

A Comparison of Virginia Preservice Teachers' Efficacy and the Effect of COVID-19

Tim Pressley

Hannah Croyle

Christopher Newport University

Abstract

The purpose of this exploratory study was to gain insight into the effect of COVID-19 on Virginia preservice teachers' efficacy. The current study compared teacher efficacy scores of two different cohorts. Cohort 1 completed the preservice teaching internship in 2017-2018, while Cohort 2 completed the preservice teaching internship during the 2019-2020 school year. Because of the impact of COVID-19, Cohort 2 had a shortened in-person preservice teaching internship due to schools moving to virtual learning. Using the Teacher Efficacy scale and open-response questions, the researchers compared efficacy scores of the two cohorts and gained insight from Cohort 2 on their thoughts moving forward as first-year teachers. The results found a significant difference in total teacher efficacy scores and classroom management efficacy scores between the two cohorts. The preservice teachers in Cohort 2 also shared their perceptions regarding the implementation of classroom management and the lack of practice within the classroom.

Keywords: Preservice Teachers; Teacher Efficacy; Teacher Induction

Every year, teacher preparation programs (TPP) attempt to prepare preservice teachers for roles as classroom teachers. A TPP plays a vital role in developing preservice teachers' efficacy through courses and field experiences (Clark et al., 2013). One significant aspect of a preservice teacher program is the student teaching internship. This experience ranges from three months to a year, depending on the TPP, and provides preservice teachers the opportunity to teach with the support of a cooperating teacher and supervisor. However, in the spring of 2020, Virginia TPPs faced the impact of COVID-19. The results of this included all schools in Virginia moving to a virtual learning format. Thus, many preservice teachers, who had been completing

field placements during the 2019-2020 year, experienced a shorter in-person internship. For this specific study, we sought to understand the impact of COVID-19 on preservice teacher efficacy in the spring of 2020 compared to a previous internship experience cohort (Spring 2018). We also wanted to gain insight on preservice teachers' perceptions of preparedness considering they had less time in the classroom as a preservice teacher.

A well thought out field placement allows preservice teachers to apply skills discussed in class and allows cooperating teachers and supervisors to scaffold the application of those skills. First-hand experiences in a classroom can help preservice teachers open their minds to new beliefs and techniques regarding teaching and learning (Darling-Hammond, 2006; Feiman-Nemser & Buchman, 1987; Shambaugh, 2016). Shambaugh (2016) states that a practicum or field experience is “invaluable to giving students opportunities to implement learning principles and sharing results with one another” (p.81). Along with providing real-life examples of the content discussed in courses, preservice teachers often become more comfortable and develop a higher teaching efficacy from a successful field experience (Flores, 2015; Singh, 2017). Thus, it is important to understand how a shorter, in-person internship teaching experience, due to COVID-19, may affect preservice teachers' efficacy as they prepare to become first-year teachers.

Teacher Efficacy

Teacher efficacy is defined as “the teacher's belief in his or her capability to organize and execute course of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran et al., 1998, p. 233). Several variables play a role in developing a teacher's efficacy. Within the school environment, the school principal and the school community's emphasis on academics may predict personal teaching efficacy. Schools that

contain teachers with high, attainable goals and have a serious learning environment tend to have teachers with higher teacher efficacy (Hoy & Woolfolk, 1993). To create an environment that promotes teacher efficacy, schools should provide teachers with strategies and feedback for their teaching as well as opportunities to work with other teachers in the building (Dembo & Gibson, 1985). Creating an environment that supports high teacher efficacy is important because teacher efficacy is strongly correlated to teacher burnout and teacher commitment to the profession (Pas et al., 2012; Skaalvik & Skaalvik, 2007). Other influences on teacher efficacy include graduate degrees (Hoy & Woolfolk, 1993), the time of the school year (Anderson et al., 1988), and previous teaching experiences (Bandura, 1997; Tschannen-Moran et al., 1998). Higher teacher efficacy may provide positive impact on students. For example, teachers with high teaching efficacy tend to make positive academic achievement predictions, especially with inattentive students in elementary and middle school (Tournaki & Podell, 2005).

Teachers with higher efficacy have also been more successful at raising student abilities, specifically in upper elementary mathematics (Midgley et al., 1989) and at the beginning of the year for elementary students (Anderson et al., 1988). A similar study found teachers with high teacher efficacy focus on maximizing literacy and math instruction (Zee & Koomen, 2016). Zee and Koomen (2016) found several other positive results of high teacher efficacy across studies. For example, teachers with high efficacy are more likely to develop supportive learning environments for students, especially for inclusive settings with students with special needs. They are also more effective with difficult students and students who receive special education services within the classroom as compared to teachers with lower teacher efficacy (Brownell & Pajares, 1999). Because of the impact of teacher efficacy on student outcomes, it is important to

learn more about the development of teacher efficacy in preservice teachers as they go through the process of preparing to teach in future classrooms.

Preservice Teacher Efficacy

Within TPPs, preservice teachers begin to develop skills that will help them be more successful in their future classrooms and thus build their teacher efficacy. While learning the art of teaching, it is important for preservice teachers to get the opportunity to apply these skills in field experiences with hopes of building teacher efficacy. Previous literature found positive results regarding the effects of field experiences on preservice teachers' efficacy specifically in the domain of reading (Haverback & Parault, 2008; Rogers-Haverback & Mee, 2015). Rogers-Haverback and Mee (2015), for example, focused on a group of preservice teachers who completed a tutoring field experience, and these preservice teachers demonstrated an increase of teacher efficacy throughout the field experience.

When looking specifically at preservice teaching and teacher efficacy, previous studies have found several different factors that play a key role in a preservice teacher's efficacy (Hoy & Spero, 2005; Knoblauch & Hoy, 2008; Moulding et al., 2014). The preservice teaching experience is often a time that preservice teachers build their teacher efficacy especially if the preservice teacher has a supportive supervisor during the preservice teaching internship (Hoy & Spero, 2005; Moulding et al., 2014). Other aspects that support building teacher efficacy include teaching opportunities and observations of an experienced teacher (Brown et al., 2015). When looking at the length of a preservice teacher's internship, previous studies have not indicated that time spent in an internship influences ones' teaching efficacy (Chambers & Hardy, 2005; Ronfeldt & Reininger, 2012).

The Current Study

The purpose of the current study was to determine if a shortened in-person preservice teaching experience due to the COVID-19 pandemic would impact Virginia preservice teachers' efficacy compared to a previous year's group of preservice teachers. Based on the previous teacher efficacy literature, we expected the preservice teachers with a full preservice teaching internship (Cohort 1) to have a higher overall efficacy and higher efficacy subscores compared to the preservice teachers with a shortened preservice teaching internship due to COVID-19 (Cohort 2).

Method

This exploratory study focused on the impact of a shortened preservice teaching internship on preservice teachers' efficacy. Because of the COVID-19 pandemic, Cohort 2 experienced six fewer weeks of in-person teaching during the internship compared to Cohort 1. During a typical internship, the final six weeks would allow for preservice teachers to have autonomy within the classroom and act as the lead teacher. During the final six weeks, preservice teachers would be responsible for all aspects of teaching including classroom management, lesson plans, instruction, and assessment. All Cohort 2 teachers moved to the virtual setting; however, it was up to the cooperating teachers to decide how much the preservice teacher got involved with the day-to-day teaching and responsibilities. Five elementary preservice teachers in Cohort 2 had opportunities to continue working with their classes by teaching lessons in a virtual setting. The other 15 preservice teachers in Cohort 2 had cooperating teachers who either moved to an asynchronous teaching model or did not allow the preservice teacher to take the lead during the last six weeks of the internship.

To determine the impact of the shortened in-person preservice teaching internship, the study compared teacher efficacy data from two different cohorts of preservice teachers (2017-

2018 & 2019-2020). Specifically, the researchers used The Teacher Efficacy Scale long version (TES; Tschannen-Moran & Hoy, 2001) and short answer responses to learn more about the impact of a shorter preservice teaching internship due to COVID-19.

Participants

All participants came from a Master's of Arts in Teaching Program in Virginia that prepares students for initial teacher licensure. The Institutional Review Board of the university housing the teaching program approved the research, and the researchers followed the American Psychological Association's ethical guidelines. We used convenient sampling with all members of the two cohorts by sending an electronic survey through email after the completion of their preservice teaching internship. Cohort 1 (2017-2018; $N = 20$) included 14 elementary and 6 secondary, English preservice teachers. Cohort 2 (2019-2020; $N = 22$) included 17 elementary and 5 secondary, English preservice teachers. Participants were predominantly female and White, as is the TPP itself.

Survey

The survey included demographic information, the TES, and open-ended questions. The TES includes three subscales: *Efficacy in Student Engagement*, *Efficacy in Instructional Strategies*, and *Efficacy in Classroom Management*. Possible responses for items ranged from 1 (*Nothing*) to 9 (*A Great Deal*). Following standard practice for this instrument, the results report mean ratings for the full scale and subscales to facilitate interpretation of scores. The TES long-form has an alpha value of .94, while the subscale of engagement has an alpha value of .87, the subscale of instruction has an alpha value of .91, and the subscale of classroom management has a subscale of .90, respectively (Tschannen-Moran & Hoy, 2001).

Along with the survey data, individuals in Cohort 2 responded to three open-ended questions. The purpose of the questions was to gain more information about the impact of their shortened preservice teaching internship. These questions included:

- 1) With schools moving online because of COVID, how prepared do you feel having a shorter preservice teaching internship?
- 2) What worries you as you enter your first year of teaching?
- 3) What are you looking forward to during your first year of teaching?

When coding the qualitative data from the survey given to Cohort 2, we used open coding (Strauss & Corbin, 1998). In order to increase reliability, both researchers read through the responses and there was 100% agreement for the qualitative codes.

Results

Through descriptive statistics and an independent *t*-test we compared the total teacher efficacy score and efficacy subscores for the two cohorts to determine if a shortened preservice teaching internship due to COVID-19 impacted preservice teachers' efficacy.

Overall Teacher Efficacy

The results found a significant difference between Cohort 1 ($M = 7.22, SD = .58$) and Cohort 2 ($M = 6.52, SD = .77$; See Appendix A) for overall teacher efficacy $t(40) = 2.52, p = .000$ (See Appendix B). These results indicated the shortened preservice teaching internship due to COVID-19 may have played a role in Cohort 2's overall teacher efficacy at the end of the preservice teaching internship. When asked to describe how prepared to teach they were, a majority of Cohort 2 (14) shared beliefs of not being as prepared as they would have liked. For example, one preservice teacher shared, "It (COVID) cut my learning experience short which is frustrating because I feel less prepared for the next year and less desired to be hired because of

my lack of experience in the classroom.” A second, who was able to teach virtually, shared that even though she continued to gain teaching experience, moving to online instruction played a role in their perception of their teaching ability. “Since moving online, I lost confidence and do not feel capable of teaching. It just was not the same as being in front of students.” Another preservice teacher shared similar thoughts of not feeling fully prepared to have her own classroom next year, but hopes to receive support within her school to make up for it.

I would have liked to have had more time in the classroom to have gotten more feedback on my teaching and have more time with my students. I feel like I am going to be at a slight disadvantage going into next year, but I hope I have support from my school to help with the transition.

The Cohort 2 preservice teachers who reportedly believed they were prepared shared that they had a cooperating teacher who supported them throughout the preservice teaching internship process and allowed them to get involved early in their preservice and virtually during the teaching internship. Thus, the preservice teachers believed they had a good foundation to build upon. For example, one preservice teacher shared, “My cooperating teacher was extremely knowledgeable on how to effectively deliver instruction and always had great feedback to help me develop. She was also good at managing behaviors and led me to be more confident in my classroom management ability.” A second preservice teacher also noted having a strong foundation that she believed would help her in the future, “I had a very positive preservice teaching internship. I did however wish I had longer to implement the changes I wished to do with both instruction and management. However, I feel like a firm foundation was established.”

Classroom Management Efficacy

The survey results found a significant difference between Cohort 1 ($M = 7.60, SD = .77$) and Cohort 2 ($M = 6.28, SD = .83$; See Table 1) for the subscale of classroom management teacher efficacy $t(40) = 4.26, p = .000$ (See Table 2). The results suggest that the shorter

preservice teaching internship due to COVID-19 impacted preservice teachers' classroom management efficacy compared to Cohort 1 who completed a full semester of preservice teaching.

Short answer responses from individuals in Cohort 2 also suggested lower classroom management efficacy due to the limited time to practice classroom management. Of the 22 Cohort 2 participants, 20 Cohort 2 preservice teachers mentioned being worried about classroom management as a future teacher. Of the 20 preservice teachers worried about classroom management, 9 preservice teachers just listed classroom management as their number one concern entering next year. However, the other 11 shared more specific concerns regarding classroom management. Comments included expressions of being nervous dealing with specific behavior problems, setting up effective rules and routines, and general classroom management. For example, one preservice teacher shared, "I am worried about being able to set up all expectations, model them, and create a firm behavior management strategy to use within the classroom." She went on to share, "I don't feel like I got enough practice addressing difficult behaviors or establishing classroom rules." A second preservice teacher shared similar beliefs, "I feel underprepared in classroom management and I wish I had more time to practice discipline and enforcing rules, routines, and procedures for students." A third preservice teacher shared that lack of practice in front of students and missing out on feedback added to her worries about the upcoming year. She commented, "I was already nervous about classroom management because everyone says it's an issue for first-year teachers. I really wish I had more time to practice and get feedback from my cooperating teacher."

Instruction Efficacy

The survey results found no significant difference between Cohort 1 ($M = 6.99$, $SD = .68$) and Cohort 2 ($M = 7.01$, $SD = .88$; See Table 1) for the subscore of instructional teacher efficacy $t(40) = -.14$, $p = .893$ (See Table 2). Even though there was no significant difference between the two cohorts, it is interesting to note Cohort 2 had a slightly higher instructional efficacy mean compared to Cohort 1 at the end of the preservice teaching internship, even with less time in the classroom.

Though there was no significant difference between the two cohorts and on average Cohort 2 had a high instructional efficacy, six preservice teachers from Cohort 2 did identify in the open-ended questions concerns regarding instruction as they enter their first year of teaching. When it came to instructional concerns, the preservice teachers mentioned the lack of opportunities to practice teaching and the limited feedback received on their teaching. The limited practice has influenced some Cohort 2 teachers to question their ability to be good teachers.

I feel like I know all the content, strategies, and techniques that first-year teachers need to be aware of and understand. However, I question how well I will be able to implement the knowledge I hold since I feel I did not get enough time to practice them in the classroom. In other words, I know what I am supposed to do, and what good quality teachers are supposed to do, but I know putting them to practice is a whole other challenge.

Other Cohort 2 preservice teachers shared similar thoughts of wanting more practice without the support of the cooperating teacher. “I wish I had more time teaching full time or with the cooperating teacher not in the room. That would have helped me feel more prepared for my own classroom.” Another Cohort 2 preservice teacher shared, “I just needed more time in front of students and learning how to properly prepare for each individual class.”

When it came to the possibility of teaching online in the future, Cohort 2 had mixed thoughts about virtual teaching and six members of Cohort 2 shared concerns about online teaching. One preservice teacher shared, “I am nervous about the possibility of teaching online because my cooperating teachers did not give me that opportunity.” Other Cohort 2 teachers, who did not get virtual experiences shared similar nerves heading into their first year, which happened to be during the COVID-19 pandemic. Five teachers in Cohort 2 believed they were more prepared if schools go virtual again in the future due to their cooperating teacher allowing them to finish their preservice teaching virtually. As a preservice teacher shared, “I had less amount of time to practice skills which require being in the actual classroom. However, I feel more confident in implementing content through technology and virtual learning.” A second preservice teacher who was able to continue working with her students when school went virtual, which gave her confidence to provide instruction in any format to students. She responded, “I was lucky to have a cooperating teacher that has encouraged me to participate in the remainder of the academic year. I have written lessons, graded assignments, and maintained contact with students, which will help me next year.”

Engagement Efficacy

The results found no significant difference between Cohort 1 ($M = 7.18, SD = .63$) and Cohort 2 ($M = 6.58, SD = .87$; See Table 1) for the subscore of engagement teacher efficacy $t(40) = 1.79, p = .063$ (See Table 2). When it came to engagement, Cohort 2 focused on their future classrooms rather than their preservice teaching internships. All 22 Cohort 2 participants shared that they hoped to establish relationships with students and to use relationships to engage students in the learning process. As one preservice teacher shared, “I can’t wait to build relationships with my students and make a positive difference in the lives of my students.

Hopefully see them learn and grow as a result of my teaching.” A second preservice teacher shared similar hopes about her future classroom. “I can wait to get to know my students, being able to show them that I care about them and want to help them, teaching fun and engaging lessons, and seeing the ‘lightbulb ’moment with my students.” A third preservice teacher hoped to bring her own love of reading into the classroom to spark student interests. “I am excited to build relationships with my students and to help them develop a love a learning and foster their sense of self and interests. I have always loved reading, so I can't wait to see my students develop literacy and a passion for reading books based on their interests.”

Discussion

The findings from this study are relevant to the current state of K-12 education and TPPs in Virginia due to the COVID-19 pandemic. Teachers who completed their preservice teaching internship during spring 2020 entered the classroom as first-year teachers in the fall with less teaching experience than previous years. New teachers also entered the 2020-2021 school year with more unknowns compared to previous years. Schools and districts must understand that the new teachers may have lower teacher efficacy as they enter the classroom compared to previous first-year teachers because of the limited preservice teaching internships. Thus, districts and schools must prioritize providing support and formative feedback to develop new teacher efficacy throughout their first year.

In regard to the difference between Cohort 1 and Cohort 2, the results indicated a significant difference in total teacher efficacy and classroom management efficacy. However, there was no significant difference in instruction and engagement efficacy between Cohort 1 and Cohort 2 preservice teachers. This may be due to previous experiences of teaching mini-lessons throughout the preservice teaching program, previous positive interactions with students, or

Cohort 2 not fully comprehending all that goes into instruction and engagement due to the lack of experience.

The results of this study may guide TPPs in Virginia as these programs look to develop future preservice teachers' classroom experiences. TPPs may need to consider alternative approaches to place preservice teachers into classrooms as schools shift educational approaches due to COVID-19, which might include more virtual experiences. TPPs will also need to consider how they can support preservice teacher efficacy if future preservice teacher internships are shorter in length or limited. This might include addressing specific skills such as virtual learning, providing preservice teachers more opportunities to practice classroom management skills in courses, or investing in virtual observation experiences for preservice teachers.

The results are also important for schools as preservice teachers' efficacy is likely to drop throughout the first year of teaching (Hoy & Spero, 2005). Though Cohort 2 finished the internship with moderate to high teacher efficacy, their overall teacher efficacy was lower than Cohort 1 after the preservice teaching internship. Thus, schools should be aware that Cohort 2 teachers may see an even lower dip in teacher efficacy compared to first-year teachers in previous years. Schools and districts should use the results from this study to engage new teachers during the first year through teacher induction programs and with PD sessions. As new teachers enter the classroom and lower teacher efficacy in classroom management, schools must keep in mind that classroom management is often a skill that needs support throughout the first year (Baker, 2005; Oliver & Reschly, 2007; Pressley et al., 2020). There is potential for Cohort 2 to see a further dip in classroom management teacher efficacy as the school year begins. This is important to note as classroom management impacts instruction and student achievement within the classroom (Gage et al., 2018; Korpershoek et al., 2016). Schools and districts should provide

extra support to new teachers throughout the first year, especially with classroom management. Support may include feedback from mentors and PD opportunities that connect with classroom instruction and management. Districts might consider focusing on only classroom management, throughout the year to encourage teacher learning from PD and build teacher efficacy in that specific domain (Desimone, 2011). Mentors and administrators should also conduct formative observations and provide feedback before conducting a formal observation. Lastly, schools may build time for new teachers to observe mentors or instructional coaches teach to gain more strategies for a successful classroom (Brown et al., 2015). By providing support to new teachers, schools may increase the efficacy of the new teachers who did not have as much classroom experience due to COVID-19.

Limitations of our study include the small number of participants, which limits the generalizability of the findings to other samples. In the future, we will look to recruit additional participants from future cohorts, which may help strengthen and generalize the findings from this study. A second limitation was due to all participants completing their preservice teaching placements in an urban school district. Future studies should include a wide array of preservice teaching environments (urban, suburban, rural) to help with the generalizability of the findings. Outside variables and experiences may have also influenced the preservice teachers' efficacy. These variables may have included previous experiences in the classroom or different cooperating teachers and schools. Lastly, the impact of COVID-19 is an ongoing process, and researchers should continue to track preservice teachers' and new teachers' efficacy as TPPs and school districts will have to work through alternative teaching environments while the world looks to control COVID-19.

Appendix A

Descriptive Statistics

	Cohort	N	Mean	Std. Deviation
Total Teacher Efficacy	Cohort 1	20	7.22	.58
	Cohort 2	22	6.52	.77
Total TE CM	Cohort 1	20	7.60	.77
	Cohort 2	22	6.28	.83
Total TE Instruction	Cohort 1	20	6.99	.68
	Cohort 2	22	7.01	.88
Total TE Engagement	Cohort 1	20	7.18	.63
	Cohort 2	22	6.58	.87

Appendix B

Independent t-test

		Levene's Test for Equality of Variances				t-test for Equality of Means		95% Confidence Interval of the Difference		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Total Teacher Efficacy	Equal variances assumed	3.668	.063	2.52	40	.000	.51	.22	.05	.96
	Equal variances not assumed			2.54	36.98	.002	.51	.22	.07	.94
Total TE CM	Equal variances assumed	.124	.726	4.27	40	.000	1.10	.26	.57	1.62
	Equal variances not assumed			4.28	35.63	.000	1.10	.26	.58	1.62
Total TE Instruction	Equal variances assumed	2.217	.145	-0.14	40	.893	-.04	.26	-.56	.49
	Equal variances not assumed			-0.11	36.99	.889	-.04	.25	-.54	.47

Total TE	Equal	3.50	.	1.	40	.063	.46	.26	-.06	.97
Engagem	variances	8	0	79						
ent	assumed		7							
			8							
	Equal			1.	36.	.061	.46	.24	-.04	.95
	variances			87	50					
	not				2					
	assumed									

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