The effects of delivering short-cycle literacy interventions to beginning readers on pre-service teachers' self-efficacy in literacy instruction

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Abstract

Purpose – This case study sought to investigate the relationship between pre-service teachers' participation in designing and delivering one-on-one literacy intervention lessons to beginning readers and their own evolving self-efficacy in literacy instruction.

Design/methodology/approach – The study was embedded within a 4000-level course in the elementary education major where pre-service teachers learn to administer, analyze and interpret a variety of literacy assessments. Based on the results of these assessments, pre-service teachers designed and implemented literacy lessons (twice a week, 30-min sessions) that addressed the beginning readers' specific instructional needs. Through collecting pre/post data with their first-grade intervention students, and participating in reflective "check-ins" (surveys, a focus group and end-of-course written reflection), a portrait of increased pre-service teacher self-efficacy in literacy instruction comes into focus.

Findings – The data showed, primarily through the thematic analysis of qualitative data, that the experience of conducting a one-on-one intervention with a striving reader impacted pre-service teachers' self-efficacy positively.

Research limitations/implications – The methodology of this study was limited by the small sample size and the low participant response rate on the quantitative survey measure.

Practical implications – This paper highlights one aspect in which clinically-rich field experiences can make a difference in the literacy instruction self-efficacy of pre-service teachers.

Originality/value – This study adds to the support for authentic instructional applications of course content in educator preparation programs, specifically in Professional Development School (partner school system) contexts. The aspect of observing and measuring intervention student progress was one lens through which pre-service teachers viewed their efficacy. Further investigations focusing on other assessment-instruction cycles could provide additional insights.

Keywords Self-efficacy, Literacy, Pre-service teachers

Paper type Case study

On the heels of pandemic school closures, concerns about resulting learning loss and teacher shortages, supporting pre-service teacher candidates to survive and thrive in today's classrooms is a top priority for teacher preparation programs and the K-12 education system. As an educator working with pre-service teachers, I was cognizant of how these variables affected learning contexts. I sought to explore my pre-service teacher candidates' developing self-efficacy in literacy instruction through their work in a semester-long course focusing on literacy assessment and instruction. I taught this required course in the Elementary Education major at a small, Liberal Arts College in a Mid-Atlantic state in the United States of

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America. The candidates were co-enrolled in a two full days per week practicum situated in Professional Development Schools in the same county as the college. The institution has a long-standing commitment to the Professional Development School model, whereas I am a rather new instructor in the program. This case study was conducted in my fourth year teaching in the program.

The case study's connection to the PDS environment in which pre-service teachers apply course content is central, thus some detail about the context is helpful. Pre-service teachers are placed (at the elementary level) in approximately 13 PDS schools in a single county school system. The institution's Internship Handbook defines a Professional Development School as:

> a collaboratively planned and implemented partnership for the academic and clinical preparation of interns and the continuous professional development of both school system and university faculty. The focus of the PDS partnership is improved student performance through research-based teaching and learning. PDS may involve a single or multiple schools, school systems and universities and may take many forms to reflect specific partnership activities and approaches to improving both teacher education and P −12 schools. (p. 63)

The institution's model places the pre-service teacher intern in a mentor teacher's classroom and is supported by a collaborative network consisting of the PDS school site coordinator and college faculty, including the PDS liaison, all with a goal to achieve the stated PDS standards. The National Association of Professional Development Schools sees a PDS as a "Third Space" where the partnership between the university and school systems creates a unique synergy characterized by supported reflection and innovation. Challenges to nurturing a Third Space in this case study's PDS context include a high-level of recent attrition in both university and school system players and changes brought about by post-pandemic needs. However, embedded PDS collaboration within the college course described in this case study does occur and is detailed in the methodology section. The guiding National Association of Professional Development Schools (NAPDS) Nine Essentials (National Association for Professional Development Schools, 2021) provide a framework for PDS partners to speak a common language and identify a common focus, supporting the aim of strengthening school-university partnerships. Two of the Essentials connect most saliently with this case study, Essential 2: Clinical Preparation and Essential 4: Reflection and Innovation. The goal of close connection between coursework and the clinical setting undergirds this study.

The driving purpose of this case study stemmed from my desire to provide a highly immersive experience for pre-service teachers in working one-on-one with a first-grade student showing some challenges in acquiring beginning literacy. Through administering extensive literacy pre-tests, and using those results to design individualized intervention lessons over several weeks, I hypothesized that pre-service teacher candidates would be able to observe their instructional efficacy in authentic and measurable ways and that this could affect teacher-candidates' self-efficacy. In this case study, I contended that the most effective course pedagogy was facilitating the close application of course content to a specialized practicum setting experience.

The literature focusing on preparing teachers to teach literacy points to coursework closely connected to field experience as being one very important factor in quality teacher preparation programs (Helfrich & Bean, 2011). The context of the literacy assessment and instruction course, in this case study, was based on providing a setting where the pre-service teachers applied newly gained knowledge about diagnostic literacy assessment and literacy teaching and learning, including a range of explicit instructional procedures. There is support in the literature to suggest that opportunities to practice newly acquired skills may increase pre-service teacher self-efficacy, (Hedrick *et al.*, 2000; Massey, 2003). Pre-service teacher candidates in this study assessed their students before and after they began their approximately 6-week period of 1:1 literacy lessons. In this way, pre-service teachers not

only practiced skills and applied knowledge, but acquired evidence of student progress. I investigated the hypothesis that this setting could boost pre-service teacher beliefs that they can impact desired literacy outcomes in first-grade students identified as needing support.

There is a consensus in the literature that high teacher self-efficacy can have positive effects on student achievement (Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2001). Furthermore, teachers with high self-efficacy may possess higher levels of persistence with teaching difficult students (Woolfolk, 1998). This case study revealed that the context of a literacy assessment and instruction course, specifically the extensive field experience working 1:1 with striving beginning readers, was a boost to pre-service teacher' self-efficacy, and this could, in turn, contribute to their future success in the teaching workforce.

Literature review

Literacy instruction for striving readers: a 1:1 tutorial intervention context

Teaching children to read is a complex and intricate endeavor for novice and experienced teachers alike. Because the ability to read, unlike speaking, does not develop naturally, teachers of early grades need much more than a love of children's literature and a basic understanding of typical beginner literacy development. Moats (2001) maintains that to instruct beginning readers effectively, teachers must have *specialized* knowledge in literacy processes and acquisition, language development and learning and an arsenal of responsive instructional strategies. Since the 2000's National Reading Panel Report (National Reading Panel, 2000) was published, it has been a hallmark requirement that elementary teachers must have a solid understanding of each of the pillars of reading (phonological awareness, phonics, comprehension, vocabulary and fluency) and how to support their students' growth in each. Even with all the complexity surrounding teaching reading, there is an established science and research-validated instructional practices driven by the science are widely-accepted. Despite this, teacher preparation programs have been criticized for not having as much emphasis on the science of reading or as strong an alignment to this science as would benefit pre-service teachers (Moats, 2001). An intense national focus on the proportion of students not reading at proficient levels as measured by the National Assessmnet of Educational Progress (NAEP), often called "The Nation's Report Card", has renewed concentration on identifying children at-risk for reading difficulties and intervening in order to prevent those difficulties. Therefore, some experience for pre-service teachers in an intervention or tutorial 1:1 context may make sense.

Though a 1:1 tutoring experience may, in some ways, be an appropriate field placement experience for pre-service teachers just beginning their educator preparation program because management and responsiveness is focused on one student instead of an entire class of students, providing literacy instruction to students presenting with some challenges in the classroom requires multi-faceted pedagogical knowledge and skills. Simply put, the complexity of teaching a child to read is often underestimated (Moats, 2001). The importance and relative challenge of teaching the fundamentals of reading and writing requires focus and extended opportunities to practice and apply reading instructional techniques for pre-service teachers. Therefore, both traditional whole class and embedded small-group instruction along with 1:1 instructional contexts may be beneficial for developing literacy teaching skills. The International Literacy Association and the National Council for Teachers of English put forth guidelines for teacher preparation supporting this aim. In their co-authored Research Advisory on Literacy Teacher Preparation (2017), they stated:

> Prospective teachers increase their competence by applying content and pedagogical knowledge within authentic teaching contexts that include prolonged engagement and explicit guidance and mentoring; field experiences that support prospective teachers' differentiated instruction, including opportunities for one-to-one instruction (tutorial settings), and engagement with culturally and linguistically diverse students and families".(p. 5)

In a general education setting, classroom teachers rarely are able to work with individual students for more than a few minutes during their school day, so it could be argued that tutoring contexts may not align with the settings most pre-service teachers will find themselves in after becoming certified. However, the 1:1 tutoring context may be beneficial in providing pre-service teachers the time and space needed to incubate the complex planning, data-based decision-making and teaching moves needed in instructing striving beginning readers without the added demands of whole class management.

Rosenthal *et al.* (2017) found that the children receiving literacy tutoring from the pre-service teachers in their study did increase their literacy skills in comparison to the control group students not receiving tutoring, although the increases cannot be attributed to the tutoring condition alone. Of interest, however, is that the authors contend that the pre-service teachers moved their instruction from a skills-based stance to an individual needs-based stance, increasing their understanding of what "best practices" in literacy instruction entails. Similarly, in a study conducted by Kindle and Schmidt (2011), pre-service teachers, who administered literacy assessments and designed tutoring lessons for their case study focus students based on their assessment results, showed growth in content knowledge and skill in teaching reading as well as professional dispositions and identity as a teacher. Qualitative data analysis, including coding for themes, was based on the pre-service teachers' dialogic learning logs, transcripts of collaborative sessions and answers to open-response questions on a questionnaire. Additionally, in Hoffman, Wetzel, and Peterson's (2016) qualitative study of pre-service teachers engaged in a literacy tutorial experience, the authors found that approximating practice in an authentic setting impacted candidate understanding of responsive literacy instruction. The researchers conclude that "practicum experiences and academic coursework should connect as responsive contexts for teacher educators and pre-service teachers to develop experience and confidence in practices that have value for future teaching in elementary classrooms" (Hoffman *et al.*, 2016, p. 205). Tutoring experiences in teacher preparation in literacy seem to have a clear place in optimum field experiences throughout an elementary education initial certification program.

Educator preparation and practice-based learning opportunities

A body of literature suggests that strong clinical experiences embedded in education program coursework impact teacher sense of preparedness and effectiveness as they enter the profession (Brown *et al.*, 2019; Darling-Hammond & Hyler, 2020; Livers *et al.*, 2021; Radović *et al.*, 2021). There are many models of clinical experiences which are intertwined with coursework in teacher preparation programs ranging from observation-based field experiences to active learning practicum placements, to inquiry-based fieldwork, to experiential learning through model classrooms (Boothe, 2022). Ball and Forzani (2009) describe the need for teacher preparation programs to improve novice teacher effectiveness and perseverance in the teaching profession with a goal of subsequently improving U.S. student outcomes. The researchers ascertain that a practice-based teacher preparation curriculum is part of the solution to these challenges, although they concede that "making the shift from a theory- and knowledge-based teacher education curriculum to one focused on practice is a complex undertaking" (Ball & Forzani, 2009, p. 506). The literature around embedded practical experience in teaching preparation is broad, thus this paper's specific focus on literacy instruction narrowed the body of literature.

The current study's context involves a field practicum experience in a senior-year literacy methods course. Further embedded within this practicum were 1:1 interventions involving 15 pre-service teacher candidates and their partnered striving first-grade readers. Thus, tutoring as a clinical experience for pre-service teachers was an important context examined. In Hoffman *et al.* (2019) review of the research of literacy tutoring and mentoring in initial

teacher preparation, in which 62 published articles were reviewed, the researchers "found substantial evidence in these studies documenting a positive impact of one-to-one and small-group teaching experiences on the growth of preservice teachers in learning to teach" (Hoffman *et al.*, 2019, p. 244).

Hilaski *et al.* (2021) detailed a study of pre-service teachers in the reading content area which viewed tutoring experiences, clinical experience and the student-teaching experience as a continuum of scaffolded support. In the Hilaski *et al.* (2021) study, pre-service teacher candidates attended class and then immediately spent 45 minutes in an embedded clinical experience. Participants administered 1:1 assessments such as Concepts about Print assessments, phonological awareness and word recognition assessments, reading interest inventories, running records, fluency measures, comprehension questions and oral retelling assessments and conducted 1:1 lessons with Kindergarten and First-Grade students. The researchers found that there were positive impacts on pre-service teacher candidates; including evidence of instruction that moved from teacher to student-centered, increased instances of strategic and responsive teaching moves and growth in teaching identity. Similar findings as a result of a tutoring context for pre-service teachers were reported by Nickel and Hughes (2020) indicating literacy knowledge, pedagogical competence and pre-service teacher confidence increased as a result of the pre-service teacher candidates conducting 35 tutoring sessions over 7 months.

It could be the case that "more is more" for pre-service teachers and practice-based learning opportunities. For example, embedded field experiences throughout their undergraduate education coursework may have an additive effect on pre-service teachers' perceived competence in the classroom. Kent *et al.* (2013) study examined the evolving sense of self-efficacy in pre-service teachers as they progressed through first and second-semester reading methods courses and then student-teaching experiences. The researchers found that reading instruction self-efficacy did build through each course completion and notably after student-teaching, candidates scored significantly higher on a measure of reading teacher efficacy on 9 individual scale items than cohorts in their first or second-semester methods courses. Kent *et al.* concluded that "the results of this study support that mastery experiences in which the individual experiences success contributed to improved perceived efficacy for the student teachers" (2013, p. 11). The authors describe mastery experiences as being aligned with "quality field experiences" and assert that these "are scaffolded in terms of difficulty, complexity, and frustration in order to build a positive sense of efficacy" (Kent *et al.*, 2013, p. 12). Findings as in Kent *et al.*'s work points to support for developing situated field experiences in which pre-service teachers are given increasing amounts of independence, responsibility and control in teacher preparation programs. What these three studies shows is that context as well as frequency and intensity matter in clinical experiences for pre-service teachers. Different pedagogical thinking and action is required in whole group, small group and 1:1 instructional contexts. In whole group instruction, for instance, teachers are likely responsible for delivering instruction as aligned with a specific curriculum, core reading program goals and pacing guides. Often, teaching with fidelity to these blueprints is required. The 1:1 tutoring context, occurring outside of some of the constraints of program fidelity, may allow pre-service teachers to build different instructional skills and pedagogical flexibility. Additionally, the intensity of observation during 1:1 lessons and specificity of just in time feedback to the learner, is very different than what is possible in whole class setting.

Teacher self-efficacy

Self-efficacy, its roots found in Bandura's Social Cognitive Theory (1986), at its essence is concerned with judgments of personal capability. Those judgments are mediated by the individual and their interactions with the behaviors they initiate in the environments they

find themselves in. Hoy and Spero (2005) explain teacher self-efficacy as "teachers' judgments about their abilities to promote students' learning" (p. 343) but also further explicate the definition with this distinction; "efficacy is a future-oriented judgment that has to do with perceptions of competence rather than actual level of competence" (p. 344). In the realm of teacher preparation, this distinction is noteworthy, as pre-service candidates are building a complex set of skills with each course and field experience at a time, over several years. The pre-service teacher's belief that they can positively affect student learning is key in capitalizing on the type of "in the moment" professional learning that happens in practice-based settings. Because research exists suggesting that opportunities to practice newly acquired skills in field-based settings may increase pre-service teacher self-efficacy (Hedrick *et al.*, 2000; Massey, 2003), a closer look at teacher self-efficacy and why educator preparation providers are interested in developing it, is warranted. In fact, Brown *et al.* (2019) concluded that during student-teaching, the most intensive practiced-based placement for a pre-service teacher, pre-service teacher candidates' perception of efficacy and preparedness increased significantly. Hoy and Spero (2005) had similar findings of their participants during the student-teaching experience, but also that teacher efficacy measures decreased during the first year of teaching depending on the amount of support first-year teachers received. Furthermore, high self-efficacy in teachers can impact actual student learning outcomes (Corkett *et al.*, 2011, Hoy & Spero, 2005; Mojavezi & Tamiz, 2012) study found positive correlations between higher teacher self-efficacy and higher student motivation as well as student achievement. Additionally, teachers with high self-efficacy may have a more persistent pedagogy when it comes to students who may be more difficult to reach and teach (Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2001 Woolfolk, 1998).

Theoretical framework

The current study is grounded in a theoretical framework constructed through the concepts of (1) self-efficacy, (2) meaningful practice for pre-service teachers and (3) teaching identity development. Bandura's social cognitive theory and work in self-efficacy, of course, are not exclusive to the field of education, although his theories have an important place in teaching and learning. In his 1977 article, Bandura establishes that "efficacy expectations determine how much effort people will expend and how long they will persist in the face of obstacles and aversive experiences" (p. 194). Thus, it can be seen as desirable for educators to possess high degrees of efficacy to function in settings with challenges – classrooms. Institutions that prepare teachers surely want to help candidates develop competence and confidence and experiences that support those attitudes are experiences in which perceived efficacy is developed. Bandura states, "the stronger the perceived self-efficacy, the more active the efforts" (1977, p. 194). Therefore, clinically-rich teacher preparation programs can provide the base for teacher self-efficacy development. In this study's context, I use the educator-specific explanation of self-efficacy from Hoy and Spero (2005) "teachers' judgments about their abilities to promote students' learning," drawn from Bandura's essential work.

Meaningful practice can be seen as almost a pre-requisite to teacher self-efficacy. Morris *et al.* states that "teachers are most self-efficacious when their experiences provide them with the tools they need to be effective: pedagogical strategies, an understanding of how to use educational resources and knowledge of the content they teach (2017, p. 825). Morris *et al.* further describe these occurrences in teacher preparation this way; "such experiences may confirm that the knowledge one gained from teacher education or professional development is indeed useful in the real world of teaching and learning" (p. 826). Experiences situated in meaningful practice, specifically the tutoring context working 1:1 with a striving reader, are examined in the current study.

Completing the triad girding this theoretical framework which guides the current study, teaching identity development joins teacher self-efficacy and meaningful practice. Beauchamp and Thomas (2009) conducted a review of the literature surrounding teacher identity formation to benefit teacher education. The authors' rationale grows from the idea that teacher preparation programs should support pre-service teachers in the awareness that they need to develop a teaching identity and accept that this identity will shift as their experiences in the teaching profession build. Beauchamp and Thomas speak to the link between teaching identity and agency (2009). Agency, or the perceived belief that an educator can affect change, may be key in persisting in the profession and thus is of interest to teacher educators. Hammerness *et al.* (2005, pp. 383-384), as cited in Beauchamp and Thomas (2009) make a powerful summary of teacher identity development: Developing an identity as a teacher is an important part of securing teachers'

> commitment to their work and adherence to professional norms. . . the identities teachers develop shape their dispositions, where they place their effort, whether and how they seek out professional development opportunities, and what obligations they see as intrinsic to their role (p. 184).

Study purpose and research questions

The purpose of this case study was to investigate the relationship between pre-service teachers' participation in designing and delivering one-on-one literacy intervention lessons to beginning readers and their own evolving self-efficacy in literacy instruction. The research sought to add to the literature on clinically-rich pre-service teacher preparation and efficacy by asking the following questions:

(1) What impact did designing and delivering one-on-one literacy intervention lessons to beginning readers have on literacy teaching self-efficacy?

(2) What do pre-service teachers perceive as factors affecting growth in literacy teaching after designing and delivering one-on-one literacy intervention lessons to beginning readers?

Methodology

This case study of a single senior-year literacy course enrollment was intended to be a mixed methods design consisting of measures meant to investigate teacher-candidate self-efficacy in literacy instruction. The design included a pre/post-test survey using Likert-scale items to be analyzed quantitatively, however poor response rates did not allow for meaningful interpretation of the data, thus data from that measure was not included in the final results. Pre-service teacher-candidates collected first-grader performance data pre/post-intervention period as that was already an established part of the course objectives. This student data, although candidates shared the data with stakeholders in practicum placements, their peers and myself, is not presented in this case study, but candidates do refer to their student assessment results in their written reflection and focus group discussion.

Also, pre-service teachers completed a written reflection to a prompt administered after the intervention cycle for their first-grade students had concluded, as well as took part in a focus group discussion. All 15 pre-service teacher participants completed the reflection and were present for the focus group discussion. Qualitative data from written reflections and video/audio recordings from the focus group were analyzed for significant themes concerning participants' experiences teaching their students and their perceived beliefs of their abilities to positively affect student literacy outcomes.

Participants

Fifteen pre-service teachers consented to participate in the study. All participants were enrolled in a senior-level required course in the Elementary Education major with a focus on assessment for literacy instruction. Fourteen of the fifteen participants identified as female, while one participant identified as male. Participants were all traditional undergraduate students in their final year of study. These pre-service teachers would student-teach in the following semester in which this study was conducted and then graduate with their undergraduate degree in Elementary Education at the conclusion of the academic year.

Context of study

The Elementary Education major at the participants' higher education institution could be viewed as a program with a "clinically-rich" practice-based component. The required course sequence for Elementary Education majors begins with a general "teaching and learning" introductory course which can be taken in the first year of study, but practicum-connected courses begin in the sophomore year. In the spring semester of the second year of study, candidates experience their first PDS placement and are in their elementary school setting for four hours a week. The following year, the candidates' junior year, brings much more practicum experience and responsibilities aligned with coursework. In the fall semester candidates are in a PDS classroom for five hours each week of the semester, and in the spring semester for seven and a half hours per week. Next comes the "professional year", which culminates in the full-time student-teaching semester, but prior to that, in the fall semester, candidates are enrolled in an integrated field practicum. It is during this semester, that the current study occurred. During this semester, all coursework is contained during certain days of the week for the cohort, so that they can be onsite in their PDS placement school for two full-time days per week, between 14–16 hours each week of the semester. Candidates are placed in classrooms with a mentor teacher as the teacher of record in an elementary grade, grades one through five. Due to the integrated nature of the practicum in this semester, candidates must balance many requirements linked to the four courses they are simultaneously taking on campus. One of those courses, the course focused on literacy assessment and instruction, is the course connected to this case study.

With this literacy course, all candidates are charged with administering a battery of early literacy assessments with a striving first-grade reader pre and post-intervention cycle during which candidates design and implement one-on-one diagnostic literacy lessons with their students. Early literacy assessments included Clay's (2013) Observation Survey, Bear, Invernizzi, Templeton and Johnson's Primary Spelling Inventory (2020) and the Diagnostic Assessment of Phonological and Phonemic Awareness (DAPPA), a locally developed school system screening tool based on Snider's (1997) assessment. The intervention framework itself is constructed around a lesson format providing opportunities for fluency reading practice, word study/phonics practice, embedded word study practice in reading connected text and authentic writing practice. Participants designed each lesson component informed by the literacy pre-assessments they conducted as well as informal assessments gathered during each lesson taught. Table 1 provides a timeline of the intervention cycle, while Table 2 illustrates the framework of the intervention lesson itself.

The literacy assessment course in which this study was contextualized had originally been designed with a clinical component and tutoring project. However, this aspect had never been examined for its effectiveness or impact on the pre-service teacher candidates. As I made changes to the course, I attempted to make the 1:1 intervention aspect more standardized with an aim to explore its impact on candidates. Other changes occurred related to the context which was not connected explicitly to my instruction and course design. The grade level of the intervention shifted from kindergarten to first grade and the semester the course is taught in shifted from spring semester junior year to Fall semester Senior year, allowing for the course to take place in

Intervention week number	Actions taken
1	Intervention students identified, parent/guardian permission secured, establish rapport with student
2	Secure parent/guardian permission, schedule intervention meeting times, begin literacy pre-assessments
3	Complete literacy pre-assessments
4	Intervention lessons (two per week), Conference with PDS mentor teacher
5	Intervention lessons (two per week)
6	Intervention lessons (two per week), lesson observation conducted
7	Intervention lessons (two per week), video-recording of lesson
8	Intervention lessons (two per week)
9	Finish intervention lessons and begin post-assessments
10	Finish post-assessments

Source(s): Table created by author

Table 1. Intervention assessment/instruction cycle timeline

	Lesson component with time allotment	Instructional focus
10 Minutes	Reading: Fluency practice	Familiar reading oral reading assessment on previous lesson's new book
5 Minutes	Word work/Phonics	*Select appropriate level of activity* (options below) Letter Identification (letter sorts) Making and breaking words, sound blending practice (known words) Making and breaking words using onsets and rimes Making and breaking words by analogy Fluent letter formation/HF word practice
10 Minutes	Writing	Writing a "story" (sentence) using interactive writing , (supports such as Elkonin boxes for phoneme segmentation) Assembling the cut-up story (optional)
5 Minutes	Reading: Application of word work/ phonics focus in connected text	Introduce and read new book

Source(s): Table created by author

Table 2. Intervention lesson framework

the semester in which candidates would be in PDS schools for two full days per week. I designed the intervention around a more structured framework with a set sequence and "must-have" components based on the science of reading. I instituted more formal and more frequent "check-ins" with candidates about intervention instruction. For example, candidates submitted structured progress reports and I gave feedback after every two lessons they taught. Progress reports detailed results of ongoing informal assessments and observations and how these data-informed teaching decisions in the moment and planning for the next intervention lesson.

Several study participants were placed in first-grade classrooms and worked with a student in their "home" placement classroom, but most participants traveled down the hallways from their "home" classroom to a first-grade room to meet their identified case study student. Case study intervention students are the first-graders identified by the PDS school's reading specialist, classroom teacher and administrator, as a student who would benefit from additional literacy support. Parent/guardian permission is obtained for pre-service teacher candidates to work with the student.

There were several significant ways in which collaboration between PDS partners was evident. Four structured experiences connected to course assignments fostered reflection and

instructional problem-solving around the candidates' work with their intervention students. First, a meeting/conference assignment between the candidate and first-grade teacher was conducted to share pre-assessment data and preliminary instructional planning. In some cases, candidates also met with their PDS Liaison (college faculty) and the school-based Reading Specialist. Candidates were responsible for scheduling and preparing for the conference by drafting data-informed instructional goals and sharing their thinking behind their lesson planning for the first few intervention sessions.

Another opportunity for collaboration was linked to a video-recorded lesson. This time, since video clips of teaching moves could be shared digitally, I, as well as the intervention student's teacher could offer feedback, ask questions and probe for reflection. The candidate was also observed by the PDS Liaison using a standardized lesson observation form closer to the end of the intervention, and if possible, a brief follow-up meeting including the first-grade teacher or Reading Specialist occurred. Finally, after candidates collected post-intervention data, they created a research poster for a final course assignment. Candidates presented these posters during a course meeting but were encouraged to share their digital posters with their PDS mentors and other stakeholders. At course completion, I compiled pre/post-assessment data for intervention students in tables for our PDS Liaison to share with PDS sites in a year-end report. Our PDS Liaison then met with each PDS Site Coordinator for a strategic planning meeting at the end of the school year. The information from the PDS stakeholders is synthesized by the PDS Liaison and then is presented to university partners to close the loop.

Procedures

After the semester began, the instructor obtained consent from the study participants. To maintain confidentiality about consent, the consent forms were collected, and participant numbers were assigned by someone other than the course instructor/researcher. As the semester neared its end, pre-service teacher candidates, wrapped up their intervention lessons and began post-assessments. The written reflection and focus group data collection procedures were completed after the approximately six-week cycle of intervention literacy lessons had been completed, but before the course concluded. The focus group was conducted during a normal class session meeting time; however, my colleague conducted the focus group based on four main researcher-designed questions and recorded the session via the institutional recording equipment. I chose a faculty colleague who is a part of our Education Department Unit, but who did not have undergraduate teaching responsibilities and thus was not well-known to the participants. I made this decision in order to maintain some distance between myself, as the course instructor and my students, so that they might be as candid as possible with the faculty member. Additionally, since this faculty member has extensive experience working with teaching candidates (now at the graduate level), they would be comfortable with the language and aim of the discussion prompts. The recordings were not shared until after the semester ended and that intention was relayed to the participants. I did not want results of the focus group to influence end of semester evaluations –of my students, or myself. The written reflection response was given during class time as well but was via an anonymous digital response in which participants replied using their assigned participant number only. No grade value was attached to the written response, although the opportunity to reflect on practice was encouraged.

Materials

Focus group. The focus group measure consisted of four main prompts:

(1) What aspects of the literacy assessment process do you feel most confident in? What parts of literacy assessment are most challenging or do you feel the least confident in?

(2) Compare your teaching skills in literacy at the beginning and end of the semester. What do you understand now that you did not before? What can you do now that you could not do before?

(3) What surprised you the most about your teaching ability in literacy working one-on-one with a striving reader this semester?

(4) What do you think was the most effective aspect of your instruction when working with your case study student? Why do you believe your student made progress?

The focus group facilitator was instructed to use these questions/prompts, but also to support participant clarification and elaboration if she deemed it necessary. The focus group occurred during a single class session and lasted approximately one hour. I myself was not present during the focus group.

Written reflection response. The written reflection response consisted of a single prompt: *Complete a self-reflection focusing on your developing literacy instruction abilities. How did your experiences assessing, designing instruction and implementing instruction for your identified struggling beginning reader this semester affect your teaching ability in literacy?*

Participants were allotted time during a regular class session during the last week of the semester to type their responses in a Google Form. Generally, participants wrote for fifteen-thirty minutes before they submitted their form.

Data collection and analysis

Qualitative data from the focus group transcript and the written reflections were processed using thematic analysis. Thematic analysis supports the researcher in identifying patterns and connections among the data which address the research questions and helps to interpret the data (Braun & Clarke, 2006). I implemented Braun and Clark's six-step framework (2006); Step 1: Become familiar with the data, Step 2: Generate initial codes, Step 3: Search for themes, Step 4: Review themes, Step 5: Define themes, Step 6: Write-up. Thematic analysis began with the written reflections first. After several readings, initial coding categories included: preparedness, practice/application, reflection, case study student progress, literacy knowledge/instructional skills, confidence and growth. Written reflections were parsed and inserted into a table with the initial codes as headings. The initial codes captured categories and these initial coding categories were then applied to the focus group transcripts. An additional code emerged during focus group analysis: challenges. As I searched for themes after all qualitative data had been captured in tables with coding categories, certain categories could be combined or collapsed resulting in primary themes and secondary themes. For instance, preparedness, confidence and growth categories often had overlapping ideas and examples, which I designated as a primary theme of "positive attitudes around developing teaching ability". Table 3 illustrates the primary and secondary themes which emerged from the focus group and written reflection data sources.

Findings

The data show that the experience of conducting a one-on-one intervention with a striving reader impacted pre-service teachers' self-efficacy positively. The interaction between course content and the opportunities for authentic application of the content in Professional Development School classrooms was illustrated to be an incubator for developing a growing sense of positive attitudes around literacy instruction abilities for the pre-service teachers in the study.

The thematic analysis of qualitative data revealed *what* pre-service teachers saw as the results of their semester implementing a literacy intervention, *why* they believed those results

	Primary themes	Secondary themes
What?	Positive attitudes around developing teaching ability	
		Confidence/Preparedness Growth challenges
Why?	Reasons for positive change and growth	
		Case study student progress Reflection
How?	Application of teaching skills in a clinically-rich environment	
		Authentic practice experiences Increase in literacy knowledge and literacy instruction skills

Source(s): Table created by author

Table 3. Thematic analysis results: Primary and secondary themes

occurred and their understanding of *how* those results were garnered. While Table 3 shows the breakdown of primary themes and the secondary themes clustered within the primary themes, Table 4 illustrates the overall frequency of statements related to each secondary theme as well as the comparison of the frequency of statements made in the written reflection responses versus the focus group discussion transcripts.

Positive attitudes around Developing Teaching Abilities

When defining the primary theme of "Positive Attitudes around Developing Teaching Abilities", statements referencing change from the beginning to the end of the semester or change from previous semesters were clustered. Many of the statements in this theme contained secondary themes around feelings of preparedness, an increase in confidence, or an awareness of growth in teaching ability over time. Overall, statements on this theme were more prevalent in the written reflection and, interestingly, the secondary theme of "challenges" only emerged in the focus group proceedings. Typical statements that are examples in this theme from the written refection include references to perceived clear changes in self-efficacy such as, "I don't know what was so different about this semester

Secondary themes	Total frequency of representation	Frequency of representation in written reflections	Frequency of representation in focus group responses
Authentic practice experiences	14	9	5
Confidence/Preparedness	13	9	4
Increase in Lit. Knowledge and Lit. Instruction Skills	9	6	3
Case study student progress	8	6	2
Growth	7	5	2
Reflection	6	2	4
Challenges	5	0	5

Source(s): Table created by author

Table 4. Comparison of secondary themes in written reflections and focus group responses

specifically, but something clicked for me and I feel much more excited rather than nervous to start teaching!". Statements often referred to units of time and changes that occurred over time, for example, "Going into this year, I did not feel confident or prepared in my teaching skills in general, but I am leaving the semester feeling extremely prepared and ready to start student-teaching and working."

> At the beginning it was a little hard, it was like being in fog. However, after a little bit of time I slowly started to understand the meaning behind different tests and how to use them. By the end of the case study, I felt very comfortable giving assessments and planning my intervention lesson. It made sense. I feel this also gave me a great perspective on how students learn literacy. I feel I grew a lot during this semester in terms of teaching ability.

In the focus group, verbal responses echoed these perceptions, especially in response to the second prompt. One pre-service teacher replied:

> A big part of my growth this semester is the ability to make instructional decisions based on student performance. I just feel like I haven't had the opportunities to really do that before. Taking their progress and using it to plan for the next lesson was a light bulb experience. I mean that's what we're going to have to do. I feel like I get that now.

Another voice added immediately after:

> I would agree. This was responsive teaching, and it was way more than even using student performance to plan the next lesson because there were many times that I had to stop what I had planned and was doing right in the moment and change direction because of what I observed. I don't think I was able to do that before.

Pre-service teachers were able to articulate changes in self-efficacy as a result of their experiences during the semester.

However, complicating the clinically-rich experience, was the backdrop of Covid and the interrupted and challenging instruction of the previous Kindergarten year for the first-graders pre-service teachers were working with. It was clear that part of the "Positive Attitudes around Developing Teaching Abilities" theme involved overcoming novel difficulties. The focus group responses provided an explanation:

> Covid really affected first graders and how they functioned this Fall. Many had not been in school at all for Kindergarten even when the schools went to hybrid. You could tell that they needed a lot of support with attention and focusing and how to be a part of a classroom. So, I think sometimes we were dealing with unique behaviors. Students just didn't seem to have as much learning experiences. We really had to adapt to our students as they were adapting to being in school.

Five pre-service teachers spoke to the Covid-related challenges, which ranged from student absences and the logistical difficulties that posed, to behavioral and instructional obstacles.

Reasons for positive change and growth

If positive changes in self-efficacy occurred, *why*, and for what reasons, did pre-service teachers offer for that change? Themes around the specific context of the course-required intervention and related tasks, assignments and activities surfaced. Specifically, participants referenced the progress their intervention student made and the built-in opportunities for reflection on teaching and learning as to underlying reasons perceived self-efficacy shifted in a positive direction. For example, take this statement from a participant's written reflection, "At first I was nervous with where my case study student started, but the growth that he was able to accomplish not only proved how much intervention really works but also how much

I supported that student's growth". The aspect of measuring case study student progress was something pointed to in the focus group as well:

> Well, even towards the middle of my intervention, I wasn't seeing much change in my student. I kept thinking, 'Man, I hope this is working' because sometimes I just felt like I was working blind - like I didn't know if I was being effective. And you know, by the time I started my post-assessments, I couldn't believe it. You know she is so much better, it was like 'wow'! On some assessments she like doubled her score. It just kind of blew me away. I didn't think I'd be *that* effective. I thought there'd be like no change.

Another participant chimed in next with:

> I agree. There were so many times during lessons I thought 'Oh boy, I think this is going in one ear and out the other, I'm not going to see progress'. But when I did the post-tests his scores were way better than I anticipated. So, I thought, 'maybe I did make an impact' -it's just not something you can always see on a daily basis.

Comments about the value of reflection as an ingredient for successful teaching were plentiful and indicated a reason for perceived efficacy. A participant wrote:

> As I worked with my student, I was able to use literacy assessments to tailor instruction based on my student's needs. I was also able to use my instruction and my student's response to instruction to facilitate even more instruction that would cater to the student's needs. This process has warranted a lot of reflection (before, during, and after instruction) which is such an important aspect of teaching.

During the focus group, of interest were several comments centering on reflection about getting to know the whole child and building relationships, as in:

> Looking back, I think what impacted my student making the progress the most was just our relationship. I think I did a great job getting to know her and asking questions and figuring out what made her tick. I could tell as the relationship grew, she was more engaged and more willing to work hard and try difficult things. We were comfortable with each other and trusted each other. It was a special thing.

Reasons for positive change in self-efficacy centered on aspects of the clinical experience which allowed pre-service teachers to perceive tangible results of instruction and reflect on the path to achieving those results.

Application of teaching skills in a clinically-rich environment

The nuts and bolts of *how* exactly self-efficacy may have been increased were highlighted in the qualitative data sources in several ways. A primary theme that surfaced was the application of content in the participants' practicum settings. Simply put, the opportunity to "live" the literacy assessment/instruction cycle surpassed even the most active university-based learning. In fact, in looking at the frequency of statements related to the secondary theme of authentic practice experiences, this category had the highest number of explicit statements about this theme overall (14), nine found in the written reflections and five in the focus group conversations. The secondary themes of authenticity and increased knowledge and skills in literacy instruction were well-represented in the data, the first and third highest frequency categories. Take this example from a written reflection, "Being able to take what I have learned and apply it with real-world instruction has only deepened my understanding and made me feel more prepared as an educator". The focus group discussion illustrated these themes even more powerfully:

> Something I noticed in my lessons with my case study student was that when we would learn so many strategies in class and it would seem so overwhelming, but when I was

> really observing my student and knew I had to make instructional choices based on what they were doing, I was able to make a decision and see how it played out. I felt really good about that. It surprised me that in the moment, I could apply what we learned in class.

Another participant then commented:

> A lot of the tools we knew about from class, but until you use it you don't know what you know how to do. And then, making those decisions became like a habit. So that changed for me throughout the semester.

Chances for authentic application of developing literacy instructional skills and content knowledge can influence pre-service teachers' perception of their literacy teaching abilities. The ability to observe an individual reader intently, respond in the moment instructionally and then see immediate results of the instruction could occur with greater frequency in the 1:1 intervention context than a whole class environment.

Differences between focus group and written reflection responses

There were some nuanced differences between the two types of qualitative responses in the Focus Group versus the Written Reflections. For example, even though the secondary theme category of "Authentic Practice Experiences" had the most responses overall (23% of all responses over seven categories), in both the written reflection (24%) and focus group (20%), the second highest frequency category, "Confidence/Preparedness" showed slightly more frequent responses coming from the written responses (24%) than the focus group (16%). In contrast, the focus group responses had more conversation around the category of "Reflection" (16%), than was seen in the written reflections (5%). Interestingly, the most striking difference between the two reflective tasks was around the secondary theme of "Challenges". Specific reflection around challenges was not observed in the written reflections, but did come up in the focus group discussion, with 20% of the thematically coded comments falling under that theme.

Discussion and implications

In this case study, the qualitative data collected in pre-service teachers' written reflections and focus group participation indicated growth in attitudes surrounding literacy teaching self-efficacy. There were subtle differences between focus group and written reflection responses. For example, references to "challenges" cropped up more frequently in the focus group discussion than in the written reflection. In a group setting, participants' responses could be influenced by the responses of their peers, thus it is understandable that a single response can create an agreement effect in which others chime in with related responses. This raises some interesting questions about the use of reflection practices of multiple modalities and what types of reflection vehicles might net differing or more beneficial insights affecting pre-service teacher self-efficacy.

The results of this study align with a body of research suggesting that coursework closely connected to strong clinical field experience factors into increased perceived feelings of competence and confidence for pre-service teachers (Brown *et al.*, 2019; Darling-Hammond & Hyler, 2020; Livers *et al.*, 2021; Radović *et al.*, 2021). The findings add to the literature which points to fostering opportunities to practice newly acquired skills in authentic contexts may increase pre-service teacher self-efficacy (Hedrick *et al.*, 2000; Massey, 2003). However, the 1:1 tutoring context added to the equation of clinical field experience could have a magnifying effect on pre-service teacher self-efficacy (Kindle & Schmidt, 2011; Hoffman *et al.*, 2016; Rosenthal *et al.*, 2017), This matters because faculty in teacher preparation programs need to

be informed about successful and evidence-based practices as the expectations and stakes for new teachers entering the profession are at an all-time high. The PDS model of school-university collaboration provides for settings conducive to clinically-rich educator preparation programs which may be of increasing importance with teacher shortages becoming critical.

Strong clinically-rich experiences married with opportunities to increase awareness of growing knowledge and skills in literacy instruction through embedded reflection could be an important contribution to increasing pre-service teacher self-efficacy. Adding to the literature about best practices in debriefing after clinical experiences is a possible future research direction. Fox *et al.* (2011) examined what both pre-service teachers and in-service teachers valued most in different types of reflective practices. They found that while pre-service teachers placed the most value on written reflections, more experienced teachers in the field viewed structured "collective conversations" as the most valuable type of reflective practice. These findings make sense as a function of the types of reflection most often engaged with in these two groups of educators. Pre-service teachers write reflections as part of coursework assignments and are thus practiced at it. However, if in-service teachers see dialog as benefitting reflection, it may be worthwhile for teacher educators to increase practice in reflective conversations (similar to this study's focus group discussion). Even more valuable could be opportunities in the PDS partnership for pre-service and in-service teachers *together* engaging in collective conversations of critical reflection. Another way of looking at the written versus verbal reflection options is viewing written reflection as a possible springboard to verbal reflective dialog, a reflective processing tool that could deepen the ensuing collective conversations.

The methodology of this study was limited by the small sample size and weak participant response on the *Pre-Service Teacher Literacy Instruction Scale*. As in any case study, it was not the intention to produce generalizable findings, but instead to explore and describe my hypothesis that pre-service teachers, through observing their instructional efficacy in authentic and measurable ways, could positively affect their self-efficacy.

Conclusion

This study shed light on factors that pre-service teachers perceive as affecting growth in literacy teaching as they designed and implemented one-on-one literacy intervention lessons to beginning readers. Qualitative data from written reflections and focus group discussion revealed positive change in literacy teaching self-efficacy at the end of the semester. Themes pointing to the importance of authentic practice experiences, observing student growth and opportunities to reflect on the application of teaching skills, surfaced in the qualitative data sources. Overall, the hypothesis that the particular PDS context in which pre-service teachers carried out their literacy interventions could boost pre-service teacher beliefs that they can impact desired literacy outcomes in first-grade students identified as needing support was confirmed.

Although the PDS relationship in the study's context is strong, lessons learned from this investigation include opportunities to increase interaction around the course and practicum settings examined in the study. Since our current PDS model uses a PDS Liaison for direct pre-service teacher oversight, observation and support, my contact with pre-service teachers and their mentor teachers occurs primarily on campus, away from PDS school sites. Educator preparation programs can and should work creatively around faculty teaching loads to ensure instructor interaction with PDS partners can occur on site regularly. Especially in a time of focused change in elementary literacy assessment and instruction, educator preparation programs need to renew commitment to NAPDS Essentials 2: Clinical Preparation and Essential and 4: Reflection and Innovation. Pre-service teachers need

clinical experiences in which in-service and university instructors are responding to the most current research in literacy teaching and learning. Pre-service teachers need coursework which provides space for the most effective vehicles for reflection on instruction.

In the future, opportunities to apply different types of authentic instructional applications available in PDS contexts could be explored. Since the aspect of observing and measuring student progress seemed to be one lens through which pre-service teachers viewed their efficacy, further investigations focusing on other assessment-instruction cycles could provide additional insights. Clinically-rich field experiences can make a difference in the literacy instruction self-efficacy of pre-service teachers, which will only benefit their future students as readers and writers.

References

Ball, D. L., & Forzani, F. M. (2009). The work of teaching and the challenge for teacher education. *Journal of Teacher Education*, *60*(5), 497–511. doi: 10.1177/0022487109348479.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, *84*(2), 191–215. doi: 10.1037/0033-295X.84.2.191.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, *4*(3), 359–373. doi: 10.1521/jscp.1986.4.3.359.

Bear, D., Invernizzi, M., Templeton, S., & Johnston, F. (2020). *Words their way: Word study for phonics, vocabulary, and spelling instruction* (7th ed.). Upper Saddle River, NJ: Pearson Education.

Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, *39*(2), 175–189. doi: 10.1080/03057640902902252.

Boothe, A. (2022). Model classrooms: One approach to teacher shortages. *The Journal of Advancing Education Practice*, *3*(1). Available from: https://openriver.winona.edu/jaep/vol3/iss1/7

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. doi: 10.1191/1478088706qp063oa.

Brown, A. L., Myers, J., & Collins, D. (2019). How pre-service teachers' sense of teaching efficacy and preparedness to teach impact performance during student teaching. *Educational Studies*, *47*(1), 38–58. doi: 10.1080/03055698.2019.1651696.

Clay, M. (2013). *An observation survey of early literacy achievement* (3rd ed.). Portsmouth, NH: Heinemann.

Corkett, J., Hatt, B., & Benevides, T. (2011). Student and teacher self-efficacy and the connection to reading and writing. *Canadian Journal of Education*, *34*(1), 65–98. Available from: https://journals.sfu.ca/cje/index.php/cje-rce/article/view/355

Darling-Hammond, L., & Hyler, M. (2020). Preparing educators for the time of COVID. . . and beyond. *European Journal of Teacher Education*, *43*(4), 457–465. doi: 10.1080/02619768.2020.1816961.

Fox, K. R., Campbell, M., & Hargrove, T. (2011). Examining reflective practice: Insights from pre-service teachers, in-service teachers and faculty. *Journal of Research in Education*, *21*(2), 37–54. Available from: https://files.eric.ed.gov/fulltext/EJ1098417.pdf

Hammerness, K. M., Darling-Hammond, L., & Bransford, J. (2005). How teachers learn and develop. In Darling-Hammond, L., & Bransford, J. (Eds.), *Preparing teachers for a changing world: What teachers should learn and be able to do* (pp. 358–389). San Francisco, CA: Jossey-Bass.

Hedrick, W. B., McGee, P., & Mittag, K. (2000). Pre-service teachers learning through one-on- one tutoring: Reporting perceptions through email. *Teacher and Teacher Education*, *16*(1), 47–63. doi: 10.1016/S0742-051X(99)00033-5.

Helfrich, S. R., & Bean, R. M. (2011). What matters: Preparing teachers of reading. *Reading Horizons*, *50*(4), 241–262. Available from: https://scholarworks.wmich.edu/reading_horizons/vol50/iss4/4

Hilaski, D. M., Maxwell, N., & Jones, J. (2021). It opened my eyes...: The potential of an embedded clinical experience in teacher preparation. *Reading Horizons: A Journal of Literacy and Language Arts*, *60*(2), 22–49. Available from: https://scholarworks.wmich.edu/reading_horizons/vol60/iss2/3

Hoffman, J. V., Wetzel, M. M., & Peterson, K. (2016). Approximating literacy practices in tutorials: What is learned and what matters for teacher preparation. *Literacy Research and Instruction*, *55*(3), 183–208. doi: 10.1080/19388071.2015.1128023.

Hoffman, J. V., Svrcek, N., Lammert, C., Daly-Lesch, A., Steinitz, E., Greeter, E., & DeJulio, S. (2019). A research review of literacy tutoring and mentoring in initial teacher preparation: Toward practices that can transform teaching. *Journal of Literacy Research*, *51*(2), 233–251. doi: 10.1177/1086296X19833292.

Hoy, A. W., & Spero, R. B. (2005). Changes in teacher efficacy during early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, *21*(4), 343–356. doi: 10.1016/j.tate.2005.01.007.

International Literacy Association and National Council of Teachers of English (2017). *Literacy teacher preparation [Research advisory]*. Newark, DE; Urbana, IL: Authors. Available from: https://www.literacyworldwide.org/docs/default-source/where-we-stand/ila-ncte-teacher-prep-advisory.pdf

Kent, A. M., Giles, R. M., & Hibberts, M. (2013). Preparing elementary educators to teach reading: An exploratory study of preservice teachers' evolving sense of reading efficacy. *International Journal for the Scholarship of Teaching and Learning*, *7*(2), 1–16, Article 23 doi: 10.20429/ijsotl.2013.070223.

Kindle, K. J., & Schmidt, C. M. (2011). Outside in and inside out: Using a case study assignment in a reading methods course. *Teacher Education Quarterly*, *38*(3), 133–149. Available from: https://files.eric.ed.gov/fulltext/EJ940640.pdf

Livers, S. D., Zhang, S., Davis, T. R., Bolyard, C. S., Daley, S. H., & Sydnor, J. (2021). Examining teacher preparation programs' influence on elementary teacher candidates' sense of preparedness. *Teacher Education Quarterly*, *48*(3), 29–52. Available from: https://files.eric.ed.gov/fulltext/EJ1328003.pdf

Massey, D. (2003). Pre-service teachers as tutors: Influences of tutoring on whole-class literacy instruction. In *National Reading Conference Yearbook* (Vol. 52, pp. 259–271).

Moats, L. C. (2001). *Improving reading by preparing teachers*. Washington, DC: Issue Brief. National Governors' Association. Center for Best Practices. Document number ED 463 243. SP 040 400.

Mojavezi, A., & Tamiz, M. P. (2012). The impact of teacher self-efficacy on the students' motivation and achievement. *Theory and Practice in Language Studies*, *2*(3), 483–491. doi: 10.4304/tpls.2.3.483-491.

Morris, D. B., Usher, E. L., & Chen, J. A. (2017). Reconceptualizing the sources of teaching self-efficacy: A critical review of emerging literature. *Educational Psychology Review*, *29*(4), 795–833. doi: 10.1007/s10648-016-9378-y.

National Association for Professional Development Schools (2021). *What it means to be a professional development school: The nine essentials* (2nd ed.). National Association for Professional Development Schools. Available from: https://napds.org/wp-content/uploads/2021/05/What-it-Means-to-be-a-PDS-Second-Edition-2021-Final.pdf

National Reading Panel (2000). *Report of the National Reading Panel: Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Washington, DC: National Institute of Child Health and Human Development. Available from: https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf

Nickel, J., & Hughes, S. F. (2020). Learning to teach reading responsively through tutoring. *Reading Horizons: A Journal of Literacy and Language Arts*, *59*(3), 21–40. Available from: https://scholarworks.wmich.edu/reading_horizons/vol59/iss3/3

Radović, S., Hummel, H. G. K., & Vermeulen, M. (2021). The challenge of designing 'more' experiential learning in higher education programs in the field of teacher education: A systematic review study. *International Journal of Lifelong Education*, *40*(5-6), 545–560. doi: 10.1080/02601370.2021.1994664.

Rosenthal, J. L., Paterson, W., Donnantuono, M., & Flynn, C. (2017). Children's literacy growth, and candidates' and teachers' professional development resulting from a PDS-Based initial certification literacy course. *School-University Partnerships*, *10*(1), 57–65. Available from: https://files.eric.ed.gov/fulltext/EJ1147238.pdf

Snider, V. E. (1997). The relationship between phonemic awareness and later reading achievement. *Journal of Educational Research*, *90*(4), 203–211. doi: 10.1080/00220671.1997.10544574.

Tschannen-Moran, M., & Hoy, H. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783–805. doi: 10.1016/S0742-051X(01)00036-1.

Woolfolk, A. (1998). *Educational psychology* (7th ed.). Boston: Allyn and Bacon.

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