

UNIVERSITY OF WISCONSIN-LA CROSSE

Graduate Studies

THE RELATIONSHIP BETWEEN PRE-SERVICE TEACHERS' SELF-EFFICACY
AND THEIR SOCIALIZATION WHILE PARTICIPATING IN AN ONLINE EARLY
FIELD EXPERIENCE COURSE

A Manuscript Style Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Exercise and Sport Science: Physical Education Teaching

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College of Science and Health

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FIELD EXPERIENCE COURSE

By Ashlin Hake

We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the degree of Master of Science in Exercise and Sport Science: Physical Education Teaching.

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ABSTRACT

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Research in physical education has studied self-efficacy and teacher socialization separately. Research has also looked at the effects of online learning or hybrid courses in pre-service teachers, but research on how pre-service teachers' self-efficacy and socialization is affected by online learning is lacking. The purpose of this study was to find the relationship between pre-service teachers' self-efficacy and their socialization while participating in an online early field experience course. Prior to the beginning of the study, informed consent was obtained. Participants were 14 college aged pre-service teachers (PTs) (4 women and 10 men) enrolled in an early field experience course. The course was taught partially online and included peer teaching instead of teaching school age children due to COVID-19. The PTs completed the Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran and Woolfolk Hoy, 2001) three times over the course of the semester. Following data analysis four PTs were purposefully selected (one with the highest mean change in self-efficacy, one with the lowest and negative mean change in self-efficacy and two others with a positive mean change in self-efficacy) for interviews. The four PTs were asked about their acculturation, professional socialization, and their self-efficacy. A repeated measures ANOVA was performed, wherein that the largest significant differences were between time one and time two of the survey with a $p < .001$. Three themes emerged from the qualitative data analysis: (a) influential teacher preparation programs impacted pre-service teachers regardless of positive or negative socializing agents in their acculturation phase, (b) hands on experiences are crucial to development of pre-service teachers' self-efficacy, and (c) PLCS were viewed as a powerful tool to increase self-efficacy.

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INTRODUCTION

Albert Bandura (1997) states that, teachers' self-efficacy beliefs and goal orientations have significant implications in education settings. They are one of the most important components in education systems. Their beliefs and attitudes during education process affect their behaviors in teaching. Self-efficacy is defined as a person's belief in their capacity or capability to complete a task or produce a desired outcome (Bandura, 1977). When learning to teach, self-efficacy levels can have a large impact on pre-service teachers. Pre-service teachers (PTs) are those enrolled in an undergraduate teacher education program where they take courses on pedagogy, theories, and content. The PTs typically have field experiences and practicums where they get hands on training with students. Another key aspect that can effect self-efficacy is occupational socialization, which has three phases, acculturation, professional, and organizational. For pre-service teachers, the occupational and professional phases are the ones they have already experienced or are currently going through. Acculturation is the time where someone learns about the profession, this could be from their past teachers, coaches, or parents. The professional phase is the time where they are enrolled in their teacher education program. During this time, professors challenge their beliefs and values and this is a time when field experiences are key to confirm their beliefs from the previous phase (Curtner-Smith, 2001).

The global pandemic has required PTs to learn online or through a hybrid model which has eliminated or limited hands on experiences with school aged students, leaving us to wonder how is this effecting PTs self-efficacy levels? There is a lack of research investigating online learning and how it specifically effects PTs self-efficacy and

occupational socialization. This study analyzed how pre-service teachers' socialization during their acculturation phase and online or hybrid learning during their professional phase effected their self-efficacy related to instruction, management, and engagement.

The study aimed to find the relationship between pre-service teachers' self-efficacy and their socialization while participating in an early field experience course and compare this data to in person learning. It was hypothesized that pre-service teachers will feel lower levels of self-efficacy due to online learning during an early field experience, due to less face-to-face time with school aged students to practice their instruction, management, and engagement. It also was hypothesized that pre-service teachers' socialization will be more affected by their acculturation than their professional socialization when learning online versus in-person.

METHODS

Participants

This study was approved by the Institutional Review Board at the University of Wisconsin-La Crosse. All participants gave written informed consent (Appendix A). There were a total of 14 Pre-service teachers (PTs) (4 women and 10 men). Six students were in their third year at the university, seven were in their fourth year, and one student was in their fifth or more year. They were enrolled in an early field experience course that is required by the university's PETE program and is taken twice. It was nine of the students first time in the course, and for five of them it was their second time.

Protocol

Pre-service teachers worked in professional learning communities (PLCs) with three other PTs. In their PLCs they worked together to plan standards based lessons in all three learning domains that included objectives and assessments. The lessons were broken down into learning segments and taught for content areas like passing and receiving, dribbling with hands, striking, dribbling with feet, overhand throw, underhand throws, locomotor skills, catching, jump rope, weight transfer, and long handled implements. Each PT taught 8- minute lessons at least once but no more than twice a week for a total of 12 -13 teaching episodes. During these teaching episodes the PTs were to focus on several desired competencies that helped focus in on aspects of their instruction, management, and engagement. This included competencies like; teacher talk, start and stop signals, teacher proximity, transitions, and instruction duration. To determine self-efficacy levels, the PTs completed the Teacher Sense of Efficacy Scale

(Tschannen-Moran & Woolfolk Hoy, 2001) (Appendix B). The Teacher Sense of Efficacy Scale (TSES) is a 24 question survey in which questions are answered on a Likert Scale ranging from 1-9. The survey has three different components, engagement, instruction, and management with eight questions in each component. The survey was converted to an online Qualtrics survey (Qualtrics, Provo Utah) for ease of data collection. The pre-service teachers who participated in the survey was given in their classroom using a Quick Response (QR) code so the participants could complete the survey on an individual electronic device. Baseline self-efficacy for each pre-service teacher was obtained before their first teaching episode, the second was completed during week four, and the last was done on week ten towards the end of their teaching sessions.

Qualitative Methodology

When all surveys were completed, the percent change across the three different self-efficacy measurements of management, engagement, and instruction for each participant from the first survey to the last was calculated [$[(\text{last}-\text{first})/\text{first}] \times 100$]. Four pre-service teachers were selected to take part in the qualitative portion of the study. These individuals were those with the highest percent change, the lowest percent change, and two others who were towards the middle. Each preservice teacher was interviewed individually through a recorded online meeting and was asked semi-structured interview questions (Appendix C). The purpose of the interviews was to collect information on how and if the PTs self-efficacy was impacted by their socialization and how online learning affected their experiences in each phase of their socialization. The questions sought information about the PTs acculturation, professional socialization, self-efficacy and their experiences within each component with online learning.

Statistical Analysis

A Repeated-Measures ANOVA was performed to assess self-efficacy and group interaction across time. Mauchly's test and Leven's test were performed to assess for the assumption of sphericity. Significant repeated measures were followed by Bonferroni Pairwise Comparisons.

Statistical analysis was performed using JASP statistics software 2020 ((University of Amsterdam, Amsterdam, The Netherlands). An alpha value of 0.05 was used to identify statistically significant differences and all data is displayed as mean \pm SD unless otherwise noted.

RESULTS

Fourteen participants completed this study (10 men and 4 women) and descriptive statistics are presented in Table 1.

Table 1.

Descriptive characteristics of the PTs

	Biological Sex		Year at University			Time in Program	
	Men	Women	3	4	5	1	2
Participant	10	4	6	7	1	9	5

Assumption checks were performed to test for equality of variance using Levens's test ($p = .903$, $p = .187$, and $p = .887$) and sphericity using Mauchly's test ($p = .676$). Neither found significant problems as all are greater than .05.

The within subjects effects of the Repeated-Measures ANOVA was significant ($p < .001$) indicating a significant change in self-efficacy over time. The interaction effect between self-efficacy and time was not significant ($p = 0.989$). For between subjects effects, no significant differences ($p = .933$) were found between the three categories of self-efficacy (engagement, instruction, and management).

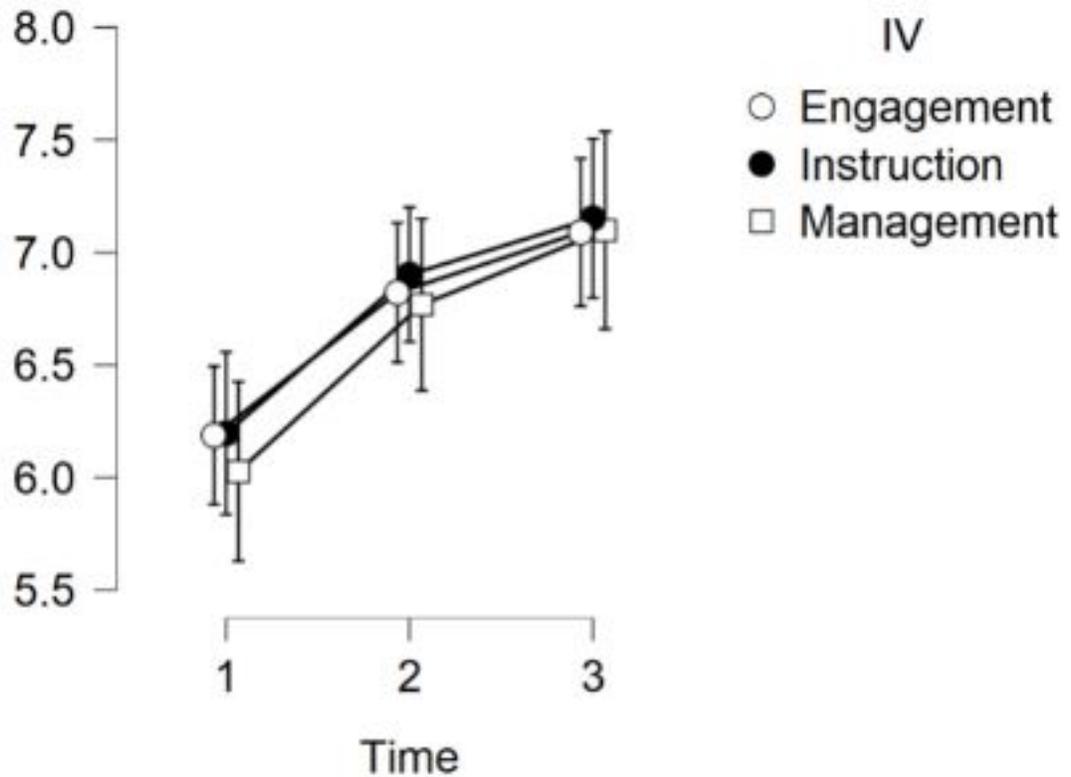


Figure 2. Descriptive plots

A Bonferroni pairwise comparisons revealed a significant difference between time one and two and between time one and three ($p < .001$) with no significant difference between time two and three ($p = 0.116$).

Of the fourteen subjects in the study four of them elected to be interviewed. The four individuals interviewed were subjects 1, 9, 12, and 14 shown in Figure 3. Subject 1 had a percent change that was negative 4.05%, subject 9 had a percent change of 19.46%,

subject 12 had a percent change of 30.52% and subject 14 had the highest percent change with a 56.07%. The average rate of change for the whole group was 17.76%.

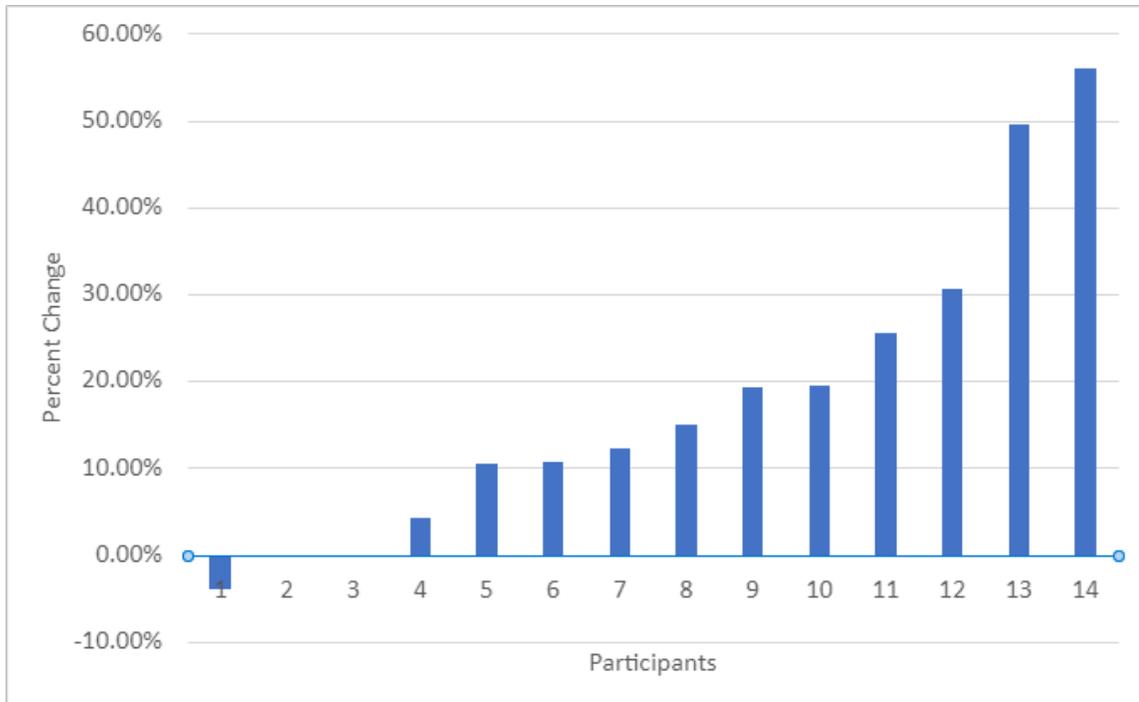


Figure 3. Individual change over time

For the qualitative data analysis process, open coding was completed on the four interviews, this then led to creating a thematic structure that broke down over arching themes and defined them, this then turned into a code book for axial coding (Richards & Hemphill, 2018). The axial coding produced three first order themes and two associated subthemes that described the pre-service teachers' self-efficacy growth through the lens of occupational socialization while learning online and in a hybrid model. The themes include: (a) Influential teacher preparation programs impacted pre-service teachers regardless of positive or negative socializing agents in their acculturation phase. (b) Hands on experiences are crucial to development of pre-service teachers' self-efficacy,

with the subthemes of varying impact of online learning on teacher self-efficacy and that pre-service teachers struggled to use instructional tools effectively, and (c) PLCS were viewed as a powerful tool to increase self-efficacy.

Influential Teacher Preparation Programs Impacted Pre-service Teachers Regardless of Positive or Negative Socializing Agents in their Acculturation phase

Pre-service teachers in this study were strongly influenced by their preparation program regardless of positive or negative socializing agents in their k-12 experiences. In the acculturation phase most pre-service teachers had at least one good relationship and experience with a physical education teacher and one bad or not so good experience in elementary, middle, or high school. For example, Emily felt she had a very close relationship with her elementary PE teacher who used quality teaching practices. However, she did not have a good relationship with her middle school teachers who tended to sit on the sidelines and just observe:

I'm still like pretty close with my elementary school PE teacher, we had a good relationship. He made sure to say hi and check in on us outside of PE class. Then in middle school, I didn't talk to those PE teachers. They didn't really care and I felt like, looking back in it, they just kind of like sat on the side of the classroom and like sat with their feet kicked up, there were days where they would, literally have their feet kicked up.

When discussing why the PTs wanted to become PE teachers all four interviewees stated memories of not wanting to be like the teachers they saw as not quality in their K-12 experiences. Participants also identified those that had positive impacts on them as well. Megan recalls the positive experiences she had with her high school PE teacher:

Then the other one, she actually was a new person that came my senior year. She was, the reason I wanted to be a PE teacher, just because, she had a way of getting literally everybody to have fun and like participate. She was the first actual PE teacher that I could actually see that she was making a difference in people and in the kids' lives.

Regardless of any negative experiences participants had during their acculturation, they have found that through their teacher preparation program and the positive and negative experiences in their K-12 education that they have the tools and confidence to be quality physical education teachers themselves. Robert reflects on his experiences and how that has affected what he wants to be as a PE teacher:

I know what really bad looks like and what really good looks like. So I got a very stark contrast there. And you know, myself included, there was very uncomfortable times and you end up just hating going to that class, rather not because of the material, but based on like the social aspect and the un-comfortability versus seeing a really good program where everyone's accepted.

Robert then goes on to discuss what his teacher preparation program has done to change his perceptions of physical education after his experiences during his acculturation.

It has changed in the aspect of you see how in depth everything we do is, there is a lot of research to tell why we are doing things and it backs up what we are doing rather than just saying well this worked so let's do it again, like I sometimes saw growing up.

Emily also talked about her perceptions of physical education changing when she started and thus far in her teacher preparation program:

My perceptions have changed a lot, I always wondered why are we here? When in PE. Now I know there is so much more to PE than just playing dodgeball and kickball and I know why it is so important and realize there is so much that you can do that I was unaware of before.

It was found that the participants' teacher preparation program gave them many tools even through the pandemic it was shown all the program provides for the pre-service teachers. Robert discusses what the program has taught him:

Learning classroom management styles and like learning about, the most effective ways to like manage behaviors, as well as like getting like all of the knowledge needed to teach. Every single skill and locomotor movement possible. Like I have

all of that now. Whereas like first day of school, freshman year, I had no idea what I was doing.

Hands on Experiences are Crucial to Development of Pre-service Teachers Self-Efficacy

It was found that hands on experiences are imperative for the development of pre-service teachers' self-efficacy. Through the pandemic they felt they missed out on so many of these experiences, Emily discusses how that affected her self-efficacy levels, "It decreased my confidence just because I wasn't really like working on anything that was actual teaching. It was more like learning. Um, and so I wasn't able to like get that hands-on experience". Another participant Jason, talks about what he finds to be important in a teacher preparation program:

I feel like experience is a lot. Um, knowing what kind of kids, how different they are, everyone's different and just being able to understand them. Have patience and yeah, just like literally experiencing like different things, and knowing not everything's going to go as how you plan sometimes something new is going to happen.

Since there were not as much hands on experiences and more online components to the course, among this first order theme it was also found that there were varying impacts of online learning on teacher self-efficacy

Varying Impact of Online Learning on Teacher Self-Efficacy

This study found that there was a second order theme of varying impact of online learning on pre-service teacher self-efficacy. Although online learning didn't improve their self-efficacy in hands on teaching, it built their confidence in being able to teach online. Emily talked about how learning online helped boost her confidence in her own abilities to potentially have to teach online someday:

Getting the ideas and like experience of being online, I kind of know for the future. I think there's going to be a lot of opportunities for more online learning with kids, so having that knowledge of, oh, when we did this kind of stuff, this is what we did.

However, they felt that their confidence teaching certain areas or subject matter was lower due to learning it online instead of in person. For example, dance and gymnastics learned online was identified by Robert:

The disadvantages to learning something like gymnastics and dance online, it's easier to see it in person and be able to work with that person on it. If I had a professor help me, it's easier to learn that right away in person. So I can be like, am I doing this right? Or can you show me this again, rather than trying to watch her, you know, through a little webcam, do a complex movement.

It was found that in their professional phase, participants felt they missed out on some hands-on experiences with students due to COVID and online learning. They received some peer teaching, but found that that was just not quite the same as teaching to actual students. They felt that hands on experience was a key part of the teacher preparation program that they were missing. The participants also reported it was harder to focus when learning online. Megan, who is in her second time in the course, discusses how important working with actual students is to her:

Just working with kids is a confidence booster. It's so much different than teaching our peers. I would say the homeschool program, like just having those different kids to work with and being able to engage with each of them separately and understanding that they're all different in their own ways, is huge for a teacher to make those connections and bonds with their kids.

When the participants were given the opportunity to gain hands on experiences working with students, they felt that it was not enough time needed to focus on instructional tools and effective management.

Pre-service Teachers Struggled to use Instructional Tools Effectively

This second order theme identified that, pre-service teachers struggled to use instructional tools effectively, specifically their desired competencies. Preservice teacher's perception of their instructional abilities was largely impacted by small class sizes and short time frames. They found it harder to focus on the desired competencies when not teaching students and when they were allowed to, the groups of students were smaller and the teaching segments shorter, making it more difficult to focus on the instructional tools. For example, Emily talked about not being able to focus on management strategies:

I would change the sizes of the groups of kids we were working with. The groups of kids we're working with are really small. In some of them, there was only one kid in the group, but then there was like six in another group. So it was kind of hard to like use classroom management, it's kind of hard to manage a class when you have one kid.

Megan reflects on the time they had to work with the students and how that affected her working on the desired competencies:

It is kind of hard to focus on them (desired competencies), the majority of the time, just because we didn't have a lot of time, I think we only had like eight minutes to work with the kids. So, it wasn't like you were spending a ton of time on anything, but yeah, I do think that they helped or focused our lesson planning and all that stuff on one specific thing.

However, participants found that using the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) self-efficacy survey helped them to focus on one specific area of improvement instead of several or all at one time. Jason mentions how the survey made him stop and look at what he could improve on, "It just made me think about it. I'm like, yeah, that's something I can work on, I know it's there, but I had to do something to fix it".

Robert also felt the self-efficacy survey helped his ability to reflect on his learning:

It's like a reflection. It's definitely a good time to sit and reflect on my learning and what I think I should be learning. Um, where do I feel like I'm at and things like that, what do I feel like I need to improve on? But yeah, it was a great tool for reflection.

PLCs were Viewed as a Powerful Tool to Increase Self-Efficacy

Preservice teachers perceived working as a PLC when planning, teaching, assessing and reflecting increased their self-efficacy. Although they did not speak highly of peer teaching, they gained some confidence from working closely with their peers in other aspects of their learning. Jason, a first time student in the course, felt like he lost a lot of confidence when he started working with actual students again spoke about how his peers helped him:

Just being with my peers, they gave me so many tips and like what I can work on. So that has definitely helped with my confidence. When we started like the first, the second and third week of homeschool work with the homeschool kids, I wasn't sure what I was doing because we were in a new topic, long handled implements and, I wasn't finding any activities and my group was helping me out.

Emily, a second time student in the course, also found that her PLC was beneficial in building her confidence:

I gained a lot of confidence from watching my peers, like learning from them and because it was four of us in a group that taught for like each set of homeschool kids. So, watching them during times that I wasn't actually teaching, kind of gave me confidence and gave me more ideas of what I can be doing to become better too.

The study showed that through online learning, relying on peers and PLCs was helpful for students to see what they needed to work on, what they were doing well, to

help with planning of lessons, and just be support for one another during stressful and difficult times.

Overall, the interviews indicated that the participants had an influential teacher preparation program regardless of the experiences and socializing agents they may have had during their acculturation. When participants reflected on negative experiences from the acculturation phase, they also discussed how that had led them to want to be different in their own teaching.

Participants felt they missed crucial hands on experiences that could have helped develop self-efficacy. This was in part due to the impact of online learning. Most stated that online learning did not improve their self-efficacy when teaching in person, but it built their confidence in being able to teach online. They felt they missed hands on experiences with actual students and that teaching their peers was not as effective. Confidence in teaching certain subject areas like dance or gymnastics after learning online was lower because of not having face time with professors to practice what was learned and ensure content was learned and executed properly.

Pre-service teachers struggled to use instructional tools effectively. Participants felt that their instructional abilities were largely impacted by small class sizes and short time frames to teach. It was more challenging to focus on the desired competencies with the shorter time segments or when teaching to peers. Participants felt the self-efficacy survey was a useful reflection tool that helped them to focus in on specific areas of their teaching.

Participants viewed PLCs as a powerful tool to increase self-efficacy. Working with their peers when planning, teaching, assessing, and reflecting increased their self-efficacy. Working with their peers helped with their confidence and they felt supported throughout the semester.

DISCUSSION

This study was conducted to find the relationship between pre-service teachers' self-efficacy and their socialization while participating in an online early field experience course. Participants in the study completed the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) where they focused on their self-efficacy levels in the areas of management, engagement, and instruction. From the survey it was found that the average rate of change in self-efficacy combining all three categories was 17.76% for the group, with the highest change being 56.07% and the lowest -4.05%.

Through interviews three first order themes were discovered as well as two associated subthemes. The analysis showed that influential teacher preparation programs impacted pre-service teachers regardless of positive or negative socializing agents in their acculturation phase. It was found that hands on experiences are crucial to development of pre-service teachers' self-efficacy with the subthemes of varying impacts of online learning on teacher self-efficacy as well as pre-service teachers struggled to use instructional tools effectively, and that PLCS were viewed as a powerful tool to increase self-efficacy.

(Aiken, 1999) indicated that early field experiences are necessary and significant in pre-service teachers' preparation and PTs wished they could have had more of those experiences. Another study found the importance of on-going, appropriate and authentic challenges to establish strong and stable efficacy in pre-service teachers (Gurvitch, 2009). It was hypothesized that pre-service teachers will feel less self-efficacy from online learning heading into an early field experience, because they will have less face-to-face time and hands-on experiences with students to practice their teaching, problem solving,

and classroom management skills. The data and analysis support this by the identified theme that hands on experiences are crucial to the development of pre-service teachers. It is also supported by previous research that found that the average percent change for pre-service teachers completing the same survey, but who did not learn online, was 22% (Anderson, 2020) which is higher than the 17.76% found in this study. (Anderson, 2020) also found a similar result in the importance of hands-on experiences during the professional phase increased self-efficacy. Although the pre-service teachers reported missing hands-on experiences, they reported feeling more prepared to teach online themselves if they ever had to after learning that way.

Anderson's research (2020) found that focusing on desired competencies during teaching segments positively impacted self-efficacy, whereas the current study, which included online learning, resulted in participants not focusing on the desired competencies and consequently did not see them as beneficial to their self-efficacy levels. The COVID-19 pandemic limited the number of students available to teach and time constraints made it challenging to focus on the desired competencies. However, taking the time to complete the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) was beneficial to the PTs development in both studies. It was viewed as a positive reflection tool and helped the PTs identify what they should be focusing on and what areas needed improvement.

It was also hypothesized that PTs socialization would be more affected by their acculturation than their professional socialization when learning online versus in-person. It is known that what is learned in acculturation it the hardest to change, while the professional phase is where you keep or remove ideas you learned previously through

new experiences and professors' orientations (Richards, 2014). The analysis showed that an influential teacher preparation program can have a greater impact than the PTs positive or negative experiences during their acculturation. Not having as many hands-on experiences due to online learning did not seem to affect their socialization as expected and they saw value in the program and professors' orientations and were able to overcome views learned in their acculturation. This result supports Anderson's 2020 research which found time in the preparation program influenced students who had both positive and negative acculturation experiences but does not support the original hypothesis of this study. This could be due the quality of the physical education teacher preparation program and what was taught during the time spent online as well as strong professor orientations.

CONCLUSION

It is known that hands on experiences in a teacher preparation program are crucial for developing self-efficacy (Aiken, 1999). It was found that without these experiences, teachers will face a “reality shock” when they start teaching (Martins, 2014). The acculturation phase is the hardest to change, and it has been reported that pre-service teachers use field experiences to confirm their beliefs and values learned during it (Curtner-Smith, 2001). Which leads to the research questions of this study: 1) What is the relationship between pre-service teachers' self-efficacy and their socialization while participating in an online early field experience course? 2) How do the results compare to the same study done on pre-service teachers who learned completely in person with a full field experience?

It was hypothesized that pre-service teachers will feel less self-efficacy from online learning heading into an early field experience, because they will have less face-to-face time and hands-on experiences with students to practice their teaching, problem solving, and classroom management skills. As well as that pre-service teachers' socialization will be more affected by their acculturation than their professional socialization when learning online versus in-person. This study supports those hands-on experiences lead to higher levels of self-efficacy; however professional socialization has a greater impact on pre-service teachers' self-efficacy than the acculturation phase at this point in their training, even after some online learning with less hands-on experiences. Further research is needed to fully support these finding.

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APPENDIX A
INFORMED CONSENT

Informed Consent

Protocol Title: Pre-Service Teacher Socialization and
Self-Efficacy While Learning to Teach

Procedure:

- The purpose of this study is to determine how a pre-service teacher's socialization, or prior experiences, can relate to their self-efficacy while learning to teach in an online setting
- This study will include two parts: part one is all subjects completing a self-efficacy questionnaire, Part two includes interviewing eight select members of the study.
- The self-efficacy questionnaire will be issued four times throughout the semester.
- The interviews will take place during class time and all interview will be audio recorded.
- Questionnaires will be completed during class time of ESS 365.
- Participants will be notified via email if they have been selected for an interview and will set up an interview time with the principle investigator.

Risks:

- Potential risks/inconveniences will be addressed by arranging interviews when most convenient to the participants.

Confidentiality:

- My participation is voluntary. I can withdraw or refuse to answer any question without consequences at any time.
- I can withdraw from the study at any time for any reason without penalty.
- The results of this study may be published in literature and presented at meetings, conferences, and/or conventions.
- All questionnaires and audio recordings will be kept confidential through the use of number codes, all participants' names will be kept confidential with the use of pseudonyms (fake names) and stored on a password protected word processor.

Possible Benefits:

- Subjects will gain a better understanding of how to build confidence and how to recognize self-efficacy.
- Will help physical education teacher education staff better understand how to help prepare pre-service teachers for teaching in the real world. Will allow subjects to reflect on their experiences and how it affects their teaching.

Informed Consent

Questions regarding study procedures may be directed to Ashlin Hake (651-705-9576), the principle investigator, or the faculty advisor, Dr. Deb Sazama (608-785-8183).

Questions regarding protection of human subjects may be addressed to the UW- La Crosse Institutional Review Board for the Protection of Human Subjects, (608- 785-8044 or irb@uwlax.edu).

Participant _____

Date _____

APPENDIX B
TEACHER SENSE OF EFFICACY SCALE

Teacher Beliefs - TSES

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

	None at all	Very Little	Some Degree	Quite A Bit	A Great Deal				
1. How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
2. How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9
3. How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
4. How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
5. To what extent can you make your expectations clear about student behavior?	1	2	3	4	5	6	7	8	9
6. How much can you do to get students to believe they can do well in school work?	1	2	3	4	5	6	7	8	9
7. How well can you respond to difficult questions from your students?	1	2	3	4	5	6	7	8	9
8. How well can you establish routines to keep activities running smoothly?	1	2	3	4	5	6	7	8	9
9. How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
10. How much can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
11. To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
12. How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
13. How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
14. How much can you do to improve the understanding of a student who is failing?	1	2	3	4	5	6	7	8	9
15. How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
16. How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
17. How much can you do to adjust your lessons to the proper level for individual students?	1	2	3	4	5	6	7	8	9
18. How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
19. How well can you keep a few problem students from ruining an entire lesson?	1	2	3	4	5	6	7	8	9
20. To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
21. How well can you respond to defiant students?	1	2	3	4	5	6	7	8	9
22. How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
23. How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
24. How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9

APPENDIX C
SEMI-STRUCTURED INTERVIEW QUESTIONS

Semi- Structured Interview Questions

(Multiple Prompts Allowed)

(Be sure to prompt, whenever applicable, about Engagement, Instruction, and Management)

Acculturation

1. Describe what your K-12 physical education experience and environment was like. i.e. class size, content, teacher relationship, etc.
2. Walk me through a typical day in your elementary, middle, and high school physical education classes.
3. Why did you want to become a physical education teacher?
4. Explain how your K-12 physical education experiences have impacted your confidence in teaching.
5. How do you perceive your K-12 teacher(s) on being a quality educator in engagement, instruction, and management?
 - a. How is this similar/different than your experience in the physical activity program?
6. If you could change anything about your elementary, middle, or high school physical education class, what would it be? Why? How has this impacted you in becoming a teacher?
7. Did you have any experiences learning online in your k-12 experience?

Professional

8. How has your teacher preparation program helped you become a more confident teacher?
 - a. Was there a specific moment that you feel like your confidence greatly increased? Or was it a more gradual increase?
9. How could your teacher preparation program help you become a more confident teacher?
10. How have your perceptions of physical education changed since coming to UWL?
11. Have you worked with children outside of the UWL PETE Program? How has this impacted your confidence in your teaching?
12. How has the UWL physical activity program specifically impacted your confidence in engagement, instruction, and management?
13. What has been your experience with learning online while in your teacher preparation program?
 - a. What program courses did you take online?
 - b. What did these online courses entail? How were they structured?
 - c. What were the advantages of online learning? What are the disadvantages?

Self-Efficacy

14. Describe a time when you did/did not feel confident in your teaching.
15. Describe a time when you did/did not feel confident in your teaching within the UWL physical activity program.

16. Did completing the self-efficacy questionnaire have any impact on you? If so how did it impact you? What stands out to you in regards to self-reflection?

17. Given your confidence in teaching during the physical activity program, what would you change or keep the same in regards to becoming an effective teacher?

18. Do you think that the focus on the desired competencies in the physical activity program has impacted your confidence in teaching and engagement with students?

19. How do you feel online learning effected your confidence levels in your ability to teach? Specifically, how did learning online effect your confidence in engagement, instruction, and management?

20. Is there anything that is important that I have missed about your confidence in teaching in the physical activity program?

APPENDIX D
REVIEW OF LITERATURE

Review of Literature

Online and virtual education is becoming more and more prevalent as our world faces a pandemic and as technology evolves in general. For pre-service teachers, hands on experiences like practicums and field experiences are imperative for them to build their self-efficacy, confidence, and skills to be able to teach effectively. This brings up the question of how this online education will affect the self-efficacy of pre-service teachers. Reviewing the literature on self-efficacy of pre-service teachers in field experiences as well as looking into online education presents the need for further study.

Pre-Service Teachers and Early Field Experiences

Pre-service teachers are students enrolled in an undergraduate teacher education program. They typically take courses in pedagogy, theory and have many content courses on what they will be teaching. Field experiences and practicums are also involved in their training traditionally which allows for many hands on experiences in real world situations.

The hands on experiences pre-service teachers get early on in their education programs are imperative. It has been reported that early field experiences were some of the most valuable components that prepared pre-service teachers for teaching (Aiken, 1999). It is estimated that less than half of all teacher education graduates actually pursue a career in schools, due to feeling ill-prepared to face what actually goes on when teaching (Aiken, 1999). Aiken's research was done to explore the role and influence early field experiences have on pre-service teachers. The pre-service teachers received a questionnaire. They viewed early field experiences as significant and necessary in preparation for teaching and should occur in a variety of schools and classroom settings

(Aiken, 1999). This poses the question of could one of these “settings” be virtual, how would this change the results of a similar questionnaire.

In a study on a field based practicum experience in a physical education teacher education program they found that an on-going, appropriate and authentic challenges are necessary to establish strong and stable efficacy in pre-service teachers (Gurvitch, 2009). Another important component the pre-service teachers reported was that they better understood educating students beyond the scope of a particular subject area (Aiken, 1999). In a chaotic time in our world, paying closer attention to our students social and emotional needs is imperative and knowing how to teach a subject area is as important as social-emotional learning today. The pre-service teachers in this study also reported that they regretted not participating in more early field experiences (Aiken, 1999). How will this change if pre-service teachers are learning virtually?

Self-Efficacy

Self-efficacy is a person’s belief in their capacity or capability to complete a task or produce a desired outcome. Self-efficacy plays an essential role in analyzing changes in fearful and avoidant behaviors (Bandura, 1977). People’s convictions in their own effectiveness will affect their willingness to cope with a given situation, however if they persist and gain corrective experiences, their efficacy can increase and eliminate their defensive behaviors (Bandura, 1977). There are four sources of self-efficacy; mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Mastery experiences involve goal setting and persisting through challenges to see a result form pursuing a goal. Vicarious experiences involve social modeling or witnessing demonstrations by other competent people. Verbal persuasion is being told

you have what it takes to be successful or not and then that leading to have the same effect. It is like a self-fulfilling prophecy, if you are told you will succeed, you are more likely to do so or vice versa. Physiological and affective states are your emotions, moods and physical states that will influence how you may feel about yourself. This can affect your confidence. These four sources can lead to developing self-efficacy and thus influences an individual's behaviors and performance.

Bandura is a psychologist who developed the above theory on self-efficacy and maps it out in great detail in his article "Self-efficacy: Toward a Unifying Theory of Behavioral Change". This is a great resource to get a basic knowledge of self-efficacy and Bandura's theory. It is a good starting place in doing research on a topic that involves the basic concept of self-efficacy, and familiarizing yourself with the components of it and what may impact it.

Self-Efficacy in Pre-Service Teachers

Teacher self-efficacy has been associated with a variety of positive outcomes for not only teachers, but students as well. There however, is not a lot of research on the development of self-efficacy on pre-service teachers, so that is what Pfitzner-Eden's research aims to do. When looking into how different experiences affected the four components of Bandura's Self-Efficacy Theory throughout pre-service teachers' practicum experiences, it was found that mastery experiences played the largest role in a teachers' self-efficacy development (Pfitzner, 2016). These mastery experiences come directly from the hands on experiences in their practicums. The mastery experiences are largely informed by the other three sources, vicarious experiences, verbal persuasion, and the affective states (Pfitner, 2016). This shows that having the hands on experiences help develop self-

efficacy through all of the channels in some way. This article also notes that they found that students play an important role in verbal persuasion, not just the cooperating teachers (Pfitzner, 2016). This makes one question how virtual field experiences will play into this aspect of student feedback to the pre-service teachers.

Pre-service teachers' self-efficacy and confidence largely influences how they teach. Self-efficacy increases during teacher education programs, especially through and during field experiences (Martins, 2015). Through real teaching situations pre-service teachers can gain more experiences that increase their confidence in their ability to successfully teach. Without early hands on experiences, teachers face a "reality shock" when they actually get to student teaching (Martins, 2015). Early field experiences are imperative to self-efficacy and are critical to their development (Martins, 2015). Without these experiences in the early stages of a program, it could significantly impact pre-service teachers' self-efficacy in a negative way. In this study by Martins, pre-service teachers reported having higher efficacy if they got to experience real world scenarios where they had to integrate behavior management strategies, build relationships with their students, and received direct feedback from their supervising teacher. This signifies the importance of the hands on experiences that help prepare them for their futures as educators.

When looking at pre-service teachers' expectations before a practicum experience, they reported wanting to have an understanding of the challenges of teaching, observe their cooperating teachers teach lessons, and reflect on the observations of lessons done by their cooperating teachers (Choy, 2013). After they completed their practicum experiences they reported that they did have a clear understanding of the

challenges of teaching, they gained teaching skills from observing their cooperating teachers, they learned how to lesson plan, learned classroom management skills, and were able to think critically about teaching (Choy, 2013). This practicum experience gave students the opportunity to apply the theoretical aspects of their coursework into a real world context in the classroom. This raises the question of would a questionnaire like this yield similar results if the course was conducted virtually, and makes you wonder how it would impact the results.

Occupational Socialization Theory

Occupational Socialization Theory is the field of study that seeks to understand the process an individual takes to become a teacher. A teacher's socialization shapes how they perform their work and promotes student learning (Richards, 2014). There are three phases of socialization which include acculturation, professional socialization, and organizational. Acculturation is the time where a person learns about the profession, so in the case of physical education this influence could come from their teachers, coaches and parents. Professional socialization is the time a person spends enrolled in a teacher education program. The organizational phase is the time where a person enters the workforce as a teacher (Richards, 2014).

My study will look more into the professional socialization of pre-service teachers and the influence that a physical education teacher education program has on them. A key component of this phase is for professors to challenge the beliefs and values that the pre-service teachers enter this phase with because those developed in the acculturation phase are difficult to change (Richards, 2014). Pre-service teachers tend to use field experiences to confirm their beliefs and values acquired in the previous phase (Curtner-Smith, 2001).

Online Learning

Since online learning is a fairly new concept there is not a lot of research out there on how it can affect pre-service teachers. We typically see teachers getting more hands on experiences rather than learning virtually. In the past year pre-service teachers learning online have experiences creating a lot of lesson and unit plans, peer teaching, learning about different teaching models, working in PLCs and hearing from in service teachers.

There is a lack of research on physical education teacher education programs online learning but there are some studies done on pre-service teachers in different subject areas learning online. In a study done on English language teachers enrolled in a program where the first two years were in person classroom training and the last two years are done asynchronously online, it was found that pre-service teachers had high levels of self-efficacy in engaging students learning, managing classes and implementing instruction strategies (UCAR, 2016). This study did not detail what the asynchronous portion entailed so there still could have been some hands on components that could have boosted their self-efficacy. In a study on blended learning in biology pre-service teachers found that creative thinking was increased through their education (Yustina, 2020). In another study on online learning in pre-service teachers it was reported that they missed social aspects of in person courses and being able to interact with others during the learning process (Dettori, 2006). In one study that was done on high school students perceptions of their online physical and health education courses, there were students who participated in a traditional classroom setting course and others who participated virtually. It was found that the online education setting was favored (Williams, 2020).

Students reported that they felt they had more choices virtually and could focus on their individual interests (Williams, 2020). This raises some questions on what students could be missing by learning virtually and only participating in activities that interest them. They will not be able to grow and learn new items, interests, or skills if they are closed off and choose only what they know already. This can be considered in the world of pre-service teachers as well, if an online platform offers more opportunity for choice, they may never be pushed out of their comfort zone to grow and build their self-efficacy in more areas. Not as familiar or comfortable to them.

Conclusion

We know from research on self-efficacy that it increases with experiences and working on their teaching and that mastery experiences play the largest role in pre-service teachers self-efficacy. It is clear that the professional phase of a pre-service teachers' socialization is where they keep or remove the ideas they have learned previously through experiences and professional orientations and that acculturation is the hardest phase to change. Online learning creates high levels of self-efficacy in pre-service teachers when used in combination with in person learning. It helps to spark creativity, but pre-service teachers missed social interactions that are important to the learning process. It is clear from the literature that field experiences, practicums, and hands on activities interacting with actual students is imperative in developing pre-service teachers' self-efficacy. The research shows that there are many factors that influence self-efficacy and how field experiences, especially early ones, can affect the confidence of the pre-service teachers.

There is a lack of research on online learning specifically its effects on pre-service teachers' self-efficacy and occupational socialization. The research is also missing what are pre-service teachers' perceptions on their teaching experiences during a course given in an online format without student contact. This leads to the question of what is the relationship between pre-service teachers' self-efficacy and their socialization while participating in an online early field experience course and how does this compare to a previous study on in person learning.

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