the students who needed the summer program the most to attend. The district provided the instructional reading level at the end of the year for each child who attended the summer program, which allowed preservice teachers to utilize literacy data to form groups and plan lessons.

#### 3.2. Research questions

- 1. Were preservice teachers able to utilize evidence-based practices, as evident in both their lesson plans and execution of those lesson plans (noted by researcher observations)?
- 2. What does the data tell us about the importance of teacher disposition scores when hiring pre-service teachers?

This study investigates work taking place during the four-week summer program in a collaborative work environment. The case study method of qualitative inquiry also allowed for the open coding preferred by the researchers for these data (Stake, 1995).

#### 3.3. Conceptual framework

Building upon the work of Paris (2012) and Ladson-Billings (2021a,b), we began looking at how the preparation of lesson plans with children in mind was accomplished. The additional component was to compare the lesson plans (as written) to the observations of the execution of the lessons. Finally, the observations included notes on teacher dispositions. We used the theory of funds of knowledge (Moll et al., 1992) to think about what each tutor brought to the program and how that translated into teaching styles. Preservice teachers must learn the difference between teaching content and teaching children. Understanding the content one teaches is critical, however, it means nothing without understanding the people to whom one is teaching. This study aims to understand the reason one teacher with nearly identical training was successful while another was not. Initial data include teacher dispositions, including a willingness to take advice and mentoring. Understanding the impact of teacher dispositions could impact programs utilizing teacher disposition instruments as tools to foster a culture of critical (yet supportive) feedback.

#### 3.4. Participants

Eight tutors (college students) and 33 children were the participants in the present study. The pre- and post-scores of the children were used as data points in the study, while the majority of the data were qualitative and included lesson plans and observations of the tutors. All of the tutors were students of color, and all of the tutors are eligible for Federal Work Study indicating that they are socioeconomically marginalized. The children were all in 2nd or 3rd grade, and all attended Title I schools, indicating that more than 50% of the children in the school receive free lunch. All work was conducted following IRB approval. All of the participants signed informed consent (assent for the children). Table 1 includes information about the college students (tutors). Appendix 1 includes pre and post-test data for elementary-aged children.

#### 3.5. Data sources and collection

The raw data included weekly lesson plans from the tutors and feedback on those plans, observations of the tutors, and pre- and postscores on literacy assessments from the children. Feedback was given on the lesson plans, and thus notes on the lesson plans were included

TABLE 1 Table of college student participants in the study.

Participant	Degree Identified race/ Identified gender		
Denise	Elementary education	Latinx/Female	
Donally	Elementary education	Latinx/Female	
Emile	Science	African American/Female	
Jimani	Social work	African American/Female	
Juan Carlo	Middle grades education Latinx/Male		
Malia	Elementary education	ucation African American/Female	
Mirabelle	Elementary education	African American/Female	
Misha	Elementary education	Latinx/Female	

as well. The observations were conducted in each classroom weekly and also include notes taken by the researchers upon presenting those observations to the tutors. The Qualitative Reading Inventory 6th edition was utilized, a Pearson product that is designed for reading specialists and school personnel (Leslie and Caldwell, 2017). The assessment utilizes grade-appropriate word lists and measures the rate of reading, reading accuracy, and comprehension (Leslie and Caldwell, 2017). The scores are not numerical but leveled, indicating letter/ sound recognition as PP1 (pre-primer 1) through the high school level.

#### 3.6. Data analysis

Using Atlas.ti, the researchers began by uploading all documents (lesson plans, observations, and literacy assessments). We analyzed the data utilizing open coding following Stake (1995) coding advice. After carefully reading through all documents, we began a list of all codes. After finalizing the code list, the researchers worked together to create a co-occurrence table and create networks. We refined the code list and found places where additional codes needed to be included, particularly in the area of COVID repercussions and dispositions. Finally, the free-flowing text analysis method was utilized by the researchers as a team (Ryan and Bernard, 2003). We discussed codes and recurring patterns in the data and worked in Atlas.ti to create connections within networks together. The codes were all added to the networks where they belong, again following conversation among the researchers. To visualize the data, the researchers printed a code co-occurrence table and each network with connected codes to move forward in discussing the findings (Ryan and Bernard, 2003).

#### 3.7. Trustworthiness

Trustworthiness was established by utilizing multiple data sources (lesson plans, observations, and assessment scores). The data analysis also included a form of member checking; the researchers discussed each finding before finalizing any codes or networks and presented all findings to the participants before finalizing themes. When compared to the scores of the children, it was quite clear that the findings were accurate; the room with the teachers with strong dispositions and stronger content knowledge showed greater literacy gains. Atlas.ti alone did not provide validity; however, it did add additional rigor and transparency to the analysis process based upon how it was used by all of the researchers (Paulus and Lester, 2016).

The final step was to utilize the Hopscotch method (Jorrin Abellan, 2019) to evaluate the steps taken throughout the research process. This web-based tool allowed the researchers to investigate any gaps in the process. During this step, the researchers determined that additional literature was needed on teacher dispositions and their impact on teacher success. Finally, triangulation was confirmed using Hopscotch. The use of multiple data sources, the thorough review of literature, analysis utilizing Atlas.ti, and the evaluation of transferability confirmed triangulation.

# 4. Findings

The findings are organized first by theme. Following the thematic analysis, the findings from the quantitative data (student literacy increases) are included. The discussion is organized by theme as well; however, we begin the discussion with the findings from the quantitative data to weave the implications of that data into the thematic findings. Following the use of Atlas.ti and the coding and networking features, the researchers agreed upon four primary themes. These are gaps in programming, strengths in programming, teacher dispositions, and implications of COVID-19. By "programming," the researchers intentionally broadly include programs of study followed by each tutor as well as the programming used for the summer program itself.

#### 4.1. Gaps in programming

Both lesson plans and observations showed areas where there are opportunities for improvement by the tutors. There was a lot of wasted time, indicated by too much time for certain non-instructional activities (an hour for recess but only 30 min of read-aloud, for example) on lesson plans and also observed by the researchers. We did note that some of the wasted time was due to a lack of expertise in transitions between activities. This is also clear in the lesson plans. There were also large pieces of the day without structured activities, where the teachers noted things like research in the computer lab without specific standards or goals for the time listed. It should be noted that this was primarily found in Classroom B; the lead teacher and supporting teachers in Classroom A did a far superior job of planning and including details within each segment.

There were also times in the lesson plans for both classrooms when activities were mislabeled. For example, there were multiple days when a literacy strategy was listed as being used (for example, having students read aloud to improve fluency) when observation showed this was not the case (the book was read aloud to the children). Another example of this included listing times for interactive readalouds during the day when in fact the elementary students were watching a video of the book being read aloud instead of engaging in conversations about the books. Additionally, there were limited times in the lesson plans or observations when small groups were utilized effectively. While the tutors were assigned to small groups within the classrooms, these small groups were utilized as behavior control, and very little differentiation of instruction or individualized instruction was noted or planned.

#### 4.2. Strengths of programming

The focus of the summer program is literacy. As directors of the program, we have chosen to define this broadly, so math literacy is appropriate. We communicated this to the tutors, and they indicated that they clearly understood this. The lesson plans and observations showed that all activities were aligned with literacy (including reading, writing, and word study). There were also great strategies used throughout the program, particularly in Classroom A. There were leveled texts used throughout the program, and both letter sounds and phonics were included in daily instruction and practice after getting to know the children and what they needed. Small group work included explicit phonics instruction every day of the program for students in Classroom A. In Classroom B there was an insistence, even following multiple rounds of discussion and feedback, to focus on vocabulary and grammar, and on what the students were not able to do. The children did show gains in these areas, but the strategies did not align with the immediate needs of the students (which were also explicit phonics instruction and opportunities to engage in authentic reading and writing).

In both classrooms, the data shows clearly that the tutors cared about the social and emotional needs of the children. Charts to show success weekly, classroom prizes and competitions, classroom jobs and identities, and classroom tee shirts were all evidence of creating a caring environment. When children had concerns, the PSTs were responsive and often brought the children to the researchers' office to create a quiet space for conversation and reflection. The children created cards, notes, and other small tokens daily for the tutors and even the faculty researchers. Observations indicated a warm, caring environment where children were shown and showing care.

During observations, additional strengths of the tutors were evident. In Classroom B, tutors bonded quickly and supported each other. Mirabelle noted a strong desire to help her peers and observation confirmed that the group worked quite well together. They showed comradery in helping each other handle the responsibility of working full-time without many breaks, which was new to each of them. They demonstrated this by offering to help each other-one observation note written by the researchers included a conversation between the tutors where one would "cover" so the other could go warm up lunch and take a quick break. The tutors came to the researchers together (again from Classroom B) when they had questions about classroom management as well. The tutors noticed that children were speaking during lessons, not paying attention, and making comments when a lesson was being delivered. The group wanted one of the researchers to speak to the class about respecting their teachers. They determined a conversation was needed as a group, which showed their reliance on collaboration and comradery.

#### 4.3. Teacher dispositions

The students in the program are divided by grade level to maintain the student-teacher ratio mandated by the Protecting Minors division of the university. In this iteration of the program, there were two classrooms. Twenty students were entering 2nd grade, and 20 students entering 3rd grade. In each classroom, there was one lead teacher and three assistant teachers. Lesson plans were submitted weekly by the lead teachers, however, all teachers contributed to the plans. By the end of week one, the data indicated a stark difference between the two classrooms. After data analysis, it was clear that these differences were in large part due to the dispositions of the teachers. Denise, the lead teacher in classroom A, showed the disposition of a far more experienced teacher. One of the areas where she excelled was providing direct instruction to the other teachers in the room—her peers. In analyzing the lesson plans, conversations are occurring in the planning. For example, in the week one lesson plan, Denise notes that tutorials will be provided for the children to create digital presentations, but the tutors need to spend additional time with each child (in small groups) to ensure understanding. In the week 2 lesson plan, Denise points out that D needs additional one-on-one instruction with letter sounds that should be scheduled during whole group time to allow for coverage and student-teacher ratio.

In observations, it was clear that Classroom A (with Denise as lead) ran much more smoothly than Classroom B. This was in part due to the superior lesson planning, all tutors collaboratively planned and collaboratively executed the plans, but it was also in large part due to Denise's leadership. Her disposition was one of professionalism in front of the teachers and children; any issues she had were voiced in confidence to the faculty. This was clear in how the children behaved; all observations noted that the class ran smoothly and there were never behavior issues.

The other classroom had lesson plan components that were noticeable in the data as well. Unfortunately, Malia and her assistant teachers operated Classroom B without the same level of professionalism, as noted in multiple observations and research logs. The notes indicated that the tutors were often clustered together without engaging children. The lesson plans indicated no instructions for assistant teachers and little evidence of collaboration. The lesson plans felt very much like something to be submitted as an assignment to faculty as opposed to a guide for instruction and the facilitation of learning. There are also notes included in the data from faculty as they looked over, offered feedback for lesson plans, and asked for revisions. Observations did not indicate that these revisions to lesson plans occurred.

Additionally, there were far more non-instructional activities listed in Classroom B's lesson plans than in Classroom As. In addition to the scheduled outdoor play time (30 min daily), there was an additional hour scheduled in weeks 3 and 4. These were sometimes learning-oriented (literacy activities using sidewalk chalk), but there were not often instructions on what the teachers would be doing to facilitate learning during these times. Lunch was stretched from 30 min to an hour in the week three and four lesson plans as well; lunch became lunch and a movie. While the children enjoyed that time (as noted in observations and faculty logs), the atmosphere became more like a summer camp than an academic space (as was evidenced in Classroom A).

#### 4.4. Implications of COVID-19

COVID-19 meant that most teachers in the program had not been in schools to student teach at all; most of them had not even completed observations in person. This led to feelings of insecurity indicated by exchanges between the teachers and the children, the teachers and their peers, and the teachers and the faculty. Faculty observations indicated that assistant teachers felt limited in their teaching experiences because the lead teacher took control of the classroom. While this was truer in Classroom A, Jimani noticed this in Classroom B as well. In Jimani's case, she noted in a reflection that she needed the children to "treat me like the adult." The planning in Classroom A indicated that the assistant teachers were engaged, however, there were multiple conflicts where Misha wanted more independence. Misha had classroom experience as a substitute teacher, and her planning was quite good. However, Denise saw the vision for the entire class in a way Misha did not; Denise was also responsible for lesson planning and took that seriously. Denise wanted to stick to the lesson plans approved by the faculty.

The data also indicated a reluctance to engage personally, potentially a side effect of COVID-19. The lesson plans and observations showed students listening to books from the tables as opposed to reading books or sharing materials. The lesson plans also indicated technology use where children would each handle a device (such as a computer lab) when a kinesthetic activity (magnetized letters, for example) would have been more appropriate. Additionally, the tutors in both classrooms appeared to be keeping some distance between themselves and the children. Even during group work, the tutors sat a bit away from the group; while all participants were masked there was still a great fear of becoming infected with COVID-19. The observations and faculty log both indicate the fear of "sharing"—both emotionally and physically sharing items.

#### 4.5. Student performance

Forty students were identified by the school district for participation in the study. Of the 40, 32 students attended the program regularly. On the dates of the post-assessments, three students were absent. Therefore, 29 students have both pre- and post-assessment administered by the faculty researchers. 14, or 48%, increased literacy by one grade level. 14, or 48%, maintained their reading level. 1, or 0.03%, decreased by one grade level. The "grade level" is roughly correlated to letter sounds (which should be attained before pre-Kindergarten) as PP1 (pre-primer 1), PP2 (pre-primer 2 equivalent to pre-K), PP3 (pre-primer 3—equivalent to kindergarten), and then levels with numbers equivalent to the grade level.

Disaggregating the results by classroom is also important. In Classroom A, 8/14 children, or 57%, maintained their reading level, and 5/14, or 36%, increased by one grade level. In Classroom B, 5/14, or 36%, maintained their reading level. Alternatively, 8/14, or 57%, increased by one grade level. The results are included in Appendix 1. The total percentage of students included who increased by a grade level was 36%.

# 5. Discussion

#### 5.1. Gaps in programming

While research on teacher competencies has increased, there is far less literature on the components of quality lesson planning (Parsons et al., 2018; Kaiser and Konig, 2019). While the teachers in this supplemental field experience vary in their training, their responsibilities as teachers for 4 weeks do not vary. In this study, the difference between the daily functionality of Class A compared to Class B seemed related to lesson planning upon analysis of data. The differences in competency in lesson planning can be—in part—based on differences in training. The PSTs acting as lead teachers were both in identical moments in their programs of study, though. Additionally, there has not yet been enough research on how teachers make use of their knowledge in a content area and related pedagogy "and relate it to the specific planning situation" (Konig et al., 2020, p. 802).

Lesson planning is complex. In this study, the weaknesses of the lesson plans for Classroom B were related to wasted time and lack of evidence of collaborative planning for the classroom teachers. This is not novel; Stigler and Miller (2018) suggest that expert teachers can plan to incorporate several elements simultaneously while novice teachers are only able to focus on one element of planning (such as the activity as opposed to multiple activities differentiated based upon various abilities in the classroom). The concern for this study is that if teachers do not plan learning tasks that are aligned with the needs of the children (academically and behaviorally), the students will not engage and behavioral issues will be evident (Konig et al., 2020). For supplemental field experiences, the goal is to add to the experiences possible in a clinical teaching setting. This study provided that framework for the PSTs, and additionally, the findings in a small, qualitative study are strong enough to add to the literature on the necessity of supplemental field experiences.

The elements of planning that were not included are not the only problems noted in the lesson plans. There were places in the lesson plans when items were mislabeled, such as in reading activities. There were other places when another pedagogical tool made more sense, such as choosing to utilize small groups for instruction as opposed to whole-class instruction. The primary concerns for the researchers when this was not in place are: does the PST have an understanding of the tenets of literacy instruction, and is the PST able to be reflexive to student needs if all voices are not heard (often the case in the whole group)? In the case of the first question, the researchers found that in Classroom B the lead teacher did not have as strong a grasp of literacy education. While the program has the strength of offering a reading endorsement to all candidates, Malia was weak in this area. This knowledge is critical for effective teaching in elementary grades (Griffith et al., 2015; Davis et al., 2019).

The second concern—are teachers able to respond when the appropriate pedagogy is not used and what are the impacts—is also well documented in the literature. Novice teachers often fall back on traditional teaching methods, indicating a proclivity to teach the way each was taught (Cochran-Smith et al., 2015; Kavanagh et al., 2020). This leads to a lack of responsiveness on the part of the teacher (candidate) due to a lack of confidence in utilizing the best pedagogy (Kavanagh et al., 2020). This is indeed what the researchers observed; many children were unable to voice answers to questions during whole group instruction despite being able to demonstrate mastery.

#### 5.2. Strengths of programming

In the findings, the researchers described the data demonstrating a focus on literacy. Even when Classroom B did not label the literacy practice correctly and/or should have utilized other strategies, the focus remained on literacy throughout the program. This is a key goal of the program, and Classroom B showed more gains in literacy across the program than Classroom A despite these errors. This shows the strength of the program for PSTs who are all required to earn a Reading Endorsement as Elementary Education majors. The literature emphasizes that literacy instruction is critical in the primary grades (Teale et al., 2020).

The PSTs also showed a good understanding of Social and Emotional Learning (SEL) with the children. Although there are many varying definitions of SEL, it is primarily focused on personal and interpersonal skills (Cherniss et al., 2006). In this study, the elements of SEL that were consistently noticed in observations were positive social relationships, helping children make (or the children making) responsible choices, and helping children (or the children making) good decisions when challenges arise (Rodriguez-Izquierdo, 2018). Noting that summer 2021 was particularly stressful for all participants in what we now recognize was the midst of COVID-19, this is an impressive strength the PSTs all demonstrated.

Finally, the collaborative nature of teaching employed by the PSTs, in particular in Classroom B, was a strength. This may be attributed to the program, but it also could be the chemistry of the teachers. In any case, it is important for this research. Co-teaching is a valuable skill that often takes a great deal of training to accomplish. According to Stang and Lyons (2008), "it is vital that pre-service teachers have the opportunity to observe collaboration... if they are expected to collaborate as in-service teachers in K-12 public schools" (p. 183). Not only were the PSTs in this study able to observe faculty researchers collaborating, but they were also able to collaborate both with those faculty researchers and each other. This training will add to the likelihood that the PSTs will be reflexive practitioners who can collaborate with their peers in the best interest of students (Stang and Lyons, 2008; Darling-Hammond, 2015).

#### 5.3. Teacher dispositions

There were noticeable differences between the dispositions of the lead teachers in each classroom, and there were also differences (though more subtle) in the personalities of all of the tutors. In Classroom A, Denise demonstrated her use of guidance for peers in the lesson plans and every researcher observation. Her leadership was natural and effective, as evidenced by her excellent behavior on display across all types of activities in Classroom A. There was an effortless quality to her presence as a teacher, and even the PSTs seemed receptive to her leadership. Her lesson plans included feedback to and from the PSTs in the classroom, and all of her peers were observed speaking with her about the small group plans they executed. Denise supplied the researchers with timely and thorough lesson plans before the deadline each week, and she was receptive to any feedback from the faculty researchers. She also had complete control of her classroom without faculty intervention; she never requested assistance with issues regarding students. While she would often speak with faculty to unpack the events of the day, she was doing so as a colleague more than for advice.

In classroom B, Malia showed a very different disposition as a teacher. She wanted her peers to have the freedom to plan at the moment with the children. Faculty researchers advised against this repeatedly, and indeed faculty researchers provided planning on several occasions to ensure students had enough work to complete in both small group and class activities. Malia loved being a leader, however, the faculty researchers both noted in their observation journals that it felt as though it was exciting to be in charge as opposed to excitement to understand leadership. The failure to attend to feedback on the lesson plans was noted by the faculty researchers and was a huge concern. In a traditional school setting, novice teachers submit lesson plans to administrators and/or department chairs for feedback (Darling-Hammond, 2015). Novice teachers must heed that feedback to impact student achievement (Cochran-Smith, 2009; Darling-Hammond, 2015). Malia's repeated failure to adjust lesson plans according to feedback seemed directly correlated to her classroom management problems. Every day of the program, Malia needed assistance with behavior management. She sent students to the front of the building to sit with researchers; faculty researchers often sat in the classroom to assist, and assistant teachers asked for assistance when lessons did not keep students engaged. By week 2, the lesson plans and observations show more time dedicated to playing in Classroom B, an effort to keep children engaged without having to do any hands-on teaching.

We agree with research indicating teacher disposition instruments are critical in protecting children, minors in particular (Phelps, 2006). We also agree that in addition to measuring competency with standards and content, teacher candidates must show dispositions beyond academics and pedagogy; pre-service teachers must show competencies in non-academic areas that display their effectiveness as teachers (Council for the Accreditation of Educator Preparation, 2019). However, we also agree with research that states this does not currently exist (Bradley et al., 2020). Bradley and colleagues demonstrate that despite thorough reviews of teacher disposition instruments (TDI), there have not been any in the field that contain internal validity and that are predictive of teacher effectiveness (2020). There are also concerns about TDIs developed with racial bias; there are many objective categories that are too vague and allow for bias among raters (Nweke et al., 2019; Campbell, 2020). Results in this study from student performance indicate that students' literacy gains in Classroom B were marginally greater than those in Classroom A. Were thoughts about the teacher disposition of Malia based upon the faculty researchers' bias? This is another item that needs to be tested (alongside multiple drafts of pilot TDIs) in summer 2022.

## 5.4. Implications of COVID-19

The tutors appeared to have a fear of engaging with the children. While all students were masked, there was a distance between most of the PSTs and the children (Denise was a notable exception who hugged or high-fived children each morning and each afternoon). The faculty researchers noticed this first in observing outdoor play; the tutors were grouped while the children played. The children were allowed to remove masks during outdoor time—and they wanted interaction during that time, including with the faculty researchers. The insecurities of the tutors did not appear to be mirrored by the children at all.

Additionally, the data indicates that tutors were reluctant to allow the children to share materials, so important for the elementary grades. In lesson plans, faculty researchers noted that books and devices were not shared, meaning that even small group reading was often just independent reading in a small group as opposed to collaborative activity. Research is still ongoing across the field on the impacts of COVID-19. However, these findings bear repeated investigation in the summer of 2022 to determine if these patterns are only due to it being the first summer program for most of the children and tutors post-COVID or if this is a trend due to isolation having extended impacts.

#### 5.5. Student performance

In the United States, children from economically disadvantaged families experience a greater reading slide than their more affluent counterparts (Allington and McGill-Franzen, 2018). There is some evidence that students from more affluent families have more learning opportunities in summer (Downey, 2016). In a study including over 300,000 children from 50 countries, socioeconomic status "correlated strongly" with reading achievement (Nicholson and Tiru, 2019, p. 110). Our study is unique in that all of the children are from economically disadvantaged homes, and all of the children entered the program performing at least two grade levels below in reading. However, the findings do correlate with the findings from the 2010 Allington et al. study, which found that children who have access to reading materials in summer improve more than their peers.

Summer bridge programs are effective in helping economically marginalized children catch up with their more affluent peers (Curry, 2002; Nicholson and Tiru, 2019). As noted in our findings, 36% of the participants increased by one grade level. Those children are now more equipped to maintain their reading momentum when school begins. Allington et al. (2010) found that if those students participate in future summers, even greater gains may be achieved. The summer bridge program may be a literacy equalizer for these students and their more affluent peers.

# 6. Implications

These research findings suggest a strong need to provide further support for the PSTs to ensure marginalized youth attending the program, but also those in the current school system, will be effectively served. Focused training on the areas identified throughout the research can provide the PSTs with the skills needed to enhance the children's experience and learning processes needed to improve their literacy levels. The four main identified areas for further training are lesson planning, teacher dispositions, literacy instruction tenets, and COVID-19-related concerns.

Lesson planning is not an easy task, as it relies on having an effective and diverse set of skills. At the same time, it is one of the main research gaps identified during the literature review completed for this study, which highlights the need to explore further how teachers use both their content-based and general pedagogy knowledge to create lesson plans (Konig et al., 2020, p. 802). Since the study shows the importance of addressing PST's ability to manage time effectively to avoid wasting time during the learning period, training should focus on helping students develop the needed skills to adequately manage transitions. Based on the research findings, such training needs to include the needed skills to help PSTs understand the role of structured activities and the difficulties caused by mislabeled activities in a lesson plan.

However, the issue could also stem from the knowledge PSTs have in the first place, and not only from the way they make use of it. Their difficulties creating a stable environment while portraying a caring authority, such as in the case of classroom A, or trusting their colleagues to create a collaborative approach, like what happened in classroom B, show what could be a lack of social–emotional skills in the PSTs' performance and overall education. In other words, not only the content of what is being thought but also the way said content should be portrayed for children to learn highlights the need to effectively evaluate each PST literacy instruction tenets level. This further emphasizes the need for supplemental field experiences such as this one; PSTs rarely have the opportunity to implement SEL or behavioral interventions during their clinical experiences (Shapiro and Kazemi, 2017).

Literacy instruction tenets are the first step through which PSTs get ready for their professional future. Pedagogical gaps in this content lead to poor choices of tools and low responsiveness to children's needs in the classroom, ultimately affecting students' learning process. While ensuring education majors are attaining a sufficient level of these tenets is not the aim of the current study, the findings suggest the need for further support in this area. Through this study, it was possible to note the difference in classroom management between a lead teacher who did not have as strong a grasp of literacy education and how critical it is for effective teaching in elementary grades (Griffith et al., 2015; Davis et al., 2019).

These gaps in literacy instruction tenets could also be explained by a lack of experience. Novice teachers often fall back on traditional teaching methods, indicating a proclivity to teach the way each was taught (Cochran-Smith et al., 2015; Kavanagh et al., 2020). This leads to a lack of responsiveness on the part of the teacher (candidate) due to a lack of confidence in utilizing the best pedagogy (Kavanagh et al., 2020). This is indeed what the researchers observed; many children were unable to voice answers to questions during whole group instruction despite being able to demonstrate mastery. This further highlights the need to address each PST's teaching style and personality in the classroom and their disposition in their role as teachers.

Teacher dispositions appear to be the cornerstone to developing an effective and integral approach for PST's training. The lack of collaborative skills portrayed by the PSTs directly affects each of the other PSTs' areas of interest. The difficulty to associate and work together was displayed differently in several moments. While Denise, in Classroom A, demonstrated natural and effective leadership, she also struggled to incorporate other teachers' voices and independence. Meanwhile, in Classroom B Malia bonded quickly with the other tutors and created a strong sense of comradery in helping each other handle the responsibility, but they were often clustered together without engaging children and the lesson plans indicated little collaboration. Their lack of responsiveness to faculty feedback reflects the tutor's overall lack of optimal disposition. Although in observations it was clear that Classroom A (with Denise as lead) ran much more smoothly than Classroom B, the tutor's dispositions are the one area that showed room for improvement across both classrooms.

Teachers' dispositions are also critical when addressing COVID-19-related concerns in the classroom and overall school setting. The different ways in which teaching within the context of a pandemic influenced the teachers' and children's behavior highlights the need to address mental health needs within the educational setting. The fear to get infected and the already learned behavior of distancing from one another changed how children and PSTs interacted with each other and, therefore, shaped differently both the teaching and learning processes. COVID-19-related safety measures significantly altered the 20–21 school year, and the learning gaps continue to grow. This is impacting long-term academic outcomes, but it has especially impacted the way children are interacting and learning in the present time.

The obvious need to better understand the mental health barriers present in the classroom after living through a global pandemic is a call to action to continue enhancing and facilitating interdisciplinary efforts in the school system. School-based mental health services hold promise for reaching youth in need. Collaboration between social workers—or other mental health practitioners such as psychologists or counselors—and teachers appear to be the centerpiece to enact change at the school, classroom, and individual teacher levels are given that school influences are mediated by the teacher's role in promoting mental wellness among students (Lynn et al., 2003).

Not only is further training needed, but it should include more disciplines that can provide PTSs with the adequate tools to address children's mental health needs alongside education needs. In both classrooms, the data shows clearly that the tutors cared about the social and emotional needs of the children. Charts to show success weekly, classroom prizes and competitions, classroom jobs and identities, and classroom tee shirts were all evidence of creating a caring environment. When children had concerns, the PSTs were responsive and often brought the children to the researchers' office to create a quiet space for conversation and reflection. The children created cards, notes, and other small tokens daily for the tutors and even the faculty researchers. Observations indicated a warm, caring environment where children were shown and showing care, yet most tutors expressed continuous concern regarding children's disruptive behavior and feeling unsure about how to handle more emotional situations.

PSTs' lack of mastery of understanding children's developmental and psychosocial needs leads to the use of punitive approaches that hinder children's educational development and create more difficulties for the child, their family, and even other school departments. Children miss content and valuable social interactions when sent to the principal's office instead of remaining in class. They also start gaining a negative self-image or reputation from classmates and school staff members. Punitive approaches also create further weight on students' families, who must address and manage children's needs often without receiving effective support. Furthermore, it creates further weight on other already overwhelmed departments within the school setting such as the counselors, social workers, principal, and other positions— all of whom currently fulfill the need of offering the social–emotional support that the classroom or teachers cannot.

# 7. Concluding thoughts

Data from this study indicate that a supplemental field experience provided the PSTs with an opportunity to engage in lesson planning for groups of students. Through our analysis, we discovered that the PSTs still needed additional support in order to design engaging lessons for the students. We also learned that PSTs needed additional support in collaborating as they designed instruction. Our analysis indicates that there are strengths that this type of field experience provided. PSTs were able to focus on literacy activities and had a strong focus on SEL. PSTs also focused on building relationships with the students despite the restrictions that were implemented due to COVID-19.

The research finding also highlights the need to equip future teachers to create a more positive and containing environment rather than a punitive environment that can hinder children's current mental health needs. Enriching PST's field experiences with training on post-COVID-19 mental health needs would only enhance what we already know about the importance of SEL. The training in the clinical experience of PST education plays a pivotal role in the development of pre-service teachers, particularly as it relates to teaching students from culturally and linguistically diverse backgrounds (Zeichner, 2010; Maddamsetti, 2020).

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding authors.

# **Ethics statement**

The studies involving human participants were reviewed and approved by the Kennesaw State University Institutional Review Board. Written informed consent to participate in this study was provided by the participants' legal guardian/next of kin.

## Author contributions

All authors contributed to the article and approved the submitted version.

# **Conflict of interest**

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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# Appendix 1

Elementary student participants in the study and levels On QRI-6.

Participant	Grade	Pre-test level	Post-test level
1	2	L2	L2
2	2	PP1	PP1
3	2	PP3	PP3
4	2	PP2	PP3
5	2	L1	L2
6	2	PP3	Absent
7	2	Primer	Primer
8	2	L1	L1
9	2	L1	L1
10	2	PP1	PP2
11	2	PP1	PP3
12	2	PP2	PP3
13	2	L2	L2
14	2	L1	Primer
15	2	PP1	PP1
16	2	L2	L2
17	3	Primer	L1
18	3	PP1	PP2
19	3	L1	L1
20	3	PP2	PP3
21	3	L2	L2
22	3	PP1	PP2
23	3	PP1	PP1
24	3	PP3	PP3
25	3	PP1	PP1
26	3	PP3	L1
27	3	L1	L2
28	3	L1	L2
29	3	L2	L3
30	3	L2	L2
31	3	L2	Absent
32	3	L1	Absent