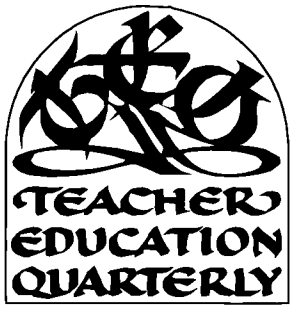

Examining the Impact of an Embedded, Multisemester Internship on Teacher Education Candidates' Teacher Self-Efficacy

S. Michael Putman, Anne H. Cash, & Drew Polly

Abstract

Teacher self-efficacy is a construct that exerts a powerful influence on the behaviors of teachers. Yet, few studies have been conducted examining the impact of contextual structures within educator preparation programs on the development of general and domain-specific teaching efficacy. This study investigated the impact of a yearlong internship for elementary education majors along several dimensions of teacher self-efficacy, including self-efficacy for classroom management, student engagement, and instructional strategies. The results indicate that candidates who participated in the internship demonstrated increases in efficacy that were significantly different in comparison to candidates who completed the traditional teacher education program. Implications are discussed as related considerations for teacher education programs as they seek to structure clinical experiences to

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maximize opportunities for mastery experiences and relationship building, thereby maximizing growth in candidates' teaching self-efficacy.

Introduction

The current educational context is characterized by unprecedented attention on teacher preparation. Educator preparation programs (EPPs) face increased scrutiny to demonstrate effectiveness for producing teachers who positively impact student learning while simultaneously balancing the intricacies associated with the changing composition of today's student population (Darling-Hammond, 2017). Within this context, investigations of the structural features within EPPs that are powerful for preparing teacher candidates (TCs), including coursework, clinical experiences, and school partnerships, are increasingly necessary (see Goldhaber, 2019). The result has been an expansion of programmatic development as EPPs consider how various facets of programs can be linked together to prepare TCs to develop the knowledge, skills, and dispositions to teach successfully within today's classrooms.

While EPPs' focus has been markedly fixed on the development of pedagogical knowledge and skills, understanding the beliefs of TCs remains important given their association with practices (Pajares, 1992; Poulou et al., 2019). One belief that has been recognized as influential due to its implications for practice is teacher self-efficacy (TSE). TSE has been associated with a number of positive instructional outcomes as well as a stronger commitment to the profession (see Chesnut & Burley, 2015; Poulou et al., 2019). However, TSE has been characterized as a complex and multifaceted construct, and researchers have noted the importance of examining the programmatic features of EPPs that contribute to the development of TSE in TCs (Clark & Newberry, 2019; Klassen & Tze, 2014).

The current investigation contributes to the literature base on the development of TCs' TSE through an examination of an embedded yearlong internship for undergraduate elementary education TCs. The program, which we refer to as the City Schools Initiative (CSI), was characterized by a strong school–university partnership, coherence between coursework and clinical experiences, and the development of a community of practice (CoP) among stakeholders. This article examines whether, and to what extent, participation in CSI was associated with differences in the perceived TSE, both general and domain-specific, between CSI TCs and those within the university's traditional program.

Theoretical Framework

Social Cognitive Theory

Bandura's (1986) social cognitive theory posits that individual behavior is determined by the interaction of personal, behavioral, and environmental factors. Within the transactional view of the theory, these factors are mutually influential and demonstrate an effect on an individual's perception of their abilities. These

perceptions of ability are more commonly referred to as *self-efficacy*, which Bandura defined as "what you believe you can do with what you have under a variety of circumstances" (p. 37). Human agency, or the intentional completion of actions, is influenced by self-efficacy within an individual's choice of tasks, effort, and persistence (Bandura, 1986). Specifically, increased efficacy beliefs will generally lead to greater effort and persistence and high levels of performance, whereas poor self-efficacy may cause individuals to give up easily or potentially not begin an activity due a lack of confidence for successful performance (Bandura, 1997).

Bandura (1986) attributed the development of self-efficacy to four primary sources: mastery experiences, vicarious experiences, social persuasion, and physiological factors. All four of these sources can be present within clinical experiences associated with EPPs. For example, mastery experiences are present when candidates directly engage in classroom activities; their efficacy beliefs are shaped based on feelings attributed to the success or failure of each endeavor. Vicarious experiences occur when TCs observe others' work within the classroom. The power of a vicarious experience is related to the perceived similarity of the model to the observer (Bandura, 1997). Social persuasion includes feedback, as TCs may receive from clinical educators (CEs), supervisors, and peers, that results in changes in beliefs relative to the performance of a particular action. The perceived credibility of the individual providing the feedback represents a significant factor in the overall impact. Finally, physiological factors are physical symptoms of the body, for example, increased heart rate, that are interpreted based on the individual's level of efficacy related to the event and are unrelated to actual ability.

Theory of Situated Learning

Situated learning theory is built on the premise that learning is a social endeavor that occurs best within authentic contexts where knowledge is directly encountered and applied (Lave & Wenger, 1991). A CoP is an important facet of situated learning theory. A CoP has been characterized as a group of people who share a joint domain, for example, an interest or concern, and develop their knowledge or expertise relative to this domain through ongoing engagement within a process of collective learning. Within the community, there is an emphasis on participants co-constructing knowledge through dialogue within the sustained activity, which can evolve as the context changes and as individuals collaboratively complete tasks. The resulting interactions among participants facilitate the creation of relationships and trust as well as an appreciation of difference and respect for others. Notably, learning growth is maximized when membership reflects community members who have had diverse experiences; hold divergent patterns of thought; and have access to a wide range of ongoing activity, information, and resources (Lave & Wenger, 1991).

Identity development is an important outcome for individuals who participate in a CoP. Initially, newcomers operate on the periphery of the community, a concept

referred to as *legitimate peripheral participation*. Over time, the participants build identities based on roles they adopt in support of the goals established by the group and the interactions that occur with group members, building competencies and knowledge within the process. This leads to movement from "peripheral participation" to increased activity and engagement, with the eventual achievement of "full participation" as a central member within the community and an enhanced sense of belonging and identity (Lave & Wenger, 1991). Several elements consistent with situated learning theory and CoP were present within the current investigation, including placing candidates in authentic sites for learning (schools) where they learned under the guidance of experienced mentors (CEs) and developed relationships with other candidates in a cohort.

Synthesis of the Literature

Amid increased scrutiny, researchers have advocated for attention toward the features of EPPs that contribute to TCs' preparation to enter the complex and challenging environment of today's schools (Burns & Badiali, 2018). Research has clearly shown that the impact of EPPs is maximized through (a) a strong curriculum informed by theories of effective pedagogy (Darling-Hammond, 2010, 2017), (b) systematic and coordinated opportunities to engage in extended clinical experiences in authentic contexts (Putman & Handler, 2016; Snow et al., 2016), (c) coherence between practices observed in clinical experiences and information presented in coursework (Burns & Badiali, 2018), and (d) strong relationships between CEs and university-based faculty (Darling-Hammond, 2010).

Accordingly, EPPs should include structures that empower TCs to apply knowledge within the day-to-day tasks and activities of teachers in classroom settings (Putman & Handler, 2016). When programs are created for TCs to engage in supported, authentic experiences aligned with EPP coursework, TCs are more prepared to teach (Snow et al., 2016). Importantly, these experiences in the classroom are also impactful on TCs' beliefs. Educational theorists have noted the powerful influence of beliefs on teachers' behaviors and decision-making as they mediate the relationship between knowledge and action (Klassen & Tze, 2014; Pajares, 1992). One such belief, TSE, has consistently been noted as especially influential.

Teacher Self-Efficacy

Derived from Bandura's (1986) social cognitive theory, TSE is associated with a teacher's belief in their ability to positively affect student learning and behavior. In their seminal work, Tschannen-Moran and Woolfolk Hoy (2001) stated, "A teacher's efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning" (p. 783). TSE has been characterized as complex and multifaceted; yet, research has proven its influence on teachers' planning, instructional decisions, and professional practices (Putman,

2012; Klassen & Tze, 2014). For instance, teachers who demonstrated high levels of efficacy were more likely to implement novel pedagogical methods (Klassen & Tze, 2014) and to differentiate instruction (Poulou et al., 2019; Suprayogi et al., 2017). Efficacious teachers were also more likely to lead the classroom effectively. This includes maintaining student engagement (Chao et al., 2017) and creating positive learning environments (de Jong et al., 2014). Each of the aforementioned positive attributes associated with high levels of efficacy can be linked to improvements in student achievement (Klassen & Tze, 2014). On the other hand, low self-efficacy has been associated with instructional strategies that were primarily teacher centered with little differentiation, ineffective classroom management, and negative views toward student behavior (Tschannen-Moran & Woolfolk Hoy, 2001; Zhukova, 2018).

One focus of research on TCs and TSE has been the impact of clinical experiences, which provide opportunities for mastery and vicarious experiences. When TCs were engaged in authentic, school-based situations, stronger efficacy was established (Putman, 2013; Reddy et al., 2020). Yet, multiple considerations must be examined to maximize the benefits associated with field experiences, including duration, opportunities for practice, and guidance (Bartolome, 2017; Darling-Hammond, 2017). EPPs generally recognize the paradigm that more is better in regard to clinical experiences, and previous investigations have confirmed that TCs who spent a year in a student teaching placement were more efficacious than those who spent a single semester in their student teaching classroom (Colson et al., 2017). While completing their clinical experiences, when TCs were not provided sufficient opportunities to practice in a "real" classroom, they were more likely to hold a positive, yet unrealistic, sense of efficacy (Cunningham et al., 2004). Subsequently, as TCs began teaching, they experienced a decrease in their TSE (Woolfolk Hoy & Spero, 2005).

Within clinical experiences, TSE is further impacted when TCs are provided with scaffolded support and feedback from CEs and university faculty. Research has suggested that TCs become more confident, that is, efficacious, through opportunities to discuss and reflect on practices, experiences, and observations (Hawkman et al., 2019; Thomson et al., 2020; Whitaker & Valtierra, 2018). This dialogue and communication are representative of social persuasion, which Bandura (1997) noted as being influential for shaping self-efficacy. The overall impact of social persuasion is predicated on familiarity and trust with the individual providing the feedback. These attributes can be established through relationship building, as associated with CoPs.

Community of Practice

A CoP has been defined as "a self-selected purposeful structure whereby educators regularly come together to work for the collective benefit of students" (Lave & Wenger, 1991, p. 5). As they relate to teacher education, CoPs have been used to build relationships among TCs and CEs, providing a structure through which partici-

pants can interact in mutually beneficial ways, including examinations of complex teaching practices (Le Cornu & Ewing, 2008; Sim, 2006). Importantly, TCs no longer passively participate in field experiences, as they are expected to be active participants in the CoP and to take some responsibility for their learning and reflection. Beck and Kosnik (2001) characterized CoPs as including extensive collaboration and shared understanding of practices among stakeholders. This shared understanding within supportive experiences provides TCs with opportunities to understand the tasks and vocabulary within the context of practice and to accept feedback directly, developing the "shared repertoire" necessary to engage in full participation within a CoP (Lave & Wenger, 1991). Subsequently, feedback and mentorship within opportunities to actively construct and reflect on their pedagogical understandings in this supportive environment have been shown to positively impact the TSE of candidates (Beck & Kosnik, 2001; Ekici, 2018; Le Cornu & Ewing, 2008).

Connectedness to peers within a CoP is also an important contributor toward development of TSE. Typically, within a teacher education program, the CoP is formed using a cohort, which occurs when TCs complete coursework as an intact group. According to Beck and Kosnik (2001), the intent of the cohort is to establish "conditions conducive to mutual support . . . and modeling a communal, collaborative approach to teaching and learning" (pp. 925–926). Through the cohort, TCs are able to share information about experiences, offer opinions, and provide information to each other. Within the resulting conversations, TCs come to understand that they often face similar circumstances, including challenges and opportunities (Ekici, 2018). As feelings of connection and belonging are developed, TCs in the cohort scaffold and refine each other's knowledge and understanding of pedagogy, content, and practices (Dinsmore & Wenger, 2006; Grudnoff, 2011; Ussher, 2010). Subsequently, the dialogue and informative feedback have been shown to enhance TSE (Ekici, 2018; Kim & Cho, 2012).

Current Study

When teacher education programs provide TCs with meaningful clinical experiences that are aligned with coursework and focus on the development of relationships among stakeholders, there is significant potential to produce TCs with a strong and accurate sense of teaching efficacy. Answering calls for additional research to continue to improve our knowledge of TCs' efficacy (Clark, 2020), the purpose of this mixed methods study was to compare the efficacy of teacher candidates participating in the CSI (CSI TCs) with teacher candidates from a traditional program (TRAD TCs). It was hypothesized that the key organizational features for the experience would be influential for improvements in CSI TCs' overall teaching self-efficacy as well as their efficacy associated with domain-specific attributes, including instructional strategies, student engagement, and classroom management. The research questions guiding the inquiry included the following:

1. What is the difference in perceived general teaching self-efficacy between TCs who participated in CSI and TCs who participated in the traditional student teaching internship?

2. What is the difference in perceived self-efficacy for instructional strategies, student engagement, and classroom management between TCs who participated in CSI and TCs who participated in the traditional student teaching internship?

3. What contextual elements present within CSI contributed toward candidates' perceptions of their preparation?

Methods

Participants

Participants included 84 TCs enrolled in the final semester of an initial licensure program in elementary education at a public university located in the southeastern United States. In total, we considered the perceptions of 18 CSI TCs and 66 TRAD TCs. Although background information about the TCs and why they may or may not have volunteered to participate in CSI was limited, we compared the two groups in terms of sex, grade point average (GPA) at admission, and status as a person of color (see Table 1). The two groups were not significantly different on any of these indicators.

Context

University Educator Preparation Program. The traditional program of study within the EPP consists of 60 credit hours completed over four semesters, with clinical experiences included in each semester. The final two semesters, referred to as the yearlong internship (YLI), were the focus of this investigation. In the first semester, designated as YLI-1, TCs engage in coursework focused on advanced instructional design, assessment and differentiation, classroom management, and equity and diversity. In YLI-1, TCs receive a clinical placement by the fourth week of the semester and are expected to spend 6–8 hours in the classroom each week for approximately 8–12 weeks, accumulating 70–80 clinical hours over the course of the semester. Within these clinical experiences, candidates teach a minimum of three lessons, receiving informal feedback from CEs. In addition, TCs examine facets of the classroom associated with concepts introduced in coursework, including the learning environment, instructional design, and assessment, submitting artifacts to demonstrate understanding of course content and its relationship with classroom instruction. In YLI-2, which represents the semester of full-time student teaching, students are required to be in the classroom for 5 full days per week for 15 weeks, gradually assuming all teaching responsibilities.

City Schools Internship. The CSI model is a modified version of the traditional program. It was developed to incorporate the tenets of effective teacher education

principles and practices associated with field experiences and instructional CoPs. The City School District (pseudonym) was specifically identified as a partner for the clinical experiences given a long-standing partnership between the EPP and district and sustained relationships between EPP faculty and district administrators and teachers.

Prior to commencement of the YLI-1 semester, administrative meetings were held to identify and formalize the organizational details of the partnership, including the selection of the clinical sites and candidate placements. Meetings between faculty and CEs were then held to develop shared goals and understandings around pedagogical strategies and principles. Instructional design requirements for the university were also presented, and plans were made to ensure that the CSI TCs could develop instructional plans under joint guidance of the university faculty member and CE. Organized as such, the goal was for CSI TCs to see the assignments as relevant to practices observed in the schools.

Table 1

Candidate Characteristics and General Teaching Self-Efficacy

	TRAD[a]			*CSI*[b]		
Parameter	*N (%)*	*M*	*SD*	*N (%)*	*M*	*SD*
Candidate characteristic						
Candidate of color	14 (21.21)			3 (16.67)		
Male	3 (4.55)			1 (5.56)		
Admit GPA		3.40	0.41		3.51	0.35
Time 1 TSES						
Overall self-efficacy (12 items)		6.54	1.12		6.65	1.04
Self-efficacy in student engagement (4 items)		6.53	1.13		6.64	1.11
Self-efficacy in instructional strategies (4 items)		6.51	1.15		6.56	1.13
Self-efficacy in classroom management (4 items)		6.59	1.24		6.73	1.09
Time 2 TSES						
Overall self-efficacy (12 items)		6.89	1.18		7.88	0.77
Self-efficacy in student engagement (4 items)		6.93	1.27		7.84	0.98
Self-efficacy in instructional strategies (4 items)		6.85	1.23		7.85	0.79
Self-efficacy in classroom management (4 items)		6.88	1.27		7.94	0.82

Notes. CSI = City Schools Initiative. GPA = grade point average.
TSES = Teachers' Sense of Efficacy Scale.
[a]*N* = 66. [b]*N* = 18.

In addition to the shared pedagogical strategies and principles identified by the stakeholders, three specific aspects of CSI deviated from the traditional model and processes associated with YLI experiences. First, as a result of the coordination within the school–university partnership, CSI TCs were provided information regarding their school placement and teacher at the end of the academic year prior to YLI-1, as opposed to after the start of the academic year. This enabled the CSI TCs to contact teachers and attend beginning-of-the-year events, including team planning meetings, the "Meet the Teacher" event, and the first day of school. Second, to maximize time in classrooms for CSI TCs, the number of clinical hours required per week in YLI-1 was increased from 1 day, or the equivalent of 6–8 hours, to a minimum of 10 hours, which were required to be spread over 2 separate days each week. Given the early communication of placements, CSI TCs were able to engage in clinical experiences for up to 15 weeks. To accommodate for the increased number of clinical hours and to reduce logistical concerns, all coursework was scheduled on Tuesdays and Thursdays. CSI TCs and CEs developed their own schedules for when the clinical hours would be completed. As part of the clinical requirements, CSI TCs observed and taught lessons each week in the CEs' classrooms. Similar to the traditional program, CSI TCs were provided informal feedback by CEs as part of teaching experiences; however, a formal observation protocol that focused on specific facets of instruction introduced in coursework was also used for three of the lessons they taught. Of these three lessons, an observation and corresponding feedback session was conducted by the CE for the first lesson. For the second and third lessons, a university faculty member and the CE observed the lesson, and both provided feedback to the CSI TC. The third modification for the CSI program occurred as students transitioned into full-time student teaching, or YLI-2. To maintain the school–university partnership and the relationships among all stakeholders, two faculty members who were CSI TCs' instructors in YLI-1 supervised them during student teaching. This differs from the traditional program as TCs are assigned supervisors associated with the Office of Field Experiences (pseudonym). These supervisors are not typically faculty and have no relationship with the candidate.

Instrument: Teachers' Sense of Efficacy Scale

The Teachers' Sense of Efficacy Scale (TSES) was used to assess the efficacy of all participants due to its recognized acceptance within the field and its demonstrated validity with preservice teachers. For this research, the short form of the TSES, which includes 12 items (see Appendix A), was used. In addition to measuring the generalized sense of efficacy, the TSES is designed to include domain-specific subscales to measure the related constructs of efficacy in student engagement, instructional strategies, and classroom management. Each subscale on the short form features four questions focused on the respective construct. Respondents rated themselves from 1 (*nothing*) to 9 (*a great deal*) on statements such

as "How much can you use a variety of assessment strategies?" (Tschannen-Moran & Woolfolk Hoy, 2001). The TSES has high levels of internal consistency for both in-service and preservice teachers ($\alpha = .90$) and moderate levels of construct validity, particularly with other measures of personal teaching efficacy ($r = 0.64$), $p < .01$ (Tschannen-Moran & Woolfolk Hoy, 2001).

Procedures

All TCs completed the TSES online on two occasions during the student teaching semester. The first administration occurred in late January and the second in late April. The response rate was reasonable at both administrations, with 83% of TCs completing both scales at the first administration and 98% of TCs completing both scales at the second administration. We collected additional background information about the TCs from the university data system, including sex, GPA at admission, and status as a person of color.

For the TSES, we calculated scores for the three subscales, including Efficacy for Student Engagement (4 items), Efficacy for Instructional Strategies (4 items), and Efficacy for Classroom Management (4 items). We used unweighted means of the aligned items (Tschannen-Moran & Woolfolk Hoy, 2001) to calculate these subscales. We also calculated the overall sense of efficacy score by averaging across all 12 items.

Qualitative data were captured through focus group interviews with CSI TCs conducted near the conclusion of their student teaching experiences (YLI-2). The interviews were conducted by the first author, a university administrator who oversaw the design and implementation of all project activities but did not have any direct instructional duties within CSI or the traditional program. A semistructured interview protocol was used (see Appendix B), which included questions that addressed the overall benefits and challenges associated with CSI as well as the impact of the program on the development of specific skills necessary within the teaching profession, for example, using data for instructional decision-making and collaborating with parents or caregivers.

Data Analysis

All quantitative analyses were estimated in the SAS program (Version 9.4; SAS, 2012). Some data were missing across key variables, ranging from 0% to 16%, given the difference in response rates at the two survey administration points. We found data to be missing at random, with missingness explained by other variables in the data set, and thus used multiple imputation (MI) to make valid statistical inferences (Dong & Peng, 2013). We imputed 20 data sets using PROC MI. This number of imputations is greater than the percentage of missing observations in order to adequately reproduce the missing data (Dong & Peng, 2013). The imputation model included variables of theoretical interest, variables associated with missingness,

and variables that were correlated with the variables that had missing data (Dong & Peng, 2013; Enders, 2010). All quantitative outcomes were normally distributed and estimated using a general linear model. For each outcome, we estimated associations between outcomes and participation in CSI, while controlling for TCs' status as a person of color, sex, and admit GPA; coefficients were aggregated across imputations using PROC MIANALYZE.

Qualitative data were analyzed using a thematic analysis (Braun & Clarke, 2006). Before beginning the coding process, the research team met to discuss the transcripts and our initial perceptions of the participant responses. We discussed emergent themes, organizational ideas, and possible relationships between the themes. The coding process was carried out independently by two authors, who engaged in iterative readings of the interview transcripts. Categories were created based on the similarities and differences within responses, keeping in mind the research questions and utilizing terminology relevant to the study. For example, specific references to building connections to colleagues or the classroom teacher were categorized as "relationship—peers" and "relationship—CE," respectively. Where differences arose, the researchers negotiated a common label. Successive passes were made through the coded data, which were then organized into patterns. Once patterns were formed, they were examined and corroborated with data from the quantitative sources, providing conclusions relative to broader themes regarding participants' TSE.

Results

Quantitative Results

We provide descriptive statistics (proportions, means, and standard deviations) comparing CSI TCs to the traditional TC comparison group for TCs' background characteristics and TSES scores in Table 1. At Time 1, at the beginning of student teaching, there were no statistically significant differences between CSI TCs and TCs in the comparison group on the TSES (see Table 2).

This changed at Time 2, at the end of student teaching, as we found that CSI TCs reported significantly greater efficacy on the overall TSES as well as all three subscales. CSI TCs reported feeling greater efficacy with respect to engaging students ($B = .99$), $t(10{,}966) = 3.06$, $p < .01$; planning and implementing instructional strategies ($B = 1.08$), $t(7{,}457.20) = 3.46$, $p < .01$; managing the classroom environment ($B = 1.09$), $t(6{,}135.70) = 3.34$, $p < .01$; and overall ($B = 1.05$), $t(7{,}260.60) = 3.52$, $p < .01$. All parameter estimates, standard errors, and statistical significances for associations between CSI participation and efficacy are reported in Table 2.

Qualitative Findings

Analyses of the focus group interviews conducted with the CSI TCs produced two primary themes and several subthemes that extend the results from the quan-

titative analysis, yielding insights into the facets associated with CSI that may have contributed to the differences observed in the quantitative data at the end of student teaching. The themes included the influence of expanded clinical opportunities within the authentic context and the importance of relationships. Notably, the themes are directly associated with and attributable to the organizational facets and experiences of CSI that occurred during YLI-1.

Expanded Clinical Opportunities

One theme that emerged from the qualitative data was the impact of the expanded clinical opportunities associated with YLI-1. Several facets within this theme were consistently noted as being influential, including early classroom visits and opportunities to connect theory to practice.

Early Classroom Visits. In every interview, the CSI TCs noted the importance of opportunities to observe and assist CEs and to directly participate in school activities in YLI-1 that occurred prior to the start of the university's semester. Overall, CSI TCs felt that being able to see how the CEs prepared for the school's opening activities and start of the year was a unique opportunity that could not be adequately modeled or described within coursework but was directly applicable to what they would experience the following year as a beginning teacher. Reinforcing these points, one candidate said, "I know how to handle the first day of school.

Table 2
Associations with General Teaching Self-Efficacy

	Overall teaching self-efficacy		*Self-efficacy for student engagement*		*Self-efficacy for instructional strategies*		*Self-efficacy for classroom management*	
Parameter	*B*	*SE*	*B*	*SE*	*B*	*SE*	*B*	*SE*
Time 1								
Intercept	9.34**	(1.80)	8.61**	(1.85)	10.01**	(1.89)	9.40**	(2.11)
CSI	0.13	(0.45)	0.06	(0.48)	0.17	(0.45)	0.17	(0.54)
Candidate of color	0.44	(0.51)	0.42	(0.54)	0.36	(0.50)	0.53	(0.60)
Male	−1.36	(1.02)	−1.10	(1.08)	−1.78	(1.02)	−1.19	(1.18)
Admit GPA	−0.84	(0.52)	−0.63	(0.54)	−1.03	(0.54)	−0.86	(0.61)
Time 2								
Intercept	8.76	(1.12)	9.32	(1.22)	8.42	(1.18)	8.55	(1.22)
CSI	1.05**	(0.30)	0.99**	(0.32)	1.08**	(0.31)	1.09**	(0.32)
Candidate of color	−0.31	(0.32)	−0.31	(0.36)	−0.17	(0.33)	−0.45	(0.35)
Male	−1.33*	(0.60)	−1.59*	(0.65)	−1.22	(0.63)	−1.18	(0.65)
Admit GPA	−0.52	(0.32)	−0.67	(0.35)	−0.44	(0.34)	−0.46	(0.35)

Notes. CSI = City Schools Initiative. GPA = grade point average.
*$p < .05$. **$p < .01$.

That's not something you can see in your classes." CSI TCs also specifically noted exposure to seeing how teachers interacted with parents and students during "Meet the Teacher," which often included the CSI TC being introduced as a student teacher from the outset of the year. Multiple statements addressed the importance of this introduction as helping to assimilate the candidate into the classroom as a vested stakeholder and helping the students and parents view the candidate as a teacher figure.

The early visits were also perceived as important for learning how to establish classroom management, for example, setting up the classroom and developing rules and expectations with students. Notably, throughout the interviews, CSI TCs cited that they were able to see how procedures and other critical aspects of the management plan were implemented. These early experiences were also deemed "instrumental" and "foundational" for later success as the CSI TCs expressed the importance of being able to see the initial day-to-day interactions of the CE and students within the management plan, which helped them better understand both expectations and the students. A candidate noted,

> A big part of classroom management . . . was being in there on day one . . . seeing our CE setup procedures, routines, expectations. . . . I was able to take a lot of what she was doing at the beginning of the year and continue to implement it.

Theory-to-Practice Connections. Given the coordinated efforts of the faculty and CEs, CSI TCs were able to take information presented in YLI-1 coursework, for example, using assessment data for planning or establishing an effective learning environment, and have direct experiences with its application in the classroom. For example, CSI TCs were exposed to using data to inform instruction within coursework, yet in the university course setting, they could not directly apply the data in any form of intervention. One candidate talked about her knowledge of multitiered systems of support (MTSS), noting,

> I would say that being put into an intervention group made me understand Tier 2. I understood MTSS, but I was still a little confused about Tier 1 kids, Tier 2, Tier 3 . . . but now I have a clear understanding of it.

As a result of being present in the classroom 2 or more days per week, candidates were also able to make theory-to-practice connections associated with the importance of developing knowledge of their students and adapting their instruction accordingly. As opposed to just "creating experiences for students," CSI TCs began to realize the necessity of finding students' "assets" and "understanding the students beyond academics." One candidate made the connection with the help of his CE: "my CE taught me . . . you have to really sit down with that student and listen to them and get to know them and remember the next day and ask them" about what was discussed. While this is about relationship building, candidates recognized that their knowledge of students was especially important for delivering engaging instruction and adapting it to address students' needs.

Relationships

While the opportunity to develop relationships was often directly associated with the extended engagement in the school context, it warrants inclusion as a separate theme given its pervasiveness across the interview responses. CSI TCs noted the importance of the relationships that were built with each other, CEs, students, and caregivers as important facets of their personal development.

Relationships With Peers. Given the enrollment in common classes, CSI participants spent nearly 8 hours together every Tuesday and Thursday. Furthermore, three to five CSI TCs were assigned to every school, thus there were further opportunities for them to develop deeper relationships with peers over the course of the whole academic year. Consistency and familiarity were noted as contributing toward the relationship building. Referring to the CSI TC cohort, one candidate noted,

> These are the people that you're really going to school with and you get to build a relationship with them. . . . In the regular program, it's mixed in with a bunch of people but . . . you don't get to see them as consistently.

The resulting relationships enabled the CSI TCs to feel they had academic as well as empathetic support. Responses within the interviews were likely to include terminology such as "support group," "lean on," "understanding," and "helping each other." A representative comment that summed up the impact was as follows: "Having that support group there for you made everything so much better and just having . . . your peers who know exactly what you're going through really helped get me through student teaching."

Relationships With Clinical Educators. The most impactful relationship was between the CSI TCs and the CEs. Notably, the relationships enabled CSI TCs and CEs to develop a mutual trust of each other as they came to know each other's teaching styles and collaboratively worked toward enabling student learning. One candidate articulated that her CE "referred to it as *our* classroom from day one." Another CSI TC indicated that because of the relationships she had developed with her CE and the rest of the educators on the grade-level team, she was "part of this community," and this was the "first time I felt like a teacher."

The relationship-building opportunities also helped CSI TCs understand various facets of teaching that could not be duplicated in coursework. For example, working with CEs instilled the need for the professional reflection associated with planning that is necessary to grow as an educator. One candidate described the process in which she engaged with her CE as she began to teach lessons in YLI-1: "When I started lesson planning . . . we would debrief every single day. She would ask, 'How did you like this lesson? What do you want to change?' We would talk about it." Subsequently, this helped CSI TCs to be receptive to feedback, that is, social persuasion, from CEs, enabling them to begin to understand where areas

for further development were. In the words of one candidate, there was "no need to prove anything." Feedback was viewed as a growth opportunity:

> The feedback that she gave me was so much more personalized. She was like, "I've seen you teach all year and you were here at the beginning of the year and this is what you've improved on and this is something that I see you do quite often that we could improve on." The transparency was crystal clear.

Many CSI TCs noted their willingness to seek input from the CEs in areas where they perceived themselves to be struggling.

Relationships With Caregivers and Students. Given the yearlong placement, the CSI TCs were able to build relationships with students and their caregivers, which they attributed to the familiarity that began with their presence in the classroom prior to the beginning of the school year. The CSI TCs felt they were viewed as a "professional" and as a "teacher" as they began to interact with each group in August. For parents and caregivers, the candidate was "not just like this person who drops in for however many hours." Instead, parents viewed them as "part of the classroom and like the teacher of their kids." A sense of mutual respect was present, not only with parents but with students. One candidate said, "Being here from day one was like most instrumental in my success with my classroom management because . . . since I already had those foundations, like those relationships." With regard to students, CSI TCs felt they were better able to understand the needs of students, instructionally and behaviorally, and to make adaptations.

Discussion

This investigation examined the impact of a clinical model that included a strong school–university partnership, a focus on the development of a CoP, and extensive in-school experiences on TCs' TSE. It is important to acknowledge that many of the unique characteristics of CSI and differences between CSI and the traditional program were associated with the YLI-1 semester. With the exception of supervision of CSI TCs by university faculty from the school–university partnership, the student teaching (YLI-2) experiences of the two groups compared within this research were congruent. That is, each group spent 16 weeks in their assigned schools on a full-time basis, gradually assuming all professional responsibilities associated with teaching. As a result, the contextual elements associated with YLI-1 may have contributed toward establishing conditions for TSE development rather than causing it directly.

Notably, the groups compared within this research did not demonstrate differences in levels of TSE at Time 1, which occurred directly after the extensive mastery and vicarious experiences in which the CSI TCs participated during YLI-1. We contend that given the direct teaching and observational experiences that occurred over YLI-1, CSI TCs' perceived efficacy at the beginning of student teaching may

have been a more accurate conception of their actual abilities, thus enabling them to maximize growth over the course of YLI-2. Prior research has shown that TCs often demonstrate an overly optimistic sense of efficacy while engaged in clinical experiences that include limited teaching opportunities (Putman, 2012; Cunningham et al., 2004). Subsequently, the fluctuations in efficacy that occur as TCs gain a greater understanding of the responsibilities of teaching within clinical experiences that include greater instructional responsibility may have manifested in the CSI TCs in YLI-1 (Putman & Handler, 2016). Meanwhile, the TRAD TCs may have exhibited the aforementioned inflated sense of efficacy following YLI-1, causing subsequent fluctuations in efficacy that became more accurate for them during YLI-2.

Examining the formation of relationships from a perspective that acknowledges tenets of situated learning theory and associated with CoPs, as trust was developed between the CE and CSI TC, the CSI TCs viewed the CE as a peer and as a similar model, which are important within the impact of vicarious experiences and social persuasion on efficacy development (Hawkman et al., 2019; Thomson et al., 2020). CSI TCs were further provided with scaffolded support, including opportunities to discuss practices, experiences, and observations. Thus feedback provided to CSI TCs by the CEs during student teaching was viewed as informative and non-threatening, resulting in an enhancement of TCs' sense of efficacy (Moulding et al., 2014). The positive rapport that developed among the members of the community also contributed toward efficacy development (Bandura, 1997; Le Cornu & Ewing, 2008; Kim & Cho, 2012). Gradually, through coparticipation in the activities, such as professional development and professional learning communities, the CSI TCs understood the context as well as the professional responsibilities of teaching, thereby moving from the periphery of the community as novices to establishing themselves as contributing members of the community (Lave & Wenger, 1991). The impact of the community formed in YLI-1 was ultimately beneficial in YLI-2 (student teaching) as CSI TCs gained additional experience and continued to receive feedback and support delivered by the CE, which subsequently allowed efficacy to continue to increase over the course of student teaching. This result is consistent with prior research (see Ekici, 2018; Le Cornu & Ewing, 2008) that revealed the important role of feedback and mentorship within opportunities to actively reflect on understandings on the development of candidates' TSE.

Clearly relationships with peers in the CSI cohort were also a significant factor in CSI TCs' perceived growth and the benefits of the experience. Using a cohort model similar to that of Dinsmore and Wenger (2006), a sense of community was established between the TCs, helping them realize that many of their peers were going through similar experiences and allowing expressions of empathy as well as collaborative support for practices and overcoming challenges. We also see consistencies with Kim and Cho's (2012) research, which noted that EPPs could contribute toward creating efficacious students through the use of cohorts. Furthermore, the relationships built within a cohort were highly influential on TCs'

learning due to a sense of trust and community (Dinsmore & Wenger, 2006; Ekici, 2018). As CSI TCs developed a sense of belonging to a community of peers, which was not present in the traditional program given placements in multiple schools and districts, CSI TCs retained their relationships, thereby continuing to scaffold and refine each other's knowledge and understanding of pedagogy, content, and practices in YLI-2. Subsequently, efficacy was increased.

Limitations and Future Directions

This research did have limitations that must be acknowledged. First, because assignment to participate in CSI was voluntary and this was not an experimental design, we cannot be sure that CSI caused TCs to report greater efficacy. Subsequently, a second limitation was that efficacy levels were not measured immediately prior to or at the beginning of YLI-1. Given that the primary differences between the experiences of the two groups were manifest in YLI-1, an important change in future research would be to increase the number of administrations of the instruments used to measure changes in efficacy across the year. This would allow investigators to corroborate whether fluctuations in efficacy occur across semesters or differ based on aspects of clinical experiences, including duration or teaching/observation expectations. A final limitation was the lack of qualitative data confirming that the TRAD TCs had inherently different experiences than the CSI TCs. While using the programmatic structure of CSI as a proxy for inherent differences, we did not interview TRAD TCs to obtain information about perceived benefits or challenges of the traditional program. Future research should incorporate interviews of both groups to substantiate differences in experiences.

Acknowledging these limitations, subsequent investigations should include several additional data sources, including clinical experience logs, observations of practice, and additional interviews. Field experience logs that capture the activities as well as the time spent in classrooms would provide opportunities to examine relationships among these variables and efficacy development. Furthermore, corresponding observations of practice could be used to examine how behaviors, for example, instructional differentiation (Suprayogi et al., 2017), or outcomes, for example, student engagement (Chao et al., 2017), were impacted by varying levels of efficacy. Given that the power of vicarious experiences and social persuasion on efficacy is associated with the perceived similarity or credibility of the model or observer (Bandura, 1997), observations and interviews with CEs and TCs may yield additional insights regarding how the relationship between CE and TC impacted efficacy through feedback and modeling.

Conclusion

Experts continue to agree that the beliefs of the teacher impact success in the classroom and that these beliefs have a long-term impact on effective teaching,

classroom management, and, subsequently, student learning (Pajares, 1992; Woolfolk Hoy & Spero, 2005). It is especially necessary for EPPs to direct specific attention toward those variables that are likely to demonstrate the most significant impact on the formation of positive beliefs. This includes carefully structuring and scaffolding learning experiences that will enable TCs to connect the theoretical knowledge gained within university classrooms to the practical knowledge enacted in the authentic classroom context. This research provides evidence that a multisemester internship founded within a school–university partnership can be an organizational feature within teacher education that develops TCs' sense of efficacy through mastery and vicarious experiences and supportive feedback. Furthermore, it provides evidence for the powerful impact of relationships between TCs and various stakeholders on candidates' TSE.

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Appendix A

Teachers' Sense of Efficacy Scale, Short Form

1. How much can you do to prevent and respond to disruptive behavior in the classroom?
2. How much can you do to motivate students who show low interest in schoolwork?
3. How much can you do to calm a student who is disruptive or noisy?
4. How much can you do to help your students value learning?
5. To what extent can you craft good questions for your students?
6. How much can you do to get children to follow classroom rules?
7. How much can you do to get students to believe they can do well in schoolwork?
8. How well can you establish a classroom management system with each group of students?
9. To what extent can you use a variety of assessment strategies?
10. To what extent can you provide an alternative explanation or example when students are confused?
11. How much can you assist families in helping their children do well in school?
12. How well can you implement alternative strategies in your classroom?

Appendix B

Focus Group Interview Questions

1. Tell me about the most positive experiences or benefits associated with participation in the City Schools Initiative.
2. What aspects of the City Schools Initiative were challenging?
3. How did the City Schools Initiative prepare you to
    a. develop classroom and instructional plans?
    b. differentiate instruction for all students, including students with disabilities?
    c. collect and use data appropriately within instructional decision-making?
    d. develop a classroom management plan and lead the learning environment?
    e. engage in collaborative activities with the clinical educators?
    f. understand the influence of diversity and plan instruction accordingly?
    g. collaborate with parents/caregivers and the community?
    h. engage in professional development and reflective practice?