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RESEARCH ARTICLE

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Returning to teaching during COVID-19: An empirical study on elementary teachers' self-efficacy

Tim Pressley

Department of Psychology, Christopher Newport University, Newport News, Virginia, USA

Correspondence
Department of Psychology, Christopher Newport University, 1 Ave of the Arts, Newport News, VA 23606, USA.
Email: timothy.pressley@cnu.edu

Abstract

The purpose of this study was to explore how the new teaching approaches and requirements because of COVID-19 impacted elementary teachers' self-efficacy, specifically instructional and engagement efficacy. The current study included 329 participants from across the United States who completed the Teacher Sense of Self-Efficacy Scale (TSES) subsections of instructional and engagement. The results found the average teacher efficacy scores for both instructional and engagement were lower than TSES scores of instructional and engagement in previous studies. The results also indicated teachers who were teaching virtually had the lowest instructional efficacy scores compared to teachers teaching in a hybrid or all in-person model. However, the results suggested no difference in engagement efficacy score based on the instructional approach. There was also no difference in both instructional and engagement efficacy based on previous accolades or teacher location.

KEYWORDS
COVID-19, elementary teachers, teacher efficacy

1 | INTRODUCTION

The COVID-19 pandemic had significant implications on elementary schools during 2020, with districts moving to all virtual instruction during the spring and facing the debate of how to return safely to school in the fall. School districts across the country took different approaches to return to school for the 2020–2021 school year, with some districts returning with in-person instruction with students socially distanced, while other districts returned with hybrid teaching (alternating in-person and virtual instruction), and 100% virtual instruction. No matter the

instructional approach, elementary teachers returned to the classroom facing different environments, routines, and instructional approaches. These requirements included mandates from districts to learn new virtual instructional pedagogy and platforms and provide instruction to all students, no matter the instructional approach. With all these changes and challenges teachers faced, teachers were still responsible for providing instruction through engaging lessons just as they had in past years; however, now teachers had to alter this instruction due to COVID-19 policies. This was especially true for elementary teachers, who often incorporate hands-on activities, individualized and small-group scaffolding, and cooperative learning into lessons (Lutz et al., 2006; M. Pressley et al., 2007; Slavin, 2015). With COVID-19 still impacting lives, researchers have only begun to study the effect of the COVID-19 pandemic on teachers (Hoang et al., 2020; T. Pressley, 2021; Song et al., 2020; Vu et al., 2020), but this article is the first to analyze and explore the potential impact on elementary teachers' efficacy in the United States during the COVID-19 pandemic.

With these decisions to change instructional approaches, teachers, schools, and districts faced many challenges when providing in-person, hybrid, and virtual teaching. These challenges included technology issues for students who may not have internet access or access to proper technology (Simmons, 2020), new approaches to planning and instruction for teachers (Honigsfeld & Nordmeyer, 2020), and new technology platforms for teachers and students (Wiggins, 2020). In addition to technology and instructional issues, teachers struggled with student engagement during virtual instruction and faced high absenteeism rates for students during virtual instruction periods (Bintliff, 2020; Leech et al., 2020). Beyond the instructional challenges, teachers attempted to balance their own lives while teaching from home, leading to higher stress levels (Bintliff, 2020). With all the new challenges and COVID-19 policies teachers faced, it is important to understand their impact on teachers. Thus, the purpose of this study was to explore how the new teaching approaches and requirements have impacted elementary teachers' efficacy, specifically instructional and engagement efficacy.

To explore teachers' instructional and engagement efficacy during COVID-19 instruction, the researcher asked the following research questions. (1) What are elementary teachers' instructional and engagement efficacy scores measured by the Teacher Sense of Self-Efficacy Scale (TSES; Tschannen-Moran & Hoy, 2001) while teaching during COVID 19 pandemic? (2) Are there any differences in instructional and engagement efficacy scores measured by the TSES based on instruction type (100% virtual, hybrid, or in-person)? (3) Are there any differences in instructional and engagement efficacy scores measured by the TSES based on teachers who were previously named teacher of the year? (4) Are there any differences in instructional and engagement efficacy scores measured by the TSES based on school location (suburban, urban, or rural)?

The researcher believed it was important to focus on these four questions to gain insight into how teaching during the COVID-19 pandemic impacted teacher instructional and engagement efficacy. As districts returned to learning during fall 2020, many districts debated the appropriate instructional approach to provide students. Thus, with districts implementing different instructional approaches, the researcher believed it was important to determine if there was a difference in teacher instructional and engagement efficacy depending on the type of instruction provided. The researcher was also interested in how teachers with previous success (i.e., named teacher of the year) instructional and engagement efficacy compared to peers. The decision to use the previous TOY provided a distinguishable difference in teachers who had previous success and had mastery experiences in the classroom to identify potential teacher efficacy differences (Hoy & Woolfolk, 1993; Palmer et al., 2005). Lastly, the researcher was interested if school location influenced teacher efficacy as school location may influence student access to the internet or parental involvement during the COVID-19 pandemic (Anderson, 2020).

1.1 | Theoretical framework

Bandura's Social Cognitive Theory (1986) states that several capabilities drive a person's motivations. These capabilities include symbolizing, forethought, vicarious, self-regulatory, and self-reflective. With these capabilities a person can acquire

knowledge and skills through direct and indirect events, the self-regulation process, and by observing others (Bandura, 1986). Through the environment, behaviors, and personal factors, these capabilities play a role in a person's views on their ability to complete a particular task. Specifically, Bandura (1997) refers to a person's views on their ability to achieve a particular outcome as self-efficacy. Information regarding a person's efficacy comes from previous success in the specific domain, observing others through vicarious experiences, verbal persuasion from others, and a person's physiological state (Bandura, 1986, 1997). When it comes to performance, a person's perceived self-efficacy may impact a person's competence and performance in that domain (Bandura, 1986, 1997). Within the context of teaching, teacher efficacy focuses on "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).

1.1.1 | Teacher efficacy

Teacher efficacy is important for schools to support as previous studies have found teacher efficacy negatively associated with teacher burnout (Pas et al., 2012; Skaalvik & Skaalvik, 2007; Zee & Koomen, 2016) and positively associated with instructional quality (Kunsting et al., 2016). Specifically, Kunsting et al. (2016) found efficacy as a stable, long-term predictor of instructional quality with a supportive classroom environment. Other studies have also seen the connection between efficacy and the classroom environment, with teachers with higher efficacy often developing stronger relationships with their students (Hajovsky et al., 2020), and seeing an increase in student engagement within the classroom (Good & Brophy, 2003). Other instructional advantages include teachers with high teacher efficacy are more likely to have high expectations of student academic achievement (Fackler & Malmberg, 2016; Tournaki & Podell, 2005) and have more success at raising student academic achievement (Anderson et al., 1988).

Within the school environment, the principal and the school community may impact teaching efficacy (Fackler & Malmberg, 2016; Hoy & Woolfolk, 1993; Wolters & Daugherty, 2007). Specifically, schools that have environments of teachers with high, attainable goals and create a serious learning environment tend to have higher teacher efficacy (Hoy & Woolfolk, 1993; Wolters & Daugherty, 2007). Fackler and Malmberg (2016) found principals that support mastery and growth in various stages of teaching (e.g., new teachers and experienced teachers) and provide strong feedback and support for teachers teaching low socioeconomic students tend to see higher teacher efficacy scores (Hoy & Woolfolk, 1993). Beyond the leadership within the building, the relationships teachers build within the environment also play a role in teacher efficacy (Fackler & Malmberg, 2016; Siciliano, 2016). Teachers who develop stronger relationships with other teachers tend to have higher efficacy than teachers with many weak relationships with other teachers (Siciliano, 2016). To develop an environment that promotes teacher efficacy, principals should provide teachers opportunities to work with other teachers in the building to develop strong relationships across teachers (Dembo & Gibson, 1985; Siciliano, 2016). Developing strong professional networks can also develop a strong collective efficacy among teachers, which may lead to higher student achievement (Moolenaar et al., 2012).

Beyond the school and classroom environments, other influences on teacher efficacy include professional development (Yoo, 2016) and previous teaching experiences (Hoy & Woolfolk, 1993; Wolters & Daugherty, 2007). Specifically, Hoy and Woolfolk (1993) found teachers with more teaching experience had higher teacher efficacy due to more mastery experiences. Mastery experiences may include success in the classroom and positive feedback from observations; both may increase teacher efficacy (Bandura, 1997; Tschannen-Moran et al., 1998). Teacher efficacy may also increase when attending professional development because of the opportunity to learn new teaching skills and observe effective models (Lakshmanan et al., 2011). More recently, Yoo (2016) found that attending online professional development also increased teacher efficacy, leading to the idea that teacher efficacy can still change in a virtual setting.

The current study utilized Tschannen-Moran and Hoy (2001) TSES to measure teachers' instructional and engagement efficacy. The TSES measures teacher efficacy and specific constructs of instructional, engagement, and

classroom management efficacy. The specific constructs indicate a teacher's thoughts on their ability within each construct. To gain perspective on the impact of COVID-19 on elementary teacher self-efficacy scores, the researcher sought out previous studies that used the TSES and the subscales of instructional and engagement efficacy. Specifically, Wolters and Daugherty (2007) found teachers instructional efficacy scores averaged 7.40 and engagement averaged 7.10 across 557 elementary teachers. They also saw slight differences when comparing school levels, with elementary having the highest instruction and engagement efficacy scores compared to middle and high school teachers. When focusing on years of experience, Wolters and Daugherty (2007) found engagement scores ranged from 6.88 to 7.59, with more experienced teachers reporting higher instruction efficacy. Engagement efficacy ranged from 6.86 to 6.95, with teachers with 6–10 years of experience reporting the highest efficacy score. Similarly, Yoo (2016) also used the TSES and found instructional efficacy improved from 7.46 to 8.08 while engagement efficacy improved from 7.08 to 7.90 after teachers attended professional development opportunities across 148 teachers, with over 40% of the sample including elementary teachers.

1.2 | The current study

Based on the previous literature and the reports presented on teaching during COVID-19, hypotheses included that new teaching demands and approaches would impact teacher instructional and engagement efficacy during the 2020–2021 school year. Specifically, there would be differences between the instructional types, with teachers who are teaching on an all virtual approach would have lower efficacy scores compared to hybrid or in-person teachers. It was also predicted that teachers who had received previous accolades Teacher of the Year (TOY) would have higher efficacy due to past teaching success. Lastly, teachers who teach in a suburban setting would have significantly higher efficacy scores than teachers teaching in rural or urban settings due to internet and technology access.

2 | METHODS

This exploratory study focused on teachers' instruction and engagement efficacy during the 2020–2021 school year, which saw many school districts take on alternate approaches to instruction due to the COVID-19 pandemic.

2.1 | Procedures and sampling

The researcher used convenience and snowball sampling to recruit teachers to complete an electronic survey during the first 2 weeks of October 2020. The researcher selected this time during the school year as most teachers had returned to teaching in August and had experienced the new teaching requirements for at least 4 weeks. This provided teachers time to adjust to new instructional approaches and requirements. The researcher posted the survey to several social media groups for teachers and emailed the survey to recent graduates of a teacher preparation program. After completing the survey, the debriefing statement encouraged all teachers to pass the survey along to other teachers.

2.2 | Participants

The current study included 329 elementary teachers from across the United States. To participate, the participants had to currently teach in an elementary school in the United States. The sample included a majority of female

(99%) teachers with an average age of 40.72. Demographics of the sample included 281 (85.5%) Caucasian/White, 24 (7%) Hispanic, 10 (3%) Black, 7 (2%) Asian/Pacific Islander, and 7 (2%) American Indian/Alaskan Native. Teacher experience ranged from the 1st–38th year of teaching, with an average of 13.69 years of teaching experience. Teachers taught at a range of schools, with 201 (61%) identifying their current school as suburban, 65 (20%) urban, 201, and 63 (19%) rural. For the instructional approach, the sample included 218 (66%) teachers teaching all virtually, 94 (29%) teaching in a hybrid model with some in-person and some virtual, and 17 (5%) teachers teaching all in-person. Lastly, the participants included 55 (17%) teachers who had previously won teacher of the year (TOY) and 274 (83%) teachers who had not won TOY.

2.3 | Survey

The survey collected demographic information on teachers such as school location, years of teaching experience, grade level, and subject, and their feelings returning to the classroom during COVID-19. To measure teacher efficacy, the current study utilized the subscales of efficacy in student engagement and efficacy in instructional strategies from TSES (Tschannen-Moran & Hoy, 2001). Previously, the TSES has shown strong construct validity with other teacher efficacy scales and includes a broad range of teacher tasks required for effective teaching (Tschannen-Moran & Hoy, 2001). The researcher selected these subscales because these two constructs would be most prevalent to teachers teaching in-person, hybrid, and virtually. The TSES uses a 9-point scale that asks teachers to rate from "nothing" to "a great deal." Example questions include, "How much can you do to motivate students who show low interest in school work?" and "How well can you implement alternative strategies in your classroom?" The TSES short form subscale of instructional efficacy has an α value of 0.86, while the subscale of engagement has an α value of 0.81, respectively (Tschannen-Moran & Hoy, 2001).

3 | RESULTS

The average instructional efficacy score for the sample was 5.53 and the average engagement efficacy score for the sample was 5.17. To determine if instructional and engagement efficacy were associated with years of teaching experience, the data analysis included a Pearson's bivariate correlation. The results suggested no association between instructional efficacy and years of teaching experience ($r = 0.063$, $p = 0.258$) and no association between engagement efficacy and years of teaching experience ($r = 0.026$, $p = 0.638$). To compare groups of teachers based on the type of instruction, teacher accolades, and school location, the researcher ran a one-way analysis of variance (ANOVA) and independent-sample t tests. It is important to note that, though the group sizes differed, the researcher believed these analyses were appropriate due to the F test robustness (Blanca et al., 2017).

3.1 | Efficacy and type of instruction

To compare teachers' instructional efficacy based on the type of instruction provided at the beginning of the 2020–2021 school year (all virtual, hybrid, or in-person), the data analysis included a one-way ANOVA. The results suggest a significant difference between the three instructional approaches $F(2, 327) = 5.77$, $p = 0.003$ (see Table 1) with teachers teaching all in-person having the highest instructional efficacy ($M = 6.22$, $SD = 1.67$, $n = 17$), followed by hybrid ($M = 5.91$, $SD = 1.63$, $n = 94$), and all virtual with the lowest average of instructional efficacy ($M = 5.32$, $SD = 1.65$, $n = 218$).

To compare teachers' engagement efficacy based on the type of instruction provided at the beginning of the 2020–2021 school year (all virtual, hybrid, or in-person), the data analysis included a one-way ANOVA. The results

TABLE 1 Teacher instruction level

		Sum of squares	*df*	Mean square	*F*	Sig
Instruction Efficacy	Between Groups	31.153	2	15.577	5.770	0.003
	Within Groups	880.115	327	2.700		
	Total	911.268	329			
Engagement Efficacy	Between Groups	9.910	2	4.955	2.510	0.083
	Within Groups	643.603	327	1.974		
	Total	653.513	329			

suggest no significant difference between the three instructional approaches $F(2, 327) = 2.51$, $p = 0.083$ (Table 1) with teachers teaching all in-person having the highest instructional efficacy ($M = 5.90$, $SD = 1.61$, $n = 18$), followed by hybrid ($M = 5.19$, $SD = 1.38$, $n = 94$), and all virtual with the same average of instructional efficacy ($M = 5.11$, $SD = 1.40$, $n = 218$).

To gain more insight on the impact of teaching virtual compared to teachers teaching at least part in-person (hybrid and all in-person), the data analysis included an independent-sample *t* test. Teachers teaching all virtually ($M = 5.32$, $SD = 1.65$, $n = 218$) had a lower instructional efficacy compared to teachers teaching at least partial in-person ($M = 5.96$, $SD = 1.63$, $n = 111$). The results indicated a significant difference in instructional efficacy $t(327) = 3.32$, $p = 0.001$, when comparing just two instructional groups (Table 2).

To compare teachers' engagement efficacy, the data analysis included an independent-sample *t* test. Teachers teaching all virtually ($M = 5.11$, $SD = 1.40$, $n = 218$) had a slightly lower engagement efficacy compared to teachers teaching at least partial in-person ($M = 5.29$, $SD = 1.43$, $n = 111$). The results indicated no significant difference in engagement efficacy $t(327) = 1.14$, $p = 0.001$, when comparing just two instructional groups (Table 2).

3.2 | Efficacy and teacher accolades

To compare teachers' instructional efficacy based on the previous accolades (TOY or no accolades), the data analysis included an independent-sample *t* test. Former TOY recipients had a slightly higher efficacy ($M = 5.55$, $SD = 1.79$, $n = 55$) than teachers who were not former TOY recipients ($M = 5.53$, $SD = 1.64$, $n = 274$). However, the results indicated no significant difference in instructional efficacy $t(327) = -0.092$, $p = 0.927$, between the two groups (Table 3).

To compare teachers' engagement efficacy based on the previous accolades (TOY or no accolades), the data analysis included an independent-sample *t* test. Former TOY recipients had a slightly lower efficacy ($M = 5.07$, $SD = 1.54$, $n = 55$) than teachers who were not former TOY recipients ($M = 5.19$, $SD = 1.56$, $n = 274$). However, the results indicated no significant difference in engagement efficacy $t(327) = 0.526$, $p = 0.599$, between the two groups (Table 3).

3.3 | Efficacy and school location

To compare teachers' instructional efficacy based on the location of the school year (rural, suburban, or urban), the data analysis included a one-way ANOVA. The results suggest no significant difference in the instructional efficacy based on the location of the school $F(2, 327) = 0.974$, $p = 0.379$ (Table 4) with teachers who teach at rural schools

TABLE 2 Virtual versus hybrid and in-person efficacy

		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
Instruction Efficacy	Equal variances assumed	0.369	0.544	3.32	327	0.001	0.636	0.191	−1.013	0.259
	Equal variances not assumed			3.34	223.91	0.001	0.636	0.191	−1.012	0.260
Engagement Efficacy	Equal variances assumed	0.001	0.976	1.14	327	0.256	0.187	0.165	−0.511	0.136
	Equal variances not assumed			1.13	217.13	0.260	0.187	0.166	−0.514	0.139

TABLE 3 Teacher accolades efficacy

		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
Instruction Efficacy	Equal variances assumed	0.601	0.439	−0.09	327	0.927	−0.023	0.247	−0.508	0.463
	Equal variances not assumed			−0.09	73.35	0.931	−0.023	0.261	−0.543	0.498
Engagement Efficacy	Equal variances assumed	0.649	0.421	0.53	327	0.599	0.109	0.209	−0.301	0.521
	Equal variances not assumed			0.49	72.76	0.625	0.109	0.223	−0.335	0.555

TABLE 4 Teacher location and efficacy analysis of variance (ANOVA)

		Sum of squares	*df*	Mean square	*F*	Sig
Instruction Efficacy	Between Groups	5.444	2	2.722	0.974	0.379
	Within Groups	902.480	327	2.794		
	Total	907.924	329			
Engagement Efficacy	Between Groups	0.420	2	0.210	0.105	0.901
	Within Groups	649.062	327	2.009		
	Total	649.482	329			

($M = 5.52$, $SD = 1.78$, $n = 63$), teachers at suburban schools ($M = 5.62$, $SD = 1.61$, $n = 201$), and teachers at urban schools ($M = 5.28$, $SD = 1.76$, $n = 65$).

To compare teachers' engagement efficacy based on the location of the school year (rural, suburban, or urban), the data analysis included a one-way ANOVA. The results suggest no significant difference in the engagement efficacy based on the location of the school $F(2, 327) = 0.105$, $p = 0.901$ (Table 4) with teachers who teach at rural schools ($M = 5.19$, $SD = 1.51$, $n = 63$), teachers at suburban schools ($M = 5.19$, $SD = 1.38$, $n = 201$), and teachers at urban schools ($M = 5.10$, $SD = 1.45$, $n = 65$).

4 | DISCUSSION

The purpose of this study was to explore the impact of returning to teaching during the COVID-19 pandemic on elementary teacher instructional and engagement efficacy. The averages of both instructional and engagement efficacy indicated teachers felt they had some influence on instruction and engagement (Tschannen-Moran & Hoy, 2001). In the current study, the average elementary instructional and engagement efficacy scores were lower than TSES scores of instructional and engagement efficacy in previous studies (Wolters & Daugherty, 2007; Yoo, 2016). Though the current study did not determine if the difference is significant, it is important to note the current efficacies averaged 1–2 points lower than previous TSES averages. It is also worth noting that previous studies have found teacher efficacy scores associated with teaching experience (Hoy & Wollfolk, 1993; Wolters & Daugherty, 2007), but in the current study, this was not the case. Thus, leading the researcher to believe that teaching experience did not lead to higher teacher efficacy during the COVID-19 pandemic. These particular results are a concern suggesting elementary teacher efficacy is down during the COVID-19 pandemic. This difference may be due to the COVID-19 teaching requirements and the lack of teaching experiences using virtual elements, which are new for all teachers. These new requirements, such as learning to teach virtually and learning virtual platforms may impact all teachers as they had limited to no experience teaching virtually or experience using the different virtual platforms. Teachers may also have lower efficacy during COVID-19 due to mental health, the challenges of balancing teaching while supporting their own children's education, or the consistent media coverage of teachers and returning to learning plans (Bintliff, 2020; Goldstein & Shapiro, 2020). Schools and districts should note these results as all teachers, experienced and new teachers, need extra support for instruction and engagement while teaching during the COVID-19 pandemic.

When looking to see if there were differences in teacher efficacy scores between groups of teachers, the results found instruction type as the only significant difference. Teachers providing all virtual instruction had the lowest levels of instructional and engagement efficacy, followed by hybrid teachers, and in-person with the highest efficacy scores in instructional and engagement. Again, these findings suggest teachers have doubts or uncertainty transitioning their instruction online. The lower efficacy for all virtual teachers may be due to the lack of previous

experiences or feedback regarding virtual instruction. Because this data collection occurred at the beginning of the school year, teachers may not have received feedback on lesson plans or had administrators observe virtual instruction yet. If administrators provide supportive feedback, teacher efficacy scores may increase due to verbal persuasion (Bandura, 1986). Virtual teachers may also still have been learning the new and different instructional platforms, which may have led to lower efficacy scores compared to their peers teaching hybrid or in-person. It is also important to note that even though hybrid and in-person teachers had significantly higher efficacy scores the current results were still lower than past TSES scores (Wolters & Daugherty, 2007; Yoo, 2016). This suggests that hybrid and in-person teachers would benefit from efficacy support as well.

When comparing teachers based on location and previous teacher accolades there were no differences in teacher groups, suggesting that no group of teachers appear to have higher efficacy than others. Thus, a majority of teachers in the sample have lower instructional and engagement efficacy while teaching during the COVID-19 pandemic, with no group based on location or teacher accolades having a higher efficacy. With schools and districts continuing to provide alternative instructional approaches due to the COVID-19 pandemic, researchers and school administrators need to understand the potential impact on teacher efficacy because of the association to other variables such as teacher burnout (Pas et al., 2012; Skaalvik & Skaalvik, 2007; Zee & Koomen, 2016) and student achievement (Anderson et al., 1988). Schools and districts should look to support teacher instruction and engagement and should not assume a teacher has higher efficacy due to past experiences or school location.

4.1 | Implications

As elementary schools and districts look to the future of teaching during COVID-19, teachers need to feel supported with their planning and teaching. Though the current results suggest instructional approaches have impacted all virtual instruction teachers' efficacy more than hybrid or all in-person teachers, the results do not advise sending students back to in-person instruction until deemed safe according to the medical data and local health officials. Until that time, schools and districts need to support teacher efficacy, specifically instructional and engagement efficacy. The support schools and districts provide should focus on experiences that will build teacher efficacy, such as verbal persuasion, vicarious learning, previous effective teaching experiences, and monitor teacher physiological state (Bandura, 1986).

To increase instructional and engagement efficacy, school administrators should also provide feedback on lessons through observations. Administrators should make this a priority early in the school year because of the changes made for the 2020–2021 school year and continue to provide support throughout the year by providing feedback and environments that allow teachers to ask questions about instruction (Fackler & Malmberg, 2016; Siciliano, 2016; Wolters & Daugherty, 2007). Administrators can also remind teachers of previous teaching success and help teachers develop similar experiences with the new instructional formats. For example, reminding a previous TOY of their successes may increase a teacher's efficacy or provide a starting point for building an experienced teacher's efficacy. Administrators can also support teacher instructional and engagement efficacy by helping teachers set attainable goals (Fackler & Malmberg, 2016; Hoy & Woolfolk, 1993; Wolters & Daugherty, 2007). Goals might specifically focus on transferring an in-person activity to a virtual environment, meeting a student achievement mark, or connecting with a student who has not consistently attended the virtual instruction sessions. Beyond support from administrators, schools and districts can help teachers learn from each other through vicarious learning (Goodwin & Shebby, 2020).

To support vicarious learning, districts should provide professional development opportunities in areas that teachers are struggling (Bandura, 1997; Yoo, 2016). Districts and schools can survey teachers for specific topics that may be useful to their teaching to support teacher efficacy. For example, during the COVID-19 pandemic Song et al. (2020) found teachers wanted support with virtual teaching, technology, and developing successful home–school cooperation. Providing applicable professional development may support instructional and

engagement efficacy because it may give teachers new and innovative teaching approaches within the virtual format. To further support teacher efficacy, teachers within the district or school can run professional development. This may provide vicarious learning possibilities for teachers to learn from other teachers. A professional development run by teachers may also allow teachers to develop a network to share lesson ideas (Dembo & Gibson, 1985; Moolenaar et al., 2012; Siciliano, 2016). Though the efficacy supporting approaches may be common for schools and districts during a normal school year, the 2020–2021 school year is drastically different and supporting teacher efficacy may not be the first concern at the moment with schools and districts working through the growing pains of instruction during the COVID-19 pandemic.

Lastly, districts and schools need to monitor teachers' physiological states during the COVID-19 pandemic (Lee & Crunk, 2020; Lee et al., 2020). The pandemic has impacted everyone differently and administrators need to be aware of how teachers are feeling, specifically the amount of anxiety and stress teachers are feeling returning to teaching during a pandemic. If schools or districts begin to see high levels of stress or anxiety, administrators might consider providing a mental health day for teachers on a day that students are not receiving instruction. Districts may also try to support teachers by providing child care to the teachers who have school-aged children to lessen the burden of balancing teaching and their own children's learning. Providing extra support for teachers' mental health may lessen teachers' stressors and may allow for an increase in teaching efficacy.

4.2 | Limitations and future directions

Moving forward, more research needs to focus on the impact of COVID-19 on teachers and schools. Teaching during the COVID-19 pandemic is new and challenging for all educational stakeholders. The current study is one of the first to explore the potential impact on teacher efficacy during fall 2020. However, the current study had some limitations that future studies should look to address. First, data collection occurred at one point in time during the fall 2020 academic school year; given the assumption that teacher efficacy changes based on experiences, a longitudinal study should examine the changes in efficacy throughout the school year. Also, a longitudinal study would allow researchers to track teacher efficacy changes as many districts look to move from all virtual instruction to a hybrid format and eventually to all in-person. It would also be important to note any changes in efficacy if districts moved back to an all-virtual approach due to the spread of COVID-19 during the 2020–2021 school year and into future years. Second, the current study had a limited sample size of teachers and unequal groups for all subgroups of teachers. Future studies should include larger sample sizes and equal samples of groups of teachers based on locations, instructional type, and accolades. Lastly, future studies should include quantitative and qualitative work investigating possible predictor variables for lower efficacy and other teaching impacts during the COVID-19 pandemic.

In conclusion, the current study found teachers had low instructional and engagement efficacy compared to previous studies (Wolters & Daugherty, 2007; Yoo, 2016). The results also suggested that teachers providing all virtual instruction had the lowest instruction and engagement efficacies of the three different instructional approaches. However, the results did not find significant differences in efficacy based on teacher location, previous accolades, or level. Future research should continue to investigate the impact of COVID-19 on teachers as they are essential workers during the COVID-19 pandemic. It is important for schools and districts to understand the potential impact on teachers as they navigate the challenges of teaching during a pandemic.

CONFLICT OF INTEREST

The author declares that there is no conflict of interest.

ORCID

Tim Pressley http://orcid.org/0000-0003-3670-9751

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