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## Factors that contribute to Teachers' Self-Efficacy for Inclusive Teaching: :A Thematic Analysis

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A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Education

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## **Abstract**

Having a strong sense of self-efficacy for teaching has been shown to be associated with numerous positive benefits for both teachers and the students that they teach. As such, researchers have been interested in identifying factors and experiences that contribute to a strong sense of self-efficacy for teaching. However, very few studies have investigated these factors qualitatively and even fewer have compared the experiences of pre-service and early career teachers. This study examines the life experiences of pre-service and early career teachers, and how these experiences contribute to their self-efficacy for teaching within inclusive classrooms. Forty-nine pre-service and 86 early career teachers were interviewed and asked about their confidence for teaching within inclusive classrooms. Interviews were coded and analyzed using thematic analysis. The experiences which contributed to participants' self-efficacy fell into three themes: 1: Practical, hands-on teaching experiences, such as directly teaching within a classroom, 2: theoretical learning and professional development such as the coursework taken within faculties of education, and 3: Past experiences such as previously worked jobs. Implications for both faculties of education and school administration, as well as how these experiences fit within the larger theory of self-efficacy are discussed.

**Keywords:** Self-Efficacy, Pre-Service Teachers, Early Career Teachers, Inclusive Education, Experiences.

## **Summary for Lay Audience**

Teachers who believe in their own abilities to bring about desired outcomes within classrooms tend to provide higher quality lessons, experience less stress while teaching, and are less likely to burn out and leave the teaching profession. This sense of belief is called self-efficacy. This study explored the experiences which contributed to pre-service and early career teachers' sense of self-efficacy for teaching within inclusive classrooms. Pre-service and early career teachers were interviewed and asked to describe the experiences which contributed to their levels of confidence for teaching within inclusive classrooms. These interviews were analyzed, and three broad categories of experiences emerged. The first category included hands-on, direct experiences such as directly teaching within classrooms. Both pre-service and early career teachers routinely described that the most significant contributors to their confidence was actually teaching within inclusive classrooms. The second category included more hands-off, theoretical experiences such as coursework and professional development opportunities. These experiences were described less favourably, and were often seen as being too theoretical or as having too few opportunities to practice what was being learned. The third and final category included experiences which occurred before teachers' entered their faculties of education. These included previously worked jobs, and personal experiences with diverse learners. The largest of its kind to date, this study tells a rich story of the experiences that contribute to the self-efficacy for teaching within inclusive classrooms of Canadian pre-service and early career teachers.

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## Chapter 1

### 1 Introduction

#### 1.1 Background and Significance

Within the field of education, inclusion is the notion that all children are entitled to a quality education within an age-appropriate general education classroom. Within such a classroom, all students receive the proper supports and accommodations that best suit their individual learning needs (Loreman et al., 2014). The foundations of inclusive education in Canada are grounded in the Charter of Rights and Freedoms (Constitution Act, 1982), and the Salamanca Statement (UNESCO, 1994). As mandated by the Charter, all Canadian citizens, regardless of ability, have equal rights and protections which includes access to high-quality education. In 1994, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) published the Salamanca Statement, which was a call to the governments of the world to declare inclusive education to be an inalienable human right. It stated that educating all students within regular schools is the most effective and efficient means of combatting discrimination, fostering welcoming communities, and improving the effectiveness of education systems worldwide. The statement emphasized that world governments should place a high priority on implementing pro-inclusion legislature, and an equally high priority on providing funding and resources for inclusive education programs (UNESCO, 1994). Canada, as a signatory of the Salamanca Statement, has made inclusive education a priority across its provinces (Falkenberg, 2015). Every Ministry of Education across the provinces of Canada have policies put in place to promote inclusion in schools (Whitley & Hollweck, 2020), and all faculties of education across the country aim to prepare pre-service teachers to teach within these inclusive classrooms (Falkenberg, 2015).

In Canada, teacher education programs vary from province to province (Falkenberg, 2015). However, most faculties of education across Canada offer a two-year Bachelor of Education degree which combines theoretical coursework and hands-on practicum experiences. The goal is to provide pre-service teachers with the skills, knowledge, and educational foundation that they require to teach successfully within an inclusive classroom (Falkenberg, 2015; Van Nuland, 2011). To implement inclusive practices effectively however, it is not enough for teachers to leave their faculties of education with theoretical knowledge and practical skills. They must also believe in their own abilities and have the confidence that they can bring about the changes that they wish to see in the classroom. In other words, they must have a strong sense of self-efficacy for teaching within inclusive classrooms (Sharma, 2018).

Teachers who have a strong sense of self-efficacy in their teaching abilities provide lessons of higher instructional quality (Colson et al., 2017; Hamman et al., 2013; Miesera et al., 2019), pay more attention to the needs of individual students (Colson et al., 2017), have a much more positive outlook on the teaching profession (Jamil et al., 2012), experience less stress while teaching (Skaalvik & Skaalvik, 2010), and are more likely to involve students in classroom decisions (Evans, 2018; Woolfolk-Hoy & Spero, 2005). Due to the benefits of a high level of self-efficacy, it is paramount that by the end of teacher education programs, pre-service teachers feel ready and confident to enter the workforce. However, it is equally as important that levels of self-efficacy remain high into the first years of the teaching career. Once firmly established, self-efficacy beliefs are difficult to change (Bandura, 1997). A teacher who has a firm understanding of his or her abilities is unlikely to have that concept changed, even when presented with evidence to the contrary. As such, early experiences,

such as those obtained during the pre-service and early career period, are particularly influential to the development of a strong sense of self-efficacy (Weber & Greiner, 2019).

### **1.2 Present Study**

Throughout the past 30 years, self-efficacy for teaching has become an increasingly significant focal point for educational research. A wide array of studies have been conducted exploring how self-efficacy for general teaching develops (see Morris et al., 2016). However, self-efficacy is domain specific (Bandura, 1997). This means that self-efficacy in one domain might not necessarily translate to self-efficacy in another domain. As a result, an equally wide array of studies have been conducted exploring how self-efficacy for more specific aspects of teaching develops. The specific aspect of teaching that the present study focused on was the development of self-efficacy for teaching within inclusive classrooms. As will be explored further, a solid foundation of research on this topic already exists. However, a very significant gap in the literature exists with regards to *how* this solid foundation came to be. The overwhelming majority of studies investigating what influences self-efficacy for teaching within inclusive classrooms have adopted a strictly quantitative approach (for examples, see Hamman et al., 2013; Kiel et al., 2020; Miesera et al., 2019). This method, often incorporating a variety of valid and reliable questionnaires, has its merit. The quantification of self-efficacy allows for the measurement of effect sizes to see the impact of interventions (for example, see Sharma & Sokal, 2015), allows for the comparison of groups to determine if different demographic variables are associated with different levels of self-efficacy (for example, see Specht et al., 2016), and allows for specific analyses to be run to determine if a combination of variables can predict one's self-efficacy (for example, see Specht & Metsala, 2018). While these studies undoubtedly provide valuable insight into the

development of self-efficacy for teaching within inclusive classrooms, this approach however, is not without its limitations.

These studies are very good at answering the question of *how self-efficacious are teachers?* They are able to distill self-reported levels of self-efficacy into easily digestible numbers which can then be used for further analysis. What these studies are lacking however, is their ability to answer the question of *why are teachers self-efficacious?* What are the *specific* experiences that contribute to the observed numbers? This study aimed to address this gap by adopting a qualitative approach, focusing on the real, self-efficacy-influencing experiences cited by Canadian pre-service and early career teachers. Furthermore, this study aimed to compare and contrast the cited experiences of pre-service and early career teachers, as this is another notable gap in the literature.

### **1.2.1 Research Questions**

To address these gaps in the literature, this study was guided by the following research questions:

1. What experiences do pre-service and early career teachers credit for influencing their self-efficacy for teaching within inclusive classrooms?
2. What are the similarities and differences between the experiences described by pre-service and early career teachers?
3. Are the experiences cited by pre-service and early career teachers consistent with the theoretical foundations of self-efficacy?

### **1.3 Situating the Researcher**

Growing up, I did not put much thought into how teachers got to where they were. I did not consider the complex combinations of experiences that led to them to the front of the classroom. For two decades, I took the process for granted; assuming that their role was

simply to teach and mine was simply to learn. My interest in teacher education first began during my final undergraduate year. As a young, idealistic, utilitarian, I wanted to do the most good for the most people as efficiently as possible. This led me to think more about teachers and the impact that they can have on the lives of students. I did some back-of-the-envelope calculations, and roughly worked out that a teacher with a 30-year career, teaching a *very conservative* 25 new students a year, would impact the lives of 750 students. If I could help improve the teaching practices of just ten teachers, that would mean 7500 students would benefit. This led me to volunteer with the Ottawa Volunteers in Education program, complete my undergraduate honours thesis on the power of student-teacher relationships, and pursue a Master's degree in educational psychology.

During my Master's degree, I continued exploring my interest in teacher education. I became involved with a large study investigating the development of inclusive teaching practices, where my primary role was to conduct and transcribe interviews from pre-service and early career teachers talking about their experiences related to inclusive education. Furthermore, my Master's thesis investigated predictors of pre-service teachers' self-efficacy for teaching within inclusive classrooms. These experiences allowed me to get first-hand insights into the experiences of teachers, and immerse myself in the research that I would later use for my PhD dissertation.

My previous research experiences impacted the decisions that I have made throughout this project. Having conducted several interviews and transcribed dozens of others, I began this project with an intimate knowledge of the data set from which I would be working. This facilitated coding and interpretation, as I began this project with an idea of the types of experiences that the participants spoke about.

## **1.5 Overview**

In Chapter 2, I begin by describing the theoretical framework from which this study was based. I provide a brief overview of Albert Bandura's Social Cognitive Theory (Bandura, 1986) and a detailed description of self-efficacy (Bandura, 1997). I then describe relevant literature related to self-efficacy for teaching in general, and then provide a comprehensive review of the literature surrounding the factors that contribute to self-efficacy for teaching within inclusive classrooms. In Chapter 3, I describe the methodology used for this study, including participant information, the data collection process, and the trustworthiness of the data. I finish the chapter with a comprehensive overview of the steps I took to complete the thematic analysis. In Chapter 4, I present the results of the thematic analysis, and in Chapter 5, I provide my interpretation of the data, provide recommendations, and discuss limitations.

## Chapter 2

### 2 Theoretical Foundations and Literature Review

I begin this chapter by providing the theoretical foundations supporting this study. I then discuss how the concept of self-efficacy has been applied to the context of teaching as a broad profession. Finally, I provide an in-depth review of the literature surrounding the previously researched factors and experiences that contribute to the development of self-efficacy for teaching within inclusive classrooms.

#### 2.1 Theoretical Perspectives: Social Cognitive Theory

Dissatisfied with the contemporary theories of human behaviour of his time, Bandura proposed a new theory which aimed to take into consideration the complex interactions that occur between an individual's personal characteristics, their behaviour, and the environment in which they find themselves in (Bandura, 1986). This theory originally began as Social Learning Theory (SLT) (Bandura, 1977), where Bandura argued that most of human behaviour is learned through social modeling. In 1986, with the publication of *Social Foundations of Thought and Action*, Bandura expanded on his Social Learning theory to place greater emphasis on cognitions, and the way that individuals process information. With this theoretical expansion, Social Cognitive Theory (SCT) emerged (Bandura, 1986).

A key concept in Social Cognitive Theory is the idea of Triadic Reciprocal Determinism (Bandura, 1986). This concept refers to the interrelationship between an individual's behaviour, the environment in which they find themselves, and their own personal characteristics. These three factors all influence each other, and subsequently influence the outcomes of experiences (Bandura, 1986). The relative influence of each of

these factors can vary depending on the task, the individual, and the circumstance (Bandura, 1986). To illustrate this point, consider two teachers who are teaching the exact same English lesson in the exact same way in two different classrooms. One classroom is well lit, well decorated, and rich with learning resources. The other classroom is dim, dull, and dearth of extra material. Will the outcomes be the same? Research that has investigated the impact of the classroom environment on learning would say probably not (Neuman & Celano, 2001). This is a specific circumstance where the environment has a profound impact on the outcomes. What if the environment remained constant, however? What if the two teachers taught the same lesson the same way to the same classroom? In that circumstance, the individual teacher characteristics of the triad become much more influential (Bandura, 1997). While there are myriad of individual characteristics that have the potential to impact the outcomes of situations, one characteristic in particular has caught the attention of researchers from a broad array of fields and disciplines: self-efficacy (Bandura, 1997).

## **2.2 Theoretical Perspectives: Self-Efficacy**

Self-efficacy is an individual's belief in his or her abilities and capacities to perform specific tasks, achieve specific outcomes, and overcome specific obstacles (Bandura, 1997). This characteristic has been the focal point of several disciplines, as an individual's beliefs in their abilities can have a profound impact on the outcomes of situations (Bandura, 1997). Let us return to the earlier example of the two English teachers. One teacher is confident in her abilities. She's done it all before. She's seen it all before. She knows how to reach her students even if they are acting out. She has a high level of self-efficacy. The other teacher however, it's his first-time teaching alone in a classroom. He has never taught a lesson that went as he had planned. He has only ever



seen other teachers struggle with behavioural issues. He is unsure of his abilities. He has a low level of self-efficacy. If these two teachers were put in front of the same class, in the same classroom, and given the same lesson to teach, which one would be a more effective teacher? Which one is more likely to achieve the ultimate desired outcome of student academic achievement and wellbeing? Decades of research have converged on the conclusion that the teacher with the higher level of self-efficacy will be the more effective teacher (see Colson et al., 2017; Goddard & Evans, 2018; Hamman et al., 2013; Miesera et al., 2019; Woolfolk-Hoy & Spero, 2005). The benefits of a high level of self-efficacy for teaching are numerous indeed, but how does a teacher achieve such a high level of self-efficacy? Where does self-efficacy, in general, come from?

There is no definitive answer for the second question, as self-efficacy is *context specific* (Bandura, 1993). Self-efficacy, as a broad, general, individual trait, does not exist. To elaborate, take the self-efficacious teacher from the previous example. Her past experiences have compounded and shaped her into a teacher who believes she has the capabilities to bring about the desired outcomes of student success and wellbeing within her classroom. Would the same experiences, the ones who turned her into a self-efficacious teacher, also turn her into a self-efficacious race-car driver? A confident, resilient, flexible mixed martial arts fighter perhaps? Self-efficacy tends to not transcend contexts, unless the contexts are similar to one another (Bandura, 1993). How then, does self-efficacy *within a specific context* develop? How did the self-efficacious teacher get to that stage? According to Bandura (1997), self-efficacy is built by a complex interaction between four sources of information. The sources of self-efficacy and the way that they manifest themselves within the context of teacher education will now be described.

### **2.2.1**      *Mastery Experiences*

The first source of self-efficacy information are mastery experiences. As the name implies, mastery experiences are accomplishing tasks, overcoming challenges, and experiencing success within a context (Bandura, 1997). Mastery experiences are the most powerful source of self-efficacy development due to the direct cause-and-effect relationship between action and results, providing immediate feedback on an individual's skills and abilities (Bandura, 1997; Jamil et al., 2012). When an individual successfully demonstrates his or her abilities, the positive feedback incorporates into their self-perception, aiding in the development of self-efficacy (Bandura, 1997). Conversely, failures undermine self-efficacy, especially if they occur before self-efficacy is firmly established (Bandura, 1997). It must be noted however, that not all successes lead to increases in self-efficacy. What then, must a mastery experience involve in order to contribute to the development of self-efficacy?

According to Bandura (1997), there are three main factors that influence the potency of mastery experiences. The first factor that can influence the potency of mastery experiences is the level of difficulty of the task. It comes as no surprise that succeeding at exceedingly easy tasks do little to contribute to the development of self-efficacy. In fact, experiencing only easy success, especially in the early stages of self-efficacy development, has the potential to be damaging. Take, for example, a teacher whose experience portfolio consists entirely of teaching in a well-funded, well-supported classroom educating well-behaved, well-mannered students who listened and responded well to all his lesson plans. This teacher had many mastery experiences and would likely have a high sense of self-efficacy for teaching in that context. However, given the current realities of the teaching profession within Canada, it is not unreasonable to describe these

experiences as *easy successes*. How then, would that teacher fare if funding to his classroom supports were cut, or if he was transferred to a class with students who did not respond as well to his lesson plans? How stable is the foundation on which he has built his self-efficacy for teaching? As stable as a house built on sand, theory would suggest. If one's own self-concept is developed through easy success, this easy success becomes the norm, and they can become discouraged when experiencing difficulties. Seeing success after being challenged, overcoming adversity, and putting forth an effort is what give mastery experiences their power.

The second factor that can influence the potency of mastery experiences is whether the experiences are consistent with an individual's values and the individual's interpretation of the nature of the success. Succeeding at a task that is not valued is unlikely to provide any meaningful self-efficacy information and is likely to be forgotten or have its significance discredited. The interpretation of successes plays a role, as those with lower self-efficacy are more inclined to attribute successes to external factors such as luck, instead of internal factors such as ability. The third factor that can influence the significance of mastery experiences is the time at which mastery experiences occur. Self-efficacy is the most malleable when an individual has yet to accumulate any evidence as to whether or not they are capable. In other words, self-efficacy is the most plastic at the very beginning of learning something new.

### **2.2.2 Vicarious Experiences**

The second source of self-efficacy information are vicarious experiences (Bandura, 1997). Put simply, vicarious experiences are observing others doing things (Bandura, 1997). Taking a back seat and observing a model complete a task contributes

to the development of self-efficacy beliefs, as the observer can not only learn how to do the task, but can also directly see it being done successfully (Bandura, 1997).

However, similar to how there were caveats to the potency of mastery experiences, it is often not enough to simply see a model succeed. There are different conditions in which an individual's self-efficacy would be more or less sensitive to vicarious observation. The first, and most influential condition is the perceived similarity between the observer and the model (Bandura, 1997). The greater the perceived similarity, the more persuasive power a model has over an observer for better or for worse (Bandura, 1997). For example, if a new teacher closely identifies with an experienced colleague and observes the colleague's successes, those observations will positively contribute to the development of that teacher's self-efficacy (Bandura, 1997). Contrarily, if that teacher observes their colleague's persistent failures, this will negatively impact their self-efficacy (Bandura, 1997).

The second factor that influences the power of vicarious experiences is the level of prior experience that the observer has with regards to the task that is being modeled (Bandura, 1994). As previously mentioned, self-efficacy is most malleable during the early stages of skill development, and this is the stage at which vicarious experiences are the most powerful (Bandura, 1994). When an individual is first learning a skill, they do not have any immediate direct knowledge regarding their own capabilities. In order to judge their own competency, they turn to the observation of models (Bandura, 1994).

### **2.2.3 Verbal Persuasion**

The third source of self-efficacy information is verbal persuasion or feedback from a trusted, reliable source. Although limited in its power for independently creating an enduring sense of self-efficacy (Bandura, 1997), feedback and verbal persuasion can be a

powerful supplement to mastery or vicarious experiences. Like the previous two sources of self-efficacy information, specific factors can influence the effectiveness of verbal persuasion on one's self-efficacy. The first factor concerns if the attempts at persuasion or feedback are grounded in reality (Bandura, 1997). Feedback that is unrealistic discredits those who are providing the feedback, and only serves to undermine the recipient's beliefs in their own abilities (Bandura, 1997). Furthermore, if an individual is persuaded that they are more capable than they really are, there is a significant potential that they will experience failure in the future, as their skills are not a match for the environment (Bandura, 1997). The second impactful factor is the knowledgeability and credibility of whoever is doing the persuading or providing the feedback. For feedback to be effective, the giver must be seen as a knowledgeable and credible source.

#### **2.2.4      *Physiological States***

The fourth and final source of self-efficacy information are the interpretation of physiological and emotional states (Bandura, 1997). What a person is feeling during a situation, and their interpretation of their feelings can have an impact on their self-efficacy for that given situation. For example, when a situation evokes feelings of fear or anxiety, a "self-fulfilling prophecy" is created, in that the stressful feelings that would normally be elicited *from* the situation are elicited *before* the situation in anticipation of failure. This heightened level of pre-situation arousal results in mental rehearsals of failure, resulting in sub-optimal performances, which lead to lower levels of self-efficacy (Bandura, 1997; Raufelder & Ringeisen, 2016). Like the previous source of verbal persuasion, the interpretation of physiological states is limited in its direct power to influence self-efficacy. Rather, it acts as one of several contributing factors in shaping a person's self-efficacy beliefs (Bandura, 1997).

### 2.3 Self-Efficacy for Teaching

Within contemporary educational research, self-efficacy for teaching has been defined as “a judgement of [a teacher’s] capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated” (Tschannen-Moran & Woolfolk Hoy, 2001 p.783). While research into, and attempts at operationalizing self-efficacy for teaching first emerged in the 1980s (see Evans & Tribble, 1986; Gibson & Dembo., 1984; Gorrel & Capron, 1988), research into self-efficacy for teaching first began to gain significant traction in the early 2000s, with the publication of Tschannen-Moran and Woolfolk Hoy’s seminal paper *Teacher efficacy: capturing an elusive construct* (2001). Finding early measurements of self-efficacy for teaching to be lacking, Tschannen-Moran and Woolfolk Hoy created an updated, valid, and reliable measure to expand the horizons of teacher self-efficacy research. Their resulting measure, the *Teacher Sense of Efficacy Scale*, soon became an integral tool in educational self-efficacy research, being used and adapted for dozens of studies (see Clark & Newberry, 2019; Colson et al., 2017; Gale et al., 2021; & Pendergast et al., 2011 for examples). The creation of this valid and reliable scale allowed researchers to more thoroughly investigate factors that influence teacher self-efficacy and resulted in a boom of research, stemming from the early 2000’s and continuing up to the present time.

An important topic of research within this domain has been on exploring the sources of self-efficacy information and how they factor into the development of self-efficacy for teaching. A routine, and theoretically consistent finding within this area is that mastery experiences are the most influential source of self-efficacy information for teaching (Clark & Newberry, 2019; Bautista, 2011; Gale et al., 2021; Ma et al., 2022a/b;

Narayanan, 2021; Pfitzner-Eden, 2016; Tschannen-Moran & Woolfolk-Hoy, 2007; Wilson et al., 2020). Pre-service and early career teachers who experience success and mastery within the classroom tend to see increases in their self-efficacy, and those who experiences failure see decreases in self-efficacy. For example, Gale et al. (2021) used the Teacher Sense of Efficacy Scale to assess the self-efficacy for teaching of early career teachers. Participants were also provided with two open-ended survey questions where they were asked to reflect on the experiences that either raised or lowered their confidence in their teaching ability. For both categories, mastery experiences in the form of successes or failures were the most commonly cited influences on teachers' sense of self-efficacy for teaching.

As previously mentioned however, mastery experiences are not the sole determinants of self-efficacy. The impact that vicarious teaching experiences have on self-efficacy have also been explored, although the findings are more mixed than mastery experiences. A 2021 study by El-Abd and Chaaban explored the impact that a 40-hour video observation course had on pre-service teachers' self-efficacy for managing classroom behaviour. No significant gains in reported self-efficacy were observed. After, participants in this study participated in focus groups. They described that although the videos aided in consolidating beliefs, they wished for more mastery experiences. Furthermore, in their mixed methods study, Gale et al. (2021) reported that teachers did not often cite vicarious experiences as being significant contributors to their self-efficacy. Similar findings were observed in Ma et al (2022a/b). In their longitudinal qualitative study, they found that vicarious experiences, or opportunities to observe others teaching

were not frequently cited. An explanation offered was that these teachers may not have been exposed to satisfactory teaching practices during their practicum.

Verbal persuasion also plays a role in the development of teacher self-efficacy, and can come in many different forms: the first being feedback and encouragement. When teachers are provided with specific, targeted feedback related to their performance, they are able to identify areas for improvement and gauge their progress with building their teaching skills (Ma et al., 2022a/b; Tschannen-Moran & Woolfolk Hoy, 2007). The second way verbal persuasion can influence self-efficacy for teaching is by providing support and mentorship to beginning and early career teachers (Clark & Newberry, 2019). As previously mentioned, theory suggests that self-efficacy is the most malleable during the early stages of skill development (Bandura, 1997). Having supportive mentors to guide and support pre-service and early career teachers can have significant impacts on the development of self-efficacy for teaching.

Physiological and affective states are the fourth and final source of self-efficacy information, however their influence has been shown to be less powerful when compared to the other sources of self-efficacy information (Gale et al., 2021). This finding is to be expected, as physiological and affective states are not thought to directly influence self-efficacy. Rather, it is the cognitive processing of these states that result in changes in self-efficacy (Bandura, 1997; Pfitzner-Eden, 2016). The physiological and affective states that are most commonly included in literature are mood, stress, and anxiety (Gale et al., 2021; Ma et al., 2022a).

As the field of education-related self-efficacy research has increased over the decades, its focal points, or domains, have narrowed. However, as previously mentioned,



self-efficacy is domain-specific (Bandura, 1997). While teaching is a specific profession, the possibilities of experiences within the profession are near endless. As a result, educational research has been increasingly focused on specific domains of self-efficacy, such as for teaching literacy (Ciampa & Gallagher, 2017), mathematics (Bjerke & Solomon, 2020; Bjerke & Xenofontos, 2023), sciences (Bautista, 2011; Velthuis et al., 2014), and physical education (Hovey et al., 2020).

This study is focused on the specific domain of self-efficacy for teaching within inclusive classrooms. As such, the remainder of the literature will focus specifically on that topic. I will begin with describing the relevant literature surrounding the factors that contribute to pre-service teachers' self-efficacy for teaching within inclusive classrooms. I will then discuss relevant literature related to early career teachers' sense of self-efficacy for teaching within inclusive classrooms. I will finish the chapter by reviewing literature pertaining to the transition from the pre-service to the early career period, and the impact that this change can have on self-efficacy for teaching within inclusive classrooms.

#### **2.4 Pre-Service Teachers' Self-Efficacy for Teaching in Inclusive Classrooms**

A significant focal point for recent education research has been the development of pre-service teacher's sense of self-efficacy for teaching within inclusive classrooms (for example, see Alsarawi & Sukonthaman, 2021; Hamman et al., 2013; Ismailos et al., 2022; Kiel et al., 2020; Miesera et al., 2019; Sharma et al., 2012; Specht et al., 2016). This focus is for good reason. As previously mentioned, self-efficacy is the most sensitive and malleable during the early stages of skill development (Bandura, 1997), and it can be safely assumed that pre-service teachers do not have a substantial bank of teaching experiences that they can draw on to form a solid cognitive representation of

their own abilities. Once firmly established, self-efficacy beliefs are relatively unchanging (Bandura, 1997). As a result, early teaching experiences during the pre-service period are particularly influential to the development of a strong sense of self-efficacy for teaching (Weber & Greiner, 2019). I will now explore the relevant literature related to the development of self-efficacy for teaching within inclusive classrooms.

#### **2.4.1 *Practicum Experiences***

Based on the theoretical foundations of what contributes to self-efficacy (Bandura, 1997), the practicum experience should be one of the most powerful contributors to the development of a pre-service's teachers' sense of self-efficacy. While on practicum, pre-service teachers have the potential to be exposed to the full spectrum of factors that contribute to the development of self-efficacy: mastery experiences in the form of direct teaching (Gale et al., 2021; Martins et al., 2015; Pfitzner-Eden, 2016), vicarious experiences in the form of observing peers and co-teachers (Clark & Newberry, 2019; Weber & Greiner, 2019), verbal persuasion and feedback from mentors (Clark & Newberry, 2019; Grima-Farrell, 2015), and the feelings of excitement or terror that come along with teaching for the first time (Weber & Greiner, 2019).

Indeed, studies that have investigated the impact of practicum experiences have routinely found that practicum experiences significantly contribute to self-efficacy for teaching, for better or for worse (Hamman et al., 2013; Martins et al., 2015; Pfitzner-Eden, 2016; Soleas, 2015; Young et al., 2018). In a mixed-methods study, Martins et al. (2015) found that commonly cited experiences that contributed to pre-service teachers' high self-efficacy were the opportunities to plan and implement lessons, successfully modifying instructions to accommodate learners, successfully establishing classroom routines, observing lessons from colleagues, and post-lesson conversations with associate

teachers. However, not all pre-service teachers in their study reported having high levels of self-efficacy. Those individuals who reported having a lower sense of self-efficacy cited a lack of experience in teaching, difficulties with managing student behaviour, and a lack of guidance and feedback as significant contributors to their low sense of self-efficacy for teaching.

Similar qualitative themes were observed in Young et al. (2018), where pre-service teachers noted that they felt the most successful when they were able to engage their classroom and manage behavioural issues, were able to establish positive student-teacher relationships, and were able to collaborate effectively with school personnel, especially with the classroom teacher. Pre-service teachers reported feeling more challenged when they could not successfully manage student behaviour, had difficulties with establishing positive student-teacher relationships, and when they could not effectively collaborate with their associate teacher.

In addition to the content and experiences of the practicum, the length of the practicum can have a significant impact on the development of self-efficacy. Longer practicums have been shown to result in higher levels of self-efficacy. (Colson et al., 2017; Specht et al., 2016). With a longer practicum, pre-service teachers have more opportunities for mastery experiences, more opportunities to learn vicariously by observing mentoring teachers, and more opportunities for expert feedback.

For practicum experiences to translate into a strong sense of self-efficacy, it is not sufficient to simply be immersed in the classroom. It is possible for a pre-service teacher to leave a practicum with a lower sense of self-efficacy if the proper environment is not provided. Weber and Griener (2019) investigated the impact that early teaching

experiences have on the self-efficacy of pre-service teachers. Pre-service teachers in Germany were surveyed regarding their practicum experiences, their perceived level of support from their faculties of education, and their level of self-efficacy for teaching within inclusive classrooms. The results of their study indicated that in their sample of pre-service teachers, there was a direct relationship between positive experiences during practicum and self-efficacy for teaching within inclusive classrooms. Although all teachers were provided with similar opportunities for teaching, those who rated their practicum experiences and the interactions with their associate teachers more positively, finished their practicum with a higher sense of self-efficacy compared to those who rated their experiences negatively. Furthermore, if pre-service teachers are not provided with the opportunities to work with students with diverse learning needs, levels of self-efficacy for teaching within a diverse classroom may remain stagnant (Nketsia & Saloviita, 2013).

#### **2.4.2 Coursework**

Coursework on inclusive education is an integral part of teacher education programs. The aim of coursework is to provide the theoretical background required for the implementation of effective inclusive teaching practices (Falkenberg, 2015, Van Nuland., 2011). While not as thoroughly researched as the practicum, studies are generally positive with regards to the impact that coursework has on the development of self-efficacy for teaching in inclusive classrooms. Some studies have shown that courses on inclusion have positive impacts on pre-service teachers' self-efficacy (Lancaster & Bain, 2010; Peebles & Mendaglio, 2014; Sharma & Nuttal, 2016; Sharma & Sokal, 2015; Sokal & Sharma, 2017).

These studies used a pre-post design to measure self-efficacy before and after pre-service teachers took a course on inclusive education. Results of these studies showed that courses on inclusive education resulted in gains in quantitative measures of self-efficacy for teaching in inclusive classrooms. Similar results were observed in Sokal and Sharma's (2017) study, where pre-service teachers who had more education on inclusion had higher levels of self-efficacy for inclusive teaching compared to those with less education. Discordant findings were observed in Woodcock et al., (2012), where no significant changes in self-efficacy were observed in their sample of Australian pre-service teachers after a course in inclusive education.

### **2.4.3**      *Gender*

Results of studies that have included gender as a variable when examining pre-service teachers' self-efficacy have been relatively mixed, with the different findings being largely attributed to cultural factors. In a large-scale Canadian study, it was found that men reported higher levels of self-efficacy for managing behaviour within inclusive classrooms relative to women (Specht et al., 2016). Specht and Metsala (2018) found similar results in their investigation of the self-efficacy beliefs of Canadian pre-service teachers, in that men were significantly more confident than women in their abilities to manage student behaviour within inclusive classrooms regardless of which grades they were preparing to teach. Additionally, men who were preparing to teach elementary grades had higher levels of self-efficacy for using inclusive instruction than men who were preparing to teach secondary grades. Internationally, Shaukat et al. (2019) investigated the self-efficacy of teachers in Pakistan and found that the female teachers in their sample had much higher levels of self-efficacy for teaching within inclusive

classrooms. Specht and Metsala (2018) suggested that Canadian societal norms provide men with more power to manage behaviour, leading to a stronger sense of control within an inclusive classroom. Shaukat et al. (2019) gave the rationale that the differences in gender can be accounted for by the “male chauvinistic culture” in Pakistan, where females are expected to take on a much more nurturing role compared to their male counterparts. Male teachers in Pakistan may use much more strict and rigid teaching strategies as to differentiate themselves from females, resulting in fewer positive experiences with their students, resulting in a lower sense of self-efficacy.

#### **2.4.4      *Grades Intended to Teach***

Differences in self-efficacy have also been observed between teachers who are preparing to teach elementary grades and those who are preparing to teach secondary grades. Results from both national and international studies have suggested that pre-service teachers who are preparing to teach elementary grades have higher levels of self-efficacy for teaching within inclusive classrooms when compared to their contemporaries who are preparing to teach secondary grades (Scheer et al., 2015; Sharma et al., 2015; Specht et al., 2016). Scheer et al. (2015) used a single factor measure that assessed self-efficacy for teaching within inclusive classrooms and found that the self-efficacy of elementary pre-service teachers was significantly higher than their secondary counterparts. Similar results were seen in Sharma et al. (2015) and Specht et al., (2016); however, Specht et al. (2016) found that the self-efficacy of elementary pre-service teachers was only significantly higher in their confidence to collaborate. No significant differences were seen regarding their confidence toward using inclusive instruction or managing student behaviour.

These differences in self-efficacy have been attributed to pre-service teachers' perceptions of the tasks and challenges that each panel represents (Scheer et al., 2015). When compared to secondary teachers, elementary teachers are responsible for many more aspects of the learning process (Specht et al., 2016). They are expected to teach many different subjects in a way that is accessible to all students. These kinds of expectations are not placed on secondary teachers, who are only accountable for teaching their subjects of expertise. Depending on the subject and whether the class is in the academic or applied stream, a high school teacher may feel like it is not their responsibility to teach students with exceptional learning needs (Specht et al. 2016). Pre-service teachers who are preparing to teach in secondary classrooms may already believe that they will not be teaching within an inclusive setting, which can explain the observed lower sense of self-efficacy.

#### **2.4.5      *Experiences with Diverse Populations***

Pre-service teachers who have more experiences with diverse populations, either professional or personal, tend to have higher levels of self-efficacy for teaching within inclusive classrooms than pre-service teachers who have fewer experiences (Burton & Pace, 2009; Crowson & Brandes, 2014; Leyser et al., 2011; Peebles & Mendaglio, 2014; Specht & Metsala, 2018; Specht et al., 2016). Crowson and Brandes (2014) found that pre-service teachers who had more contact with people with disabilities had higher levels of self-efficacy for teaching students with disabilities and were less likely to oppose the concept of inclusion. Furthermore, pre-service and in-service teachers who have more experience with friends and family members with diverse learning needs are more likely to have more positive attitudes toward inclusion and have higher levels of self-efficacy

for teaching within inclusive classrooms (Ahmmed, et al., 2012; Specht & Metsala, 2018; Specht et al., 2016).

However, some studies have suggested that having friends and family members with disabilities has little-to-no effect on attitudes toward inclusion (Boyle et al., 2013; Varcoe & Boyle, 2014). Boyle et al. (2013) did not find that teachers who had regular contact with a friend or family member with diverse learning needs held more positive attitudes toward inclusion. Varcoe and Boyle (2014) compared the attitudes toward inclusion of pre-service teachers with or without training in inclusive education. They found that pre-service teachers with training held significantly more positive attitudes; however, there was no significant differences in attitudes were found between participants who had more or less contact with friends or family members with diverse learning needs. Varcoe and Boyle (2014) explained these conflicting results by referring to study by Bradshaw and Mundia (2005), who suggested that attitudes toward disability are less dependent on friend or familial relationships, and more influenced by associating with people with disabilities within the school and community context.

#### **2.4.6**      *Pre-Service to Early Career*

Most research on the development of self-efficacy for teaching within inclusive classrooms has fallen within the timeframe of teacher education programs (Colson et al., 2017; Friesen & Cuning, 2018; Hamman et al., 2013; Martins et al., 2015; Specht et al., 2016; Weber & Griener, 2019). The consensus is that throughout the pre-service teaching years, self-efficacy steadily increases as a result of the mastery experience opportunities, feedback from mentors, and vicarious learning. Where a significant gap in the literature



exists however, is the maintenance of these levels of self-efficacy into the first years of teaching. Strong, stable self-efficacy beliefs take time to develop (Bandura, 1997), and the early years of teaching are a time where self-efficacy beliefs are particularly sensitive (Weber & Greiner, 2019; Woolfolk-Hoy & Spero, 2005).

To date, only a handful of studies have either tracked levels of self-efficacy of teachers into their first years of in-service teaching or examined a cross-sectional sample of teachers with varying years of experience. It should be noted however, that these studies only investigated general teacher efficacy or special education teacher efficacy, not specifically efficacy for teaching within inclusive classrooms. Woolfolk-Hoy and Spero (2005) followed 53 American pre-service teachers throughout their time in their faculties of education into their first year of teaching. They collected data at three points in time: once toward the beginning of teacher preparation, before the participants had finished their coursework, a second time at the end of their teacher education programs, and a third time at the end of their first year of in-service teaching. As to be expected, they found that self-efficacy for teaching increased significantly during the preparation period. However, they found that self-efficacy levels dropped significantly after the first year of in-service teaching. The authors suggested that there may be a discrepancy between the methods and strategies taught to them within their faculty of education, and the actual practical application of those strategies within a real classroom. They suggest that teachers may have left their faculty of education with an inflated sense of self-efficacy, underestimating the complexity involved in teaching effectively. This effect is mentioned in Weber and Greiner (2019), in which the authors attribute the decline in self-efficacy observed during the first years of teaching to “reality shock”, where pre-service

teachers graduate with a sense of self-efficacy that is too high, and their expectations do not match the realities of what they face within the classroom.

A more recent longitudinal study conducted by George et al. (2018) tracked the self-efficacy of Australian teachers across their first five years of teaching. They gathered efficacy data at two points in time: the first time being before participants began their first year of in-service teaching, and the second time five years into their teaching career. Results of their study found that over this five-year span, teachers sense of self-efficacy for teaching significantly increased. However, the authors cautioned the results of this study. They noted that only collecting self-efficacy data at two points in time, with such a significant gap in between points impacts the ability to make meaningful interpretations of what is contributing to the increase in self-efficacy.

The final longitudinal study tracked teachers' self-efficacy from their final practicum into their first year of teaching (Ma et al., 2021a). Adopting a mixed methods design, the authors both gathered quantitative data related to teachers' self-efficacy, and conducted interviews asking teachers to describe how they felt regarding their teaching practices and highlight any specific influences on their self-efficacy for teaching. The authors found that participants' self-efficacy for teaching significantly improved between the pre-service and in-service period. This increase was not described as smooth. In their interviews, all participants in this study described the first few weeks of in-service teaching as a shock. However, they began to feel more relaxed as the year progressed, thanks mostly to the mentorship and support that they received from colleagues within their schools.

## 2.5 Current Study

A solid foundation of research exists on the topic of self-efficacy for general teaching, and self-efficacy for teaching within inclusive classrooms. Researchers have thoroughly explored the influence of direct experiences such as the practicum (Clark & Newberry, 2019; Colson et al., 2017; Gale et al., 2021; Grima-Farrell, 2015; Hamman et al., 2013; Martins et al., 2015; Pfitzner-Eden, 2016; Soleas, 2015; Specht et al., 2016; Weber & Greiner, 2019; Young et al., 2018), coursework (Lancaster & Bain, 2010; Peebles & Mendaglio, 2014; Sharma & Nuttal, 2016; Sharma & Sokal, 2015; Sokal & Sharma, 2017), and personal and professional interactions with diverse learners (Burton & Pace, 2009; Crowson & Brandes, 2014; Leyser et al., 2011; Peebles & Mendaglio, 2014; Specht & Metsala, 2018; Specht et al., 2016). The influence of more indirect factors such as gender (Specht et al., 2016; Specht & Metsala, 2018; Shaukat et al., 2019) and grades intending to teach (Scheer et al., 2015; Sharma et al., 2015; Specht et al., 2016) have also been well explored. However, significant gaps within this literature base remain.

One of the most notable gaps is the relative lack of qualitative studies exploring the real, lived experiences of pre-service and early career teachers, and how those experiences contribute to self-efficacy for teaching within inclusive classrooms. To date, the majority of studies investigating the factors that contribute to self-efficacy for teaching within inclusive classrooms have done so quantitatively. These studies have used valid and reliable questionnaires to represent self-efficacy numerically and investigated the variables which either predict that number or influence it, for better or for worse. While these studies have provided valuable information into the factors that influence quantitatively measured levels of self-efficacy, they do not tell the full story

regarding exactly what kinds of experiences resulted in the quantitative changes in self-efficacy for teaching within inclusive classrooms.

A second gap exists with regards to comparing the types of experiences that pre-service and early career teachers describe as having an influence on their self-efficacy for teaching within inclusive classrooms. Most research on this topic has either looked exclusively at pre-service teachers or in-service teachers. Few studies have compared pre-service and early career teachers' self-efficacy for teaching and to date, none have done so specifically for self-efficacy for teaching within inclusive classrooms. This is a problematic gap, as self-efficacy is domain specific (Bandura, 1997). While self-efficacy for general teaching and self-efficacy for teaching within inclusive classrooms undoubtedly share similar characteristics, the teaching demands of an inclusive classroom are different than that of a classroom where students are segregated based on ability. To address these gaps, I adopted a qualitative, cross-sectional design. I aimed to elucidate and compare the lived experiences which contributed to pre-service and early career teachers' sense of self-efficacy for teaching within inclusive classrooms.

## Chapter 3

### 3 Method

In the following chapter, I review the methodological considerations for this study. First, I describe participant information. Second, I describe the measures used. Third, I describe the recruitment and data collection process. Fourth, I describe the trustworthiness of the data and analyses. Finally, I describe my process for completing the thematic analysis.

#### 3.1 Participants

Participants in this study were pre-service teachers from 12 faculties of education across Canada and in-service teachers in their early career. For the purposes of this study, early career was defined as teachers who were in their first, second, or third year of teaching. 49 participants made up the pre-service group. The average age of the pre-service teachers was 27.5 ( $SD=5.86$ ). This group consisted of 36 females, 10 males, one participant who identified as other, and two participants who did not indicate a gender. Twenty-nine participants indicated that they were preparing to teach elementary grades, 15 indicated that they were preparing to teach secondary grades, 4 indicated that they were preparing to teach intermediate grades, and one participant who did not indicate which grades they were preparing to teach.

The early career group was composed of 86 participants. The average age of these teachers was 29.05 ( $SD=6.22$ ). This group consisted of 67 females, 18 males, and one participant who identified as other. 45 indicated that they were teaching elementary grades, 32 indicated that they were teaching secondary grades, 3 indicated that they were teaching intermediate grades, and 6 indicated that they were teaching in all grades.

### **3.2 Measures**

Participants filled out a demographic questionnaire where they indicated their gender, the grades they were intending to teach or currently teaching, their level of personal and professional experience with diverse populations, and how many days they have spent teaching within inclusive classrooms. In addition, participants were interviewed, and asked the following questions:

1. How confident do you feel in teaching in diverse classrooms?
2. Has this increased, decreased or remained the same over the last year?
3. What has contributed to your level of confidence for teaching in diverse classrooms?

As a “diverse classroom” can have many meanings depending on the context, all interviewers clarified during the interview process that within the context of this study, diverse meant the inclusion of students with exceptionalities within the general education classroom.

### **3.3 Participant Recruitment and Procedures**

All data for this study were obtained as a part of a larger ongoing research project undertaken by the Canadian Research Centre on Inclusive Education investigating the development of inclusive teaching practices. Pre-service teachers from 12 Canadian universities were asked to complete the aforementioned questionnaire during the first week of their first course on special education. On this questionnaire, participants indicated if they would be interested in completing an interview. Participants who wished to be interviewed were then contacted and interviewed by a research assistant or myself. Interviews were typically between twenty and thirty minutes in length and consisted of

the three questions, as well as two other questions related to teachers' instructional practices and beliefs toward inclusion.

Consent was obtained to record the interviews to facilitate later transcriptions. The full consent form can be found within Appendix A. After the interviews took place, they were then transcribed verbatim by myself, or a research assistant. Once the interviews were transcribed, they were uploaded to the qualitative analysis software *NVivo*. Participants who were interviewed during the pre-service period made up the pre-service group. Participants who were interviewed during their first, second, and third year of in-service teaching composed the early career group. Ethics approval was obtained from Western University Research Ethics Board (see Appendix B)

### **3.4 Credibility and Trustworthiness of the Data and Analysis**

A key component to qualitative research is ensuring that the analyses completed, and the subsequent results, are credible and trustworthy. In other words, the conclusions drawn should correspond to the data. Nowel et al., (2017) provide comprehensive guidelines for qualitative researchers to follow in order to ensure the credibility and trustworthiness of their work. The following section will describe the steps that I took to ensure that the analyses and the conclusions drawn from it were both credible and trustworthy.

#### **3.4.1 *Credibility***

The first factor for consideration is the credibility of the study. Credibility refers to the coherence between the data and the researcher's interpretation of the data and is analogous to internal validity (Tobin & Begley, 2004). Tobin and Begley (2004) suggest that credibility can be met in a number of ways. The first method I used is prolonged engagement, which refers to having spent sufficient time in the field of study to

understand the phenomena that are being observed. Although I am not, nor have I ever been a teacher, I have been immersed and involved with the data from which this project stems for six years. The second method I used is peer debriefing. Throughout the data analysis process, I discussed my findings and interpretations with another researcher who too had been immersed in the project.

### **3.4.2**      *Dependability*

The second factor is the dependability, or reliability of the study. Tobin and Begley (2004) suggest that for a qualitative study to be dependable, the research process must be “logical, traceable, and clearly documented” (p.392). To ensure the dependability of this study, I provide in the following section a detailed overview of each step taken to conduct the thematic analysis.

### **3.4.3**      *Confirmability*

The third factor is the confirmability of the findings. Confirmability means that the findings are clearly drawn from the data, and not “figments of the inquirer’s imagination” (Tobin & Begley, 2004). In order to achieve adequate confirmability, I ensured that all results and conclusions that were drawn were supported by using direct quotes from the participants.

## **3.5 Thematic Analysis**

As the goal of the study was to identify the themes and patterns that emerged from participants’ reports of their experiences, a thematic analysis was used. Thematic analysis is a qualitative method used for identifying, analyzing, and reporting patterns within data (Braun & Clarke, 2006). It is a technique that has been described as being “[the] first qualitative method of analysis that researchers should learn” (Braun & Clarke,



2006, p. 78), as the methods provide foundational skills beneficial for other forms of qualitative analysis. In addition to providing skills to novice qualitative researchers such as myself, thematic analysis has the benefit of theoretical neutrality. Other techniques of qualitative analysis, such as interpretive phenomenological analysis or discourse analysis, operate within the confines of specific theoretical frameworks. Thematic analysis is not rooted in any specific theoretical orientation, adding to its flexibility. This flexibility of thematic analysis allowed me to adopt an essentialist/realist lens when interpreting the data, operating under the assumptions that the language that participants were using during their interviews reflected their real lived experiences.

To conduct a thematic analysis, Braun and Clarke (2006) have laid out a six-phase process, which is meant to be used as guidelines for the analysis. The phases are as follows. 1: familiarization with the data set. Phase 2: Generating initial codes. Phase 3: Searching for themes. Phase 4: Reviewing themes. Phase 5: Defining and naming themes. Phase 6: producing the report of the results. I will describe each phase in detail, and the steps that I took to conduct the analysis.

### **3.5.1**      *Thematic Analysis: Phase 1*

The first phase in Braun and Clarke's (2006) method is to become familiar with the data which is to be analyzed. Familiarity with the data allows for a deeper understanding of the breadth and depth of the content and allows for early ideas, patterns, and meanings to begin to emerge. The data that I analyzed are transcripts of the interviews of pre-service and early career teachers. In these interviews, participants were asked to describe the experiences that contributed to the instruction that they use in diverse classrooms, the experiences that contributed to their beliefs related to inclusion,

and the experiences that directly contributed to their confidence for teaching within inclusive classrooms. Although this study is specifically investigating the factors that contribute to pre-service teachers' confidence for teaching within inclusive classrooms, the entire transcript was read. This procedure was followed because of the potential overlap in described experiences between the questions. Participants sometimes referred back to the same experiences that contributed to their instruction and beliefs when asked about the experiences that contributed to their confidence. My experience as a research assistant allowed me to become very familiar with the data set before beginning the analyses. I conducted several of the interviews, and I was the designated transcriber for my interviews, as well as the interviews of other researchers who were involved with the larger project from which this study stems.

To begin the formal analysis process, all interviews were uploaded into the qualitative analysis software *NVivo*. The interviews were then organized by the group in which they belonged, either pre-service or early career. All interviews were then read, beginning with the pre-service group.

### **3.5.2**      *Thematic Analysis: Phase 2*

**Phase 2.** The second step in Braun and Clarke's (2006) method is to generate initial codes. Codes are used to identify segments of meaning within data, which will allow for future analysis and interpretation (Bazeley, 2013). The well-established literature on the topic of the factors that contribute to teachers' self-efficacy, as well as my extensive experience with the data allowed me to use a blended coding approach, combining both inductive and deductive coding techniques (Linneberg & Kosgaard,

2019). Before beginning coding, I created an initial codebook which is can be found in Appendix C.

Using this initial codebook, I began the coding process utilizing the qualitative analysis software *NVivo*. As I read through the transcripts, codes were added to encompass additional thoughts, feelings, and experiences that were not included in the original codebook. After I finished reading and coding all of the transcripts, I read them a second time; applying the same coding structure. Throughout the coding process, codes were added, removed, and combined. A complete codebook can be found in Appendix C.

### **3.5.3      *Thematic Analysis: Phase 3***

After the data has been coded, the third step is to search for themes. During this process, perspective shifts from a narrow focus on codes, to a broader focus on how the codes fit together in order to form patterns (Braun & Clarke, 2006). I began this process by re-reading all coded statements to further immerse myself in the data, and to get a sense of any early patterns that began to emerge. After reading all of the coded entries, I transferred the codes and the coded entries to *Microsoft Word*. This was done to facilitate the early organization of codes into themes. Within *Microsoft Word*, codes were grouped together based on underlying similarities that the codes shared. This resulted in the creation of three initial groups of codes. The first group encompassed all of the experiences, thoughts, and opinions that the participants accumulated throughout their time within schools and classrooms. The second group included the hands-off, theoretical learning that had taken place either in their faculties of education or professional development. The third and final group included personal and past experiences that

participants had talked about. Once the groups were made, all entries from all codes were inputted and organized in *Microsoft Word*.

#### **3.5.4      *Thematic Analysis: Phase 4***

The fourth step in Braun and Clarke (2006) is to review the themes. Braun and Clarke (2006) describe two levels of reviewing and refining themes. The first level is reviewing the at the level of the coded data to see if the codes form a coherent pattern. After re-reading though the coded data, all codes appeared to fit well within the themes. After the completion of the first level of reviewing, I moved onto the second level. This level examines the validity of the themes in relation to the data set, and if the themes accurately represent the meanings within the data set (Braun & Clarke, 2006). After reviewing the themes, I compared them to the theoretical framework from which I was operating, as well as the pre-existing literature on the development of self-efficacy for teaching within inclusive classrooms. No changes were made to the themes.

#### **3.5.5      *Thematic Analysis: Phase 5***

The fifth phase involves defining and naming and defining themes. For this stage, I looked at the commonalities between the codes that were grouped together. According to Braun and Clarke (2006), the names of themes must be able to immediately let readers understand the theme. I opted to keep the names of the themes simple, yet easily understandable.

After the codes were sorted into themes, and the themes were named, I began an additional round of coding to address the third research question: are the experiences cited by pre-service and early career teachers consistent with the theoretical foundations of self-efficacy? To do this, I created a second codebook based on the four sources of

self-efficacy information (Bandura, 1997). As each source of self-efficacy information is associated with experiences which can both increase and decrease overall self-efficacy (Bandura, 1997), the codebook included both positive and negative definitions for each source. A complete codebook can be found in Appendix C.

To facilitate the coding process, each code was assigned a different colour. Statements were then read and highlighted in *Microsoft Word*, based on the criteria established within the code book. Statements were then sorted into categories which reflected the four sources of self-efficacy. This allowed for the comparison of experiences between pre-service and early career teachers across the sources of self-efficacy information. After this final round of sorting was completed, the data were ready for the sixth and final phase of Braun and Clarke's (2006) qualitative analysis model: writing up the results.

## Chapter 4

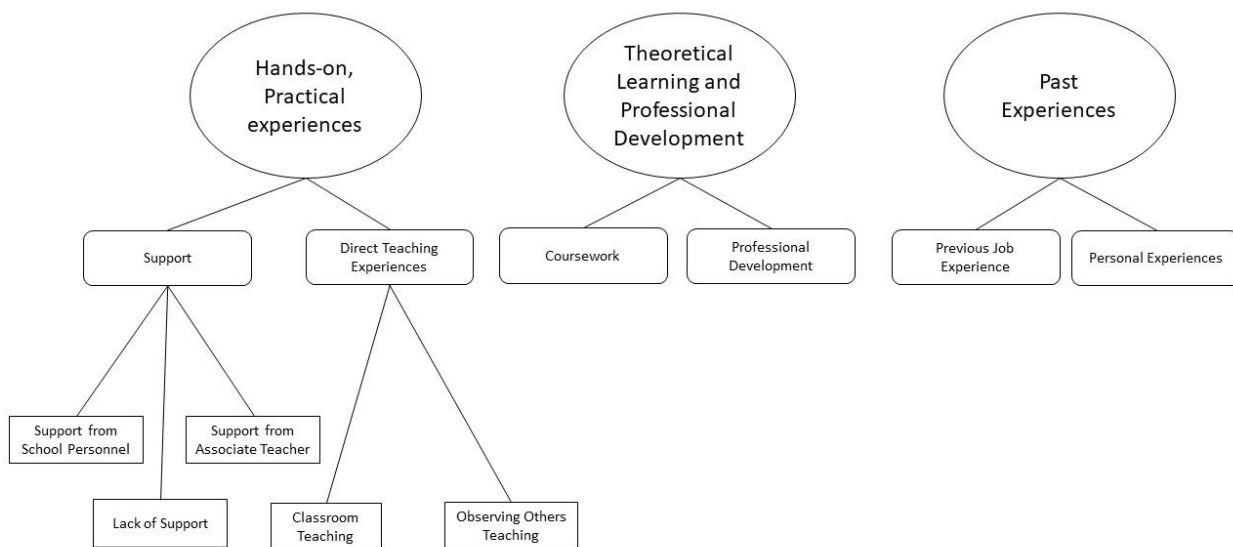
### 4 Results

After completing the thematic analysis, three main themes emerged from the data and are presented in Figure 1. The first theme that emerged from the data was labelled Hands-on, Practical Teaching Experiences. This theme encompassed the direct, in-school experiences that both pre-service and in-service teachers cited as contributing to their self-efficacy for teaching within inclusive classrooms. This theme was the most prominent one that emerged from the data and was composed of two smaller sub-themes. The first sub-theme, Direct Teaching Experiences, reflected experiences that pre-service and in-service teachers gained directly from the classroom. The second subtheme, Support, reflected statements related to the support that participants received from their associate teachers and school personnel, as well as their statements related to a perceived lack of support.

The second theme that emerged from the data was titled Theoretical Learning and Professional Development, and consisted of two subthemes. The first subtheme, Coursework, encompassed statements made by participants regarding their coursework taken within the faculty of education. The second subtheme, Professional Development, reflected statements related to professional development opportunities, such as seminars and workshops.

The third and final theme was titled Past Experiences, which encompassed participants' experiences when beginning their time in their faculties of education. This theme consisted of two subthemes: Personal Experiences, reflecting the life experiences of participants that contributed to their sense of self-efficacy for teaching within inclusive classrooms, and Previous Job Experiences, which encompassed past employment

opportunities that participants described. The following section will provide detailed descriptions and evidence of these themes.



**Figure 1. Thematic Map**

#### **4.1 Theme 1: Hands-on, Practical Teaching Experiences**

##### **4.1.1 Subtheme: Direct Teaching Experiences**

The first subtheme encompassed the experiences that pre-service and early career teachers described while they taught within the classroom; either during their practicum placements or during their in-service period. Within this subtheme, two distinct categories of experiences were present. The first of which, Classroom Teaching, reflected teachers' experiences of success or failure while trying to implement inclusive practices. In addition, it included their descriptions of interactions with the students in their classrooms as well as their accounts of feeling as if they did not have enough experiences to be confident in their abilities. The second, Observing Others Teaching, summarized

the accounts of teachers whose confidence was affected by observing other teachers teaching.

**Classroom Teaching.** For pre-service teachers, their direct classroom teaching experiences came from their practicum. Pre-service teachers described their practicum as one the most influential experiences that they have had with regards to the development of self-efficacy for teaching within inclusive classrooms. As one pre-service teacher described:

I feel much more confident, it's increased greatly over the past year. And what's contributed to that specifically is experiencing it. Actually being in an inclusive classroom and around students with exceptionalities and getting to know how to teach them and interact with them and having that opportunity, that is definitely what has boosted my confidence.

Other pre-service teachers described similar practicum experiences. They cited successfully implementing lesson plans, engaging students with the material, managing challenging behaviour, and having the opportunities to test the theories that they learned during their faculties of education as positively impacting their self-efficacy for teaching within inclusive classrooms. A pre-service teacher who was in the middle of their second practicum described:

After having a practicum and going back to [the faculty of education] too, that helped a lot because I could take my experiences in practicum and think about what we were learning in class in that context, and then with this practicum I was thinking back to everything I learned in class and thinking about it in this context, plus the last context so I think that yeah my confidence level definitely has gone up.

In addition to these experiences, pre-service teachers learned that teaching is often a job that requires a trial-and-error approach to figure out what works for their students and what fits with their teaching style. However, they also expressed concerns regarding



that approach, specifically with the “error” component. One pre-service teacher described:

I think that's the only real way to gain confidence is to try different things and it almost seems like a double-edged sword because you need like trial and error to figure out what works but you don't want to do that to the detriment of the student.

This pre-service teacher was weary of using such an approach, as they feared that they might accidentally derail the lesson. They went on to describe:

It becomes a little bit of a delicate situation that way, like, how could I best modify or accommodate this person, for this person, without... I'm always worried. That's like my big fear in practicum; when I have full control over a lesson I'll just totally derail all their learning.

Other pre-service teachers fully embraced the trial-and-error approach of learning to teach. They accepted that things will not always go well and tried to use the times when situations did not go as expected as learning opportunities to inform future instruction.

One pre-service teacher described:

Just being in the classroom and experiencing it is definitely the thing that's made my confidence go up because having tried and failed, or tried and it [goes] decent but not the way I planned, and just seeing how different things happen. Just that experience in and of itself has made me gain confidence.

The opposite was true for other pre-service teachers, however. Another pre-service teacher described their experiences:

I think that spending time in the classroom has just in some ways, decreased that confidence in that I do see the enormity of the challenge I am actually faced with, and sort of feeling, I suppose, minimal success in actually implementing some of the things that I get excited about in terms of strategies for teaching diverse learners.

Another experience that resulted in the decline in pre-service teachers' self-efficacy was when pre-service teachers had difficulty applying what they learned in their

coursework to their practicum. As previously mentioned, effectively teaching requires knowledge and mastery of many different skills. Pre-service teachers first learned about these skills and the theory behind them in their coursework. Then, they had opportunities to practice them during their practicum. Some pre-service teachers were able to successfully put the theory into practice during their practicum:

Certainly, [my confidence] has increased because of this experience that I'm having right now. It's taking the application of the theoretical background and seeing it in practice. I'm actually living in the moment and I'm seeing that it is natural, it is doable, [and] I'm doing a fair job.

Others, however, were not as successful. One pre-service teacher described:

I think my confidence has definitely gone down from moving from coursework into my practicum. Making adaptations and plans without an actual student to test them against is one thing, but actually making those plans in the time-pressure of practicum, then giving those to a student, and then having them work through them while also dealing with a classroom filled with other students. It's definitely a lot larger of a challenge than I appreciated beforehand.

A lack of experiences was also cited as a factor for the stagnation of self-efficacy, or for not feeling confident in abilities to teach within inclusive classrooms. Pre-service teachers did not have much say in the practicum classrooms that they were assigned to, and had even less of a say in the level of needs of the students within those classrooms. Some pre-service teachers were able to gain a wide variety of experience with many diverse learners. Others were not able to gain such experiences. One pre-service teacher described:

I don't feel really confident because I haven't been tested on my own yet, so um, once I've, once I'm in it and I've tried a few things I think I'll know better. It's hard to say if you haven't really had a chance to test the theories and the practices.

Direct teaching experiences influenced early career teachers' self-efficacy for teaching within inclusive classrooms in much the same way as pre-service teachers.

Experiencing success or failure within the classroom, witnessing first-hand the discrepancies between university theory and classroom practice, and having limited experiences with inclusive classrooms all had impacts on early career teachers' self-efficacy. One teacher described how their confidence increased:

I felt like just being graduated in July, already my confidence has gone way in the positive for having increased because I've had the opportunity to experience it more, practice it day and day to the point where it's almost second nature now.

Another early career teacher described:

Of course, what also has contributed to my level of confidence is actually being in diverse classrooms. Even though they can be far more challenging than a homogeneous classroom; just a bunch of the same culture with the same ability or what have you, that's where that most growth happens.

When teachers began their careers, they often started off as occasional teachers to gain experience and build their reputations within schools. While working as occasional teachers, they had the opportunity to teach within a wide variety of classrooms, similar to when they were on practicum. Being able to see such a wide variety of students in a relatively short amount of time contributed to the confidence of in-service teachers. One described:

I primarily supplied in elementary school, so that was a great way to get to see diverse classrooms every single day and adapt very quickly to the diverse needs of each classroom. [Occasional] teaching really leapt my confidence because I was ready for anything.

Regularly working as occasional teachers provided in-service teachers with more opportunities to implement the strategies and test the theories that they learned during their time in their faculties of education. However, other early career teachers found this to be a very difficult task. One teacher described:

In some ways having more experience, I'm more confident now. But also, I have recognized how unique each student is and how like it's not just "Oh I'm going to hand out my adapted work to some people." It's a lot more than that. When it's

on paper at school it's just "Okay this is what I do probably. I'll just hand out this paper instead of that paper or something." I think probably overall I'm more confident, but I'm also more cautious, perhaps.

Despite gaining confidence through experiences, this teacher experienced some shock at how different implementing inclusive practices was in theory versus how it was in practice. Another early career teacher described having similar experiences:

I would say [my confidence is] probably the same. In teacher's college it was a lot more idealistic and you think that everything can be accomplished and maybe following it by the book it does, but um, in class I'm finding it's a little more difficult than what I had anticipated and again I don't really have that many students who are on IEPs or even um, gifted in the class, so I would say it's probably around the same

Similar to pre-service teachers, the confidence of early career teachers remained stagnant if they felt like they did not have enough experiences with teaching diverse learners. As one teacher described:

[In] teacher's college there's courses on your exceptional learners, but I haven't had much opportunity over the last two years or so to implement a lot of that, right? You know, I don't see the IEPs, I don't do the ISSPs, I don't work with the students with pervasive needs or anything like that, you know, I'm just a substitute teacher coming into the classroom and teaching a day's lesson.

**Observing Others Teaching.** Both pre-service and early teachers were also influenced by observing other teaching and vicariously learning teaching strategies. While on practicum, pre-service teachers were in a unique position where they taught alongside a more experienced teacher, most commonly referred to as an associate teacher. The associate teacher acted a guide to help them navigate the intricacies of teaching within inclusive classroom, as well as a model for inclusive practices. Pre-service teachers were able to watch how their associate teacher successfully implemented strategies, and saw that inclusion was not just possible in theory, but also possible in practice. One pre-service teacher described:

I think that the biggest and best experience that I've been able to take from is actually having the practicum to see how other teachers do it, because it's one thing to theorize and hear about it but it's another to actually see, and I think it's also a difficult thing to teach because every student is different.

Other pre-service teachers did their practicums in classrooms with a wide variety of learners, and were able to see how their associate teachers implemented inclusive practices. Having observed these practices, they were then able to implement them into their own teaching. Another pre-service teacher described:

During [practicum] I got to observe my associate teachers, and they had very diverse learners from physical disabilities like cerebral palsy to reading disabilities and things like that. So, then I got to see how each teacher met the individual needs of each student. Putting theory into practice, it was very neat to see how, how they implemented [inclusive practices] in the classroom and that has the biggest impact on me.

During the early career period, the opportunities to observe others teaching became few and far between. In-service teachers were often too busy with their own classes to spend significant amounts of time observing the instruction of another, more experienced teacher. However, one teacher described taking time on their designated prep period to go and observe their colleagues with teaching:

I feel confident but not the best. I do like to watch my colleagues when I walk by a classroom or when I'm on prep and I go and watch them, because I find there are teachers out there who are really amazing and it's nice to watch them and get tips from them - how they manage certain students or a certain situation, but yeah, in general, I feel confident but I know I'm not the best and I still have room to grow and I love watching other teachers. It has increased over time and experience.

Although early career teachers had less time for direct observation, what became more common as teachers progressed into the early years of in-service teaching was leaning on their colleagues and administration for support.

#### **4.1.2**      *Summary of Direct Teaching Experiences*

Direct teaching experiences and more indirect observational experiences affected both pre-and-in-service teachers' self-efficacy for teaching within inclusive classrooms, for better or for worse. Those who experienced success, had many experiences with diverse learners, and who were able to implement what they learned from their faculties of education into the classroom saw their confidence for teaching within inclusive classrooms increase. Conversely, those who routinely experienced failure, noticed significant discrepancies between what they were taught and what they saw, and had comparatively few experiences within diverse classrooms saw their self-efficacy decrease, or stagnate. For pre-service teachers, observing their associate teachers successfully implement inclusive teaching techniques allowed them to see that inclusion was possible not only in theory, but also in practice. After entering the in-service period, opportunities to observe other teachers became fewer. However, some in-service teachers still took the time and sought opportunities to observe more experienced teachers.

#### **4.1.3**      *Subtheme: Support*

The second subtheme reflected pre-service and early career teachers' descriptions of the different types of support that they received throughout both their time in their faculties of education, and during the in-service teaching period. Three distinct categories of experiences composed this subtheme. The first, Support from Associate Teacher, summarized the experiences of pre-service teachers who received significant supports from their associate teacher. The second, Support from School Personnel, described both pre-service and in-service teachers' experiences with receiving support from school personnel, such as administrators, educational assistants, and other teachers. The third,

Lack of Support, encompassed the experiences of participants who described feeling unsupported in their roles as pre-service or in-service teachers.

**Support from Associate Teacher.** As previously mentioned, pre-service teachers were paired up with a more experienced associate teacher during their practicum. Not only did associate teachers act as an exemplar for the modeling of inclusive practices, they were also support figures that provided feedback, resources, and scaffolding to help develop the skills and confidence of pre-service teachers. One pre-service teacher described their experience with receiving support from their associate teacher:

I think especially through the practicums I have been able to gain that confidence and, what has contributed, I think my associate teachers have really helped to contribute to my level of confidence because they've been able to give me quick feedback whenever I've been doing something really well.

Another pre-service teacher described their experiences working with and teaching alongside their associate teacher.

My relationship with my associate teacher has really been a confidence booster and working as a team has really helped. You know, there's sometimes where, now that we're working together and, I'm mostly teaching, but to a certain point we are co-teaching so now, she can sit down with diverse learners while I am circulating with the rest of the class and she can do like, a small clinic with them and she's getting to know them better so it will also tell me, like oh, this student really benefits when they do this.

Pre-service teachers who felt supported in their role tended to report feeling confident in their abilities. They knew that their associate teacher was there to provide structure, support, and to intervene if things did not go according to plan. Despite no longer having the direct support from their associates, early career teachers were not left fully alone when they left their faculties of education. They built support networks in their schools by getting advice and resources from other teachers, administrators, and school

professionals. These support networks helped build and shape the confidence of both in-service teacher's self-efficacy for teaching within inclusive classrooms.

**Support from School Personnel.** While on practicum, pre-service teachers experienced first-hand the support that school personnel can provide. Although their primary support figure in the school was their associate teacher, they saw that teachers do not work in silos. They saw that even the most experienced teachers require support from their colleagues. One pre-service teacher described:

Seeing how other teachers even the most experienced teachers talk to their peers and lean on their peers and get advice from their peers when they're facing a situation has also given me confidence to know that it's okay to need that support.

In addition, pre-service teachers also received first-hand experience with the types of consultation and collaboration cases that occur between teachers and administration. They were able to see how everybody leans on each other in order to achieve the desired outcome of supporting students at school. When asked about what contributed to their confidence, one pre-service teacher described:

The conversations with other professionals within the school in terms of, hey, what can we do about this student who is asking for body breaks? What can we do? What is available? What is your schedule? When can they come down, things like that... Getting to know what is available in the school in terms of support.

Another pre-service teacher described feeling similarly. When asked about what contributed to their confidence for teaching within inclusive classrooms, they replied:

If you want me to generalize, my confidence level has increased for me based on experience and based on teachers taking the time out of their schedule to support me and to help me... Not only have I had principals help me and associate teachers help me, but I've had parents [help me]. It's just a beautiful thing. It has been a community experience and it has really made me more confident to know that I'm not the only one that has a passion for teaching... It's beautiful.



After transitioning from pre-service to in-service teaching, early career teachers leaned more on their colleagues for support. These more experienced teachers shared their expertise with the early in-service teachers and helped support them in navigating the intricacies of early-career teaching. One teacher shared their experiences:

I'm a very independent person so I don't really like to ask for help, but now I've kind of accepted that teaching is not an independent job. So, it's nice to know there are learning facilitators, and aids, and all of those people who are more experts in this area and they can assist me through teaching and guiding those students who are struggling and different in any way.

Another early career teacher described having similar experiences:

Just experience in the classroom I think, and then feeling like I'm in a safe supportive environment at school so now I know because I've been a year at that school I know that my learning support teacher, my principal, and my E.A.s and co-workers are all there to support me if I do have a student with diverse needs and abilities, whereas at the beginning of my time there I felt like I had to be the teacher on my own and take care of everything on my own. And now that I'm settled into the school and feel well supported, I know who to go to for help and that I'm not alone if I'm struggling with something, so, it makes everything much easier.

In addition to support with students with diverse learning needs, in-service teachers also received support in the form of general praise for their performance within the class. An early career teacher described:

I've had a lot of positive people that often say how wonderful the things I'm doing in my classroom are, I don't mean to kind of boost myself but it's great when it's great when colleagues take time out of their day to come by and say I saw that you were doing this, and I just thought that was so great.

Despite support being abundant, both pre-service and early career teachers felt like support was lacking in some specific areas, which negatively impacted their confidence. This lack of support came in the form of feeling as if teachers are not supported in their role with regards to inclusion, not receiving good feedback or guidance from their associate teacher.

**Lack of Support.** While on practicum, one pre-service teacher observed that the teachers in their school were not supported:

I mean it was definitely a learning experience but seeing how teachers aren't really supported, you know? I mean it's good to say that all these resources are out there, but in practice it's not really happening. So that was eye-opening.

This pre-service teacher went on to describe how they did not receive very much guidance from their associate teacher during their practicum, and how their associate teacher only intervened and offered feedback when something went wrong in the classroom. Feeling a lack of support also extended to early career teachers as well. Once teachers left the pre-service period, they no longer had the kind of direct, one-to-one feedback and support that their associate teacher provided. They were, for the most part, on their own in the classroom. This removal of support could be a stressful, jarring experience, as one teacher described:

It definitely has decreased, my confidence of teaching in diverse classrooms. You know, you kind of going through teacher's college, you have this support you have this safety net of your associate teacher and someone kind of guiding you. And now that I'm in a situation where I'm kind of flying solo. I'm really just trying to ensure that I'm able to reach my students and I'm catering my lessons properly and my assessments are good and the classroom management's there, so when it comes to the differentiation and um, you know reaching the students who aren't kind of, at grade level, I definitely struggle with that and I'm kind of sad to admit that.

One early career teacher described their experiences with not receiving adequate resources in the classroom required to support their students:

Looking at the general support for inclusiveness in classrooms, I don't know if I would feel as confident going into a classroom of my own. And I say that because I believe strongly in inclusion, but I believe strongly in inclusion when we can support those students how they need to be supported, and not just put them into a classroom without the supports, whether that's EAs, whether that's programs that pull them out of the class, um, whether that's funding for different technology that those students need.

This participant later described that seeing classrooms where supports are not readily available has shaken their desire to teach within an inclusive classroom. They firmly believed in the concept of inclusion and the inclusive classroom, but did see its implementation as a realistic possibility without additional supports, such as in-class educational assistants, funding for assistive technology, or programming. Another early career teacher described feeling similarly with regards to the lack of support and resources that they observed within a classroom. They described feeling frustrated at a system-wide level:

[Support] hasn't been able to be there in a lot of cases and that's really frustrating when, especially as a new teacher, I'm not super confident in my skills. I'm still growing and learning as I always will be, but you know it's really frustrating what like you can see what would be so helpful but you're not able to provide it.

#### **4.1.4**      *Summary of Support*

The feedback, guidance, and structure that associate teachers were able to provide to pre-service teachers helped build their confidence in the early stages of their career. After transitioning into the in-service period, teachers no longer had the support of their associate teachers and had to find support from the school personnel within their schools. Early career teachers often found support from their administrators and other teachers. Not all pre-service and in-service teachers received such adequate support, however. While on practicum, some pre-service teachers saw first-hand that the staff in their schools were not being supported, which negatively impacted their confidence for teaching within inclusive classrooms. Similarly, the transition from the pre-service period into in-service teaching was described as jarring, as teachers no longer had the consistent support of their associate teacher.

## 4.2 Theme 2: Theoretical Learning and Professional Development

### 4.2.1 *Subtheme: Coursework*

Coursework is a staple in all faculties of education. It is meant to provide the theoretical background for teaching, that is then meant to be carried forward and applied during the practicum. One pre-service teacher described their experience in their inclusive education course:

We had to all take a mandatory course about diversified education where we learned about different developmental disorders for students, learning disorders for students, how to create and implement individual education plans. So that was really great. It was a great course. I think that it should have been a full year course.

Learning about Individual Education Plans, differentiating instruction for diverse learners, Universal Design for Learning, and designing lesson plans were commonplace in pre-service teachers' coursework experiences. What was also commonplace however, was pre-service teachers commenting on the limited practical value that their coursework provided. One pre-service teacher described:

I think that some of the classes we've taken have touched on [inclusion] and I know they tried really hard with some of the programs in the classes that we've taken but it's not quite there. You know that feeling where the information is there, it's just not being given to us in a way that is actually applicable. We're learning a lot more of the theory, I just want to know how to deal with a kid who is refusing to do all work because clearly he has some sort of exceptionality that has not been identified. I just need to know how to do it.

Another pre-service teacher described feeling similarly:

Things that I learn in the classroom they are great, but I need to make that connection to it happening in class... We've had great professors that really do try to bring us the application and they [had] guest speakers all the time. That has contributed to [my] level of confidence and knowledge. But until I actually have my experience, I think it'll go up.

Pre-service teachers found their coursework to be most beneficial when they were able to test out the theories that they were learning in the practicum setting. Experiencing the successful application of theory into practice allowed them to see that inclusion was possible in practice, and not just in theory. One pre-service teacher described:

Certainly [my confidence] has increased because of this experience that I'm having right now. I'm actually taking the application of the theoretical background and seeing it into practice... I'm seeing that it is natural, it is doable, [and] I'm doing a fair job.

Another pre-service teacher described having similar experiences. This pre-service teacher took a class specifically targeted toward supporting the learning needs of diverse learners, which they described as practical and beneficial:

I'm confident and that's definitely increased since last year. I just took a learning support class. It really was that learning support class and my practicum experiences that helped me increase my confidence. Those were the two key pieces there. You only take so many courses during your teaching degree, I think I took a dozen, and there were really only two that I felt were helpful, and that was one of them. That one was so practical and that one I was able to put those suggestions and those ideas into practice during my practicum.

One pre-service teacher described feeling frustrated with the format of their coursework, and overwhelmed when they were put in a position to apply it. During their courses they learned many different theoretical models for learning and differentiation, but did not have any opportunities to apply it in the moment:

It's hard like when you're doing a class like that and you're not actually in schools and interacting with students. It's so easy to just forget everything or to memorize it and have it go in one ear and out the other. I feel like we learned about [Universal Design for Learning] and [Differentiated Instruction] and tried to memorize some of those things, but it's all just very surface level and without actually meeting kids with those designations, it was hard to have those things stick. I think I learned stuff but it's different seeing it on paper and writing it out than seeing it in the classroom. I found that when I got into my practicum, I had a look at the [Universal Design for Learning] stuff and just felt kind of overwhelmed by it.

Another pre-service teacher commented on the difficulty of learning theory with limited opportunities for in-class practice:

I do feel like in our education program there needed to be more additional specific training on meeting student needs, and not just like giving us information, but giving us opportunities to practice implementing different strategies and getting feedback on that...[having] theory and enough case studies and ideas and collaboration within the classroom to come up with the strategies for meeting the students' needs and then having a chance to implement that [and] then get feedback on it.

Pre-service teachers also felt as if their coursework was out of date, and that their instructors did not have a good sense of what occurred within the classroom. One pre-service teacher described their experiences:

The only class that has prepared me for anything in teacher's college is my exceptionalities course. Overall, I've been fairly disappointed with teacher's college. I feel like I haven't felt prepared really at all that much for actual teaching. I'm sure it's different everywhere, but a lot of our professors here are not necessarily up to date with what the actual classroom looks like these days, and many of them have not taught in Ontario for twenty years. A lot changes from year to year let alone in twenty years. If I had not taken my exceptionalities focus course I would not be prepared for teaching students with exceptionalities at all.

The experiences of teachers did not change once they transitioned from the pre-service period into early career teaching. They found the hands-on, practical skill development to be the most beneficial component to their coursework. They did not get as much out of courses if there was too heavy an emphasis on theory. One teacher described their experiences with coursework:

The program I was in I felt I had one course that was particularly helpful to me which was the science curriculum course where we went over all of the curriculum and learned how to run labs and we got to run demonstrations for a class and how to get them hooked in. And it was very much practical and doing lesson plans and may seem that I would then use in the future. The remainder of the classes that I took were very much just very theoretical or impractical. Like giving information but nothing to do with the information and so I felt they weren't useful to me.

Another early career teacher found their coursework and faculty of education experiences to be very idealistic, and not necessarily representative to what they experienced while teaching:

[Inclusion] is very idealistic in the university, but the reality of it is it's not always smooth. Like I know the textbook says do this and it'll work, everything's going to come to fruition. No, not the case... [my confidence] increased in the sense that I've been offered a lot more knowledge on how to do lesson plans, what different adaptations might be needed, what, you know, even diverse needs are out there, but at the same time in a practical sense it's decreased a little because of what I said about the classroom size and work load, especially in the public system. They want you to achieve the moon, but sometimes you're just sitting in the atmosphere.

#### **4.2.2      *Summary of Coursework***

In summary, pre-service and early career teachers who were able to successfully apply the theoretical knowledge obtained during their courses tended to view their courses in a more positive light compared to those who had more difficulty putting theory into practice. For other teachers however, there was a significant discrepancy between what they learned in university and what they observed in the classroom. Courses were either seen as too idealistic, too theoretical, or having too few opportunities to practice in real-time.

#### **4.2.3      *Subtheme: Professional Development***

Professional development allowed for teachers to continue learning through a variety of means, such as workshops, seminars, and lectures. Both pre-service and early career teachers had the opportunity to attend professional development, however it was a more common experience with in-service teachers. One pre-service teacher described their propensity toward professional development:

I'm constantly doing as much PD as I can, so I go to conferences and workshops and that sort of thing... continuously going to do more PD and focusing on diverse classroom workshops will obviously improve my confidence.

Another pre-service teacher described professional development experiences, in conjunction with their pre-service teacher education, helped increase their confidence for teaching within inclusive classrooms:

I think the education that I got has helped to increase my confidence in that I feel like I have some tools at my disposal. And the same thing with professional development events and spending some time on websites and learning about, especially about things like UDL.

However, other pre-service teachers found professional development to be too repetitive from what they've learned in their faculties of education:

I have gone to workshops. I have found a lot of the workshops that are available at the school have been, I found some of them useful, but I felt like they also have been somewhat repetitive from what we've learned in school.

Others did not have access to professional development opportunities, and shared that they believed having more would contribute to their confidence for teaching within inclusive classrooms. One pre-service teacher described:

I think that in order to feel more confident I need some more professional development. I need to probably take a couple [additional qualification] courses when I graduate and things like that. I think that we learned how to manage the students but I want to be able to still have a difference, make a difference in their life and I want them to learn, I don't want to just manage them.

As a whole, few early career teachers described professional development as having a direct impact on their self-efficacy and the opinions toward professional development were generally mixed. Some early career teachers found their professional development



experiences to be too theoretical and of limited practical value. One early career teacher described:

I've had a few P.D.s that have been interesting in many facets, but the majority of them are mostly just talking, and then once you get into the actual classroom you develop more influences than that. So, yeah, I've had some P.D.s and I've thought "oh, that's an interesting strategy", but it's always dependent upon the students themselves if those strategies work, and a lot of P.D.s are often less practical than I would like.

Similar sentiments were shared by three other early career teachers. When asked about the contributors to their confidence, one answered:

Experience. That's the only thing. That's the only thing I think is seeing what needs to be done and doing it. Because the PD does not prepare you for a classroom. University does not prepare you for a classroom, not in the least.

The second answered:

I found [that] P.D.s have been helpful, I found that the courses that I took in university kind of started that journey, but it's definitely been just working with students and communicating with them.

And the third answered: "I've had some professional development opportunities, but I'm not sure that they've really contributed much to my confidence there. I feel like it's just experience."

Not all descriptions of professional development were negative, however. One early career teacher found professional development to be beneficial as it allowed them to learn new instructional techniques from other professionals. They described:

All of our PD days. Right? They obviously serve a purpose... We learn different things from everybody else, and there are things that I'm doing in my classroom this year that I didn't do two years ago because I learned it from somebody last year. You're constantly adding to your what we call our bag of tricks just and by encountering all these different professionals and by doing all of these different workshops, and just discussing education, that adds to [confidence] as well.

#### **4.2.4**      *Summary of Professional Development*

Professional development was noted as both a positive and negative influence on participants' self-efficacy. Those who described professional development as positively impacting their self-efficacy highlighted the networking opportunities, knowledge, and strategies provided by these opportunities. Others however, viewed professional development less favourably. While some appreciated what they learned during these opportunities, they made it clear that direct experience, not professional development, contributed to their confidence for teaching within inclusive classrooms.

### **4.3 Theme 3: Past Experiences**

#### **4.3.1**      *Subtheme: Previous Job Experiences*

Pre-service teachers came to their faculties of education with a variety of job experiences which aided in the development of their self-efficacy for teaching within inclusive classrooms. One pre-service teacher described their experiences with coaching the Special Olympics, and how they adapted the techniques that they used teaching skating to their practicum classroom:

The ice arena is no different than a classroom, it's just a different setting. We have a number of skaters that are non-verbal and last week I was able to teach a set of steps in a particular order to a skater that was non-verbal and he was able to remember the steps and do them again and again. It was just through lots of eye contact and positive reinforcements and high-fives and hand signals and things like that.

This pre-service teacher went on to describe how the additional experience that they gained coaching the Special Olympics made her more confident at teaching in inclusive classrooms, because she has had so much experience working with students with a wide range of exceptionalities. Another pre-service teacher worked as an Educational Assistant

and within group homes prior to entering their faculty of education: They went on to describe:

I have my developmental service worker diploma and my travelling youth worker diploma from college, and then I went back, and so I worked as an EA. I also worked in group homes for a while as well... I have worked in a Section 23 classroom and I've worked with children with autism on a daily basis, so I have that experience quite a bit and I've also worked with children with autism in [participant's city] so I've had quite a large experience base so I'm quite confident in teaching in [inclusive classrooms].

Before entering their faculty of education, another pre-service teacher was a consultant. During this career, they acted as a liaison between employers, politicians, and various municipal organizations. Although not directly related to education, the pre-service teacher applied the consulting skills that they learned during this career and applied them to their teaching career. They described that they felt much more comfortable asking for support:

My first career I ran my own business as a consultant. And so because I've been a small business owner, I've been able to liaison with, lots of different people in different fields... Because I've [connected] with a lot of different people I would feel confident in asking for support from my administration or other teachers or, I would go looking for the right resources that would help me through. I wouldn't just try and do it on my own.

Previous job experiences influenced the self-efficacy of early career teachers as well. One teacher worked at a clothing store and described their experiences with interacting with diverse learners in that setting:

I worked at a children's clothing store. And generally, children with exceptionalities would come in and talk to me, and I'd be the person that [they] would just hang out with them and help them out when their parents were shopping. I had a lot of positive feedback from that. One woman [had a son with autism] and he normally didn't want to shop because he absolutely hated it. But I talked to him and made conversation and he would shop and get that stuff done. That helped me to feel more confident in my interactions [with diverse learners].

In-service teachers also described their small-business backgrounds as being significant contributors to their self-efficacy. One in-service teacher ran a tutoring business:

The program was tailored for each individual student to help them be successful in the classroom. We accepted students that were struggling, or just wanting to have extra practice and keep up, or gifted students as well.

In addition, this early career teacher worked as an Educational Assistant before receiving their teaching certification. Having these previous employment experiences allowed them to be exposed to a wide variety of students and teaching strategies, and as a result, they described themselves as feeling “very confident in teaching in diverse classrooms”. They went on to say:

As far as contributing to that level of confidence, I think having, having already experienced what it’s like to try different ways and not be afraid to take risks, bringing things in a positive way for the students and reflecting on how they work, or whether they don’t work is the best way that I further my teaching practice.

Finally, an early career teacher described feeling a “4 out of 5” with regards to their confidence for teaching within inclusive classrooms. When asked about the specifics that contributed to their level of confidence, they cited classroom experience and their previous work with children as the most significant contributors:

I guess it’s just all the work that I’ve done with children in the past, babysitting, being a camp counsellor. I’ve had the opportunity to work with kids with all kinds of different learning needs. Ever since I started babysitting when I was 11, and I’ve appreciated that. It’s helped me to understand different children and understand how they learn and what they need, And I think that makes me a better teacher, hopefully.

#### **4.3.2      *Summary of Previous Job Experiences***

Previous job experiences had a significant impact on the self-efficacy for teaching in inclusive classrooms for both pre-service and early career teachers. Teachers were able to gain valuable experiences in fields outside of education, and incorporate what they

learned from these experiences to their classroom teaching. These experiences came in the form of interacting with children outside of an educational context, coaching, tutoring, and consulting.

#### **4.3.3 Subtheme: Personal Experiences**

The second subtheme encompassed the non-professional, non-educational experiences that participants cited as contributing to their self-efficacy for teaching within inclusive classrooms. These included participants' own experiences within the education system, as one pre-service teacher described:

I actually had an IEP growing up as a child... I have personal experience with it as a student. I learned differently so I understand. I've been in the shoes of the student, I understand what it's like to have, to not understand things, or to need extra support... For me that's a huge confidence builder. If I wouldn't have had the personal experience I have, I don't know if I would be as confident.

Others shared experiences involving their own teachers. One pre-service teacher described having a very poor grade 1 teacher, which motivated them to put in the effort to try and be the best teacher they could. They described:

I think I'm extremely confident with teaching, I'll just say that. At the beginning of the year, I was nervous I'm not going to lie. Because to me, I'm responsible for taking in these little human beings and making them good people and teaching them the fundamentals of life. I want to make sure these kids are getting everything they need and they're not going to leave school being like oh my God my grade 3 teacher was just so horrible. My grade 1 teacher was so awful and I just didn't want to be that person.

Another pre-service teacher described their confidence as natural, coming from within: Before I even came into the teacher education program, I felt comfortable working with diverse students all shapes, sizes, types and abilities. So I always, I felt comfortable right away.

Similar sentiments were shared by early career teachers. One early career teacher described having an exceptionality and directly experiencing the accommodations helped them feel more confident at teaching within inclusive classrooms:

I have a lot of previous knowledge from my experiences growing up as a student with an exceptionality... I would say I've always been confident doing it because I know what it feels like to be there, and I know a lot of accommodations that are easy that helped me.

Another early career teacher commented on their innate confidence for teaching in inclusive classrooms:

I'm very easily approachable, and I'm very, understanding and, so, yeah, I'm pretty confident I think I'm pretty good in that area... What contributes to that it's just, I don't know if you want to call it DNA, personality traits, just life in general just, you know?

One early career teacher described their experiences with their own child who had recently been diagnosed with autism, and described how that experience helped increase their confidence:

Just this past year my child was diagnosed with autism so that's been a really fast learning curve about what autism looks like, what that means, what that can present as, how to help it, um, I've taken many workshops around children with anxiety and children with ASD and learning how to support them, so those are things that have really helped increase my confidence.

Others spoke about how consistent reflection on their teaching practices contributed to their confidence. One early career teacher described:

I focus a lot on differentiation so because I do, I give myself time to reflect. I'm constantly reflecting. If you ask me what are you doing or what are you thinking about on a weekly basis, I'm always coming back to differentiation. Rather than just here's my lesson plan for next week. It's a priority for me and I think making it a priority contributes to my confidence.

Another in-service teacher described a similar process. When asked about what contributed to their confidence for teaching within inclusive classrooms: they answered:

Doing more reading and research, and self-reflection really. Taking the experience of the day and not just chalking it up to that's what I did today. It was more of a I sat down looked at the positives of the day, looked at the negatives, what could I have done better, because there's been obviously some interactions

with students of those diverse backgrounds that didn't go as positively as I'd liked.

#### **4.3.4**      *Summary of Personal Experiences*

In addition to previous job experiences, pre-service teachers entered their faculties of education with a wide range of personal experiences, which contributed to their self-efficacy for teaching within inclusive classrooms. These personal experiences included having an IEP growing up and experiencing first-hand what it is like as an exceptional learner. Teachers also described having family members who were exceptional learners and gained confidence by working with those family members and seeing how they were supported. Other teachers described their confidence as stemming from their own personalities; describing that their self-efficacy was innate.

### **4.4 Comparison of Pre-service and Early Career Experiences by Themes**

#### **4.4.1**      *Practical, Hands-on Teaching Experiences*

The general consensus, for both pre-service and early career teachers, was that their practical, hands-on teaching experiences were the most powerful influences on their self-efficacy for teaching within inclusive classrooms. Teachers in both groups routinely cited that actually teaching within the classroom and experiencing the full spectrum of the demands of the teaching profession contributed the most to their confidence, for better or for worse. Members of both groups saw their self-efficacy increase by experiencing success and seeing the direct impact that their teaching practices had on their students. Members of both groups also saw their self-efficacy stagnate or decrease by experiencing failures or running into significant discrepancies between the theory that they had learned in their faculties of education and the practice they were now trying to implement. Additionally, members of both groups expressed that their self-efficacy for

teaching within inclusive classrooms was not as high as it could be, simply because they had limited experiences working in such environments. All in all, the types of direct teaching experiences that contributed to pre-service and early career teachers' self-efficacy were largely the same.

What was not wholly the same however, were the support figures available for pre-service and early career teachers, and the potential opportunities for observing skilled models demonstrate effective teaching practices. For pre-service teachers, their most commonly mentioned support figure and model was their associate teacher. During their practicums, many pre-service teachers had regular access to an associate teacher who provided support in the forms of feedback, guidance, providing teaching resources, and modeling effective teaching practices. Others did not have such high-quality support during their practicum. Some pre-service teachers also reported feeling supported by the school personnel where they were completing their practicums, but the primary figure of support tended to be the associate teacher. The opposite was true for early career teachers. No longer having access to such a consistent support figure as the associate teacher, early career teachers had to find support elsewhere. For those who were able to find it, support came from school administrators, educational assistants, and fellow teachers, and the type of support received was very similar to the support provided by pre-service teachers' associate teacher. Other however, found the transition to in-service teaching to be a very jarring experience, as they no longer had the "safety net" provided by their associate teachers.



#### **4.4.2**      *Theoretical Learning and Professional Development*

There were relatively few differences reported regarding how coursework and professional development opportunities impacted pre-service and early career teachers' self-efficacy for teaching within inclusive classrooms. Both pre-service and early career teachers found that coursework helped improve their self-efficacy if they were able to successfully apply what they learned within the classroom. Seeing theory in practice helped cement their views that inclusion was indeed possible, and they were capable of implementing inclusive practices. However, both groups commented on the difficulty of such a task. Often, coursework was seen as being too theoretical, offering too little in terms of practical skills, and being out of touch with the realities that both pre-service and early career teachers were observing within the classroom.

Both pre-service and early career teachers had opportunities to participate in professional development. However, such experiences were more commonly cited by early career teachers, and few found them to have a direct impact on their self-efficacy for teaching within inclusive classrooms. Some pre-service teachers found professional development to be helpful in conjunction with the training they received from their faculties of education. Others found the content to be too akin to their coursework to be of any significant practical benefit to their teaching practices. Similar sentiments were shared by early career teachers who frequently commented on the practicality of the professional development opportunities in which they had participated. They tended to have difficulty applying what they had learned and frequently commented that only practical experiences, not theoretical learning, contributed to their self-efficacy for teaching within inclusive classrooms.

### **4.4.3**      *Past Experiences*

Similar to the previous two themes, there were very few differences between pre-service and early career teachers with regards to the past experiences that influenced their self-efficacy for teaching within inclusive classrooms. Members of both groups described past jobs as having a positive impact on their self-efficacy. Most of these jobs were related to working directly with children in some capacity, and both pre-service and early career teachers described being able to translate these experiences to the classroom setting. The personal experiences described by pre-service and early career teachers differed slightly. Both groups had members who cited their own experiences as diverse learners as having a direct impact on their confidence for teaching within inclusive classrooms. These participants shared that having an exceptionality, or having an I.E.P. helped with their confidence, as they had first-hand experiences regarding what it was like to be a diverse learner. Both groups also had members who described their confidence as innate, and just a product of their personalities. However, reading, studying, and self-reflection were only mentioned by in-service teachers. No pre-service teachers mentioned those as impacting their self-efficacy for teaching within inclusive classrooms.

### **4.5 Participant Experiences by Source of Self-Efficacy**

The following section will explore the theoretical foundations underlying why the experiences described by pre-service and in-service teachers contributed to their sense of self-efficacy for teaching within inclusive classrooms. Using the themes which emerged from the thematic analysis, I describe how the experiences described within these themes fit with the theoretical sources of self-efficacy information. As previously mentioned, self-efficacy beliefs are developed through complex interactions between sources of

information which are conveyed actively through mastery experiences, vicariously through observation, socially through verbal persuasion, and physiologically through the interpretation of bodily states (Bandura, 1997). Three out of the four sources of self-efficacy information were regularly described within the data. The only source that was not mentioned was Physiological States. While pre-service and early career teachers occasionally mentioned feelings when elaborating on why specific experiences contributed to their self-efficacy, none of them described these feelings as having an impact on their self-efficacy for teaching within inclusive classrooms. As such, the following section will contain no description of Physiological States.

#### **4.5.1**      *Mastery Experiences*

Mastery Experiences were the primary source of self-efficacy information while pre-service and early career teachers were directly teaching. Experiencing success while teaching in inclusive classrooms bolstered both pre-service and early career teachers' sense of self-efficacy. When asked about the contributors to their confidence for teaching within inclusive classrooms, one in-service teacher answered:

Experience, and seeing the success when you do try something new with a student and you do see if you do something differently and you adapt a lesson for them that you can see almost right away that they “get it” so I think that has been a huge factor in building my confidence in the primary and junior grades.

By experiencing success, pre-service and in-service teachers saw first-hand that they had the capabilities to enact effective change within the classroom. In addition to directly experiencing success with teaching lessons, Mastery Experiences came in the form of overcoming challenges and obstacles within the classroom. One early career teacher described:

The experiences that I had last year with the intensity of the behaviour, and other challenges that I had going on, I feel a little bit more confident just having gone through those experiences and having had to find ways to make things work.

This participant went on to describe how watching students succeed increased their confidence for teaching within inclusive classrooms. However, they also described a time when their confidence was shaken:

Those students that have [failed], I let them down last year because I wasn't able to meet the diversity of needs at the same time. When we've got students who are not necessarily labeled with a learning disability, but who may or may not have one, compounded with all of the social issues that were present last year. I didn't meet their needs. I didn't. and it's a crappy feeling to carry.

Experiencing failure despite putting forth significant efforts can have negative impact on self-efficacy, especially if self-efficacy beliefs are not firmly established (Bandura, 1997). Both pre-service and early career teachers who saw their efforts yield limited success, or experienced obstacles that they were unable to overcome reported having their confidence in their abilities shaken. Another pre-service teacher described an obstacle that they did not know how to overcome:

[Having]so many different needs and so many different levels of programming; that's what makes me feel unconfident... How do you teach eight grade levels in one grade 9 class? How do you teach social studies to a grade 9 class that reads at a grade 1 level? Like how do you do that? I just don't know and I don't know how they can teach pre-service teachers to do that. I really don't.

Not all failures led to decreases or stagnations in self-efficacy, however. For those with a strong sense of their abilities, occasional failures are unlikely to have a significant impact on overall self-efficacy (Bandura, 1997). For these individuals, failures are more often interpreted as due to transient, external factors such as inadequate preparation as opposed to more stable, internal factors (Bandura 1997). One confident early career teacher described these experiences as such:

That independence when you become a teacher has been huge, and even failing, like bombing quite a few lessons for those diverse needs and realizing then okay, that doesn't work then you, you change your philosophy and you are able to learn from the failure. I think just being in the classroom has been a huge confidence builder for teaching diverse needs, in that I'm now aware that failure is fine, and that it's going to happen, so I might as well accept it, and I can grow from that.

For self-efficacy for teaching within inclusive classrooms to develop, a teacher must experience repeated successes within the classroom, and apply their skills consistently and persistently (Bandura, 1997). For some pre-service and early career teachers however, they had limited opportunities to apply their skills, which subsequently resulted in them not feeling as confident in their abilities. One pre-service teacher described:

In the classroom setting I'm not super confident about my ability yet. I haven't had a lot of practice. I've had a lot of practice interacting with persons with disabilities themselves like that general population bringing them into that instructing environment, but I'm not sure how that would go in a classroom.

In addition to their successes with direct teaching, pre-service and in-service teachers were able to experience mastery during their previous job experiences. Although the experiences described were not always related to teaching within a classroom, experiencing successes in domains that were tangentially related to specific areas of teaching within inclusive classrooms allowed teachers to become more confident in those domains. For one participant, experiencing past success as a consultant translated into current confidence for being able to consult, connect, and ask for support. For another participant, previous mastery experiences came in the form of experiencing success while coaching the special Olympics. During this past job, they saw first-hand the power of inclusion and differentiated instruction. They described taking these successes and

applying them to the classroom; saying that “the ice arena is no different than a classroom, it’s just a different setting”.

**Summary of Mastery Experiences.** Pre-service and early career teachers experienced mastery by seeing the direct positive impact that their teaching had on their students, and by overcoming obstacles within the classroom. Not all obstacles were able to be overcome, which decreased the confidence in some teachers. However, those who were able to frame their failures as learning opportunities did not have their confidence shaken by the occasional failure, as they knew that they could learn from their mistakes and carry that knowledge forward. In addition to classroom successes, teachers experienced mastery during their previous job experiences. During these past jobs, they were able to gain confidence in specific areas, which directly translated into confidence for teaching within inclusive classrooms.

#### **4.5.2**      *Vicarious Experiences*

In addition to Mastery Experiences, Vicarious Experiences are a powerful source of self-efficacy information. Observing skilled models successfully demonstrate tasks raises efficacy beliefs, especially if the model is perceived to be similar to the one who is doing the observing (Bandura, 1997). Modeling allows observers to see that difficult tasks are in fact possible, and persuades them that if other can do it, they can do it too. For pre-service teachers, these kinds of experiences came in the form of observing their associate teachers. Seeing how their associate teachers handled situations and solved problems within the classroom allowed pre-service teachers to learn risk-free how to handle similar situations. One pre-service teacher described:

My confidence has increased. I think that the biggest and best experience that I've been able to take from is actually having the practicum to see how other teachers

do it, because it's one thing to theorize and hear about it but it's another to actually see.

Vicarious teaching experiences also extended to early career teachers as well.

Although they no longer had associate teachers teaching alongside them, they took time out of their days to observe other teachers. One early career teacher described:

I feel confident but not the best. I do like to watch my colleagues when I walk by a classroom or when I'm on prep and I go and watch them, because I find there are teachers out there who are really amazing and it's nice to watch them and get tips from them - how they manage certain students or a certain situation, but yeah, in general, I feel confident but I know I'm not the best and I still have room to grow and I love watching other teachers. It has increased over time and experience.

Vicarious Experiences were also present in the coursework experiences of pre-service teachers. These came in the form of pre-service teachers' course instructors modeling inclusive practices. One pre-service teacher described:

What has contributed to the level of confidence during this semester? My experience, being treated myself as if I matter as a student. This one professor, she completely changed my whole perspective on what a diverse classroom means how to approach it. The way that she treated all of us, although we were different, she treated us all in a special way. She has definitely helped me. It was due to her that I have whatever confidence I do have to be in a diverse classroom, to take on the challenge of trying to do what she did for me and us.

For this pre-service teacher, their confidence stemmed from observing their instructor apply inclusive teaching strategies that are meant for the classroom, and experiencing first-hand the power that successfully implementing these strategies can have.

The final source of Vicarious Experiences came in the form of the personal experiences described by pre-service and early career teachers. Some pre-service teachers were diverse learners themselves. They experienced first-hand the inclusive practices modeled by their own teachers and the successes of their implementation.

**Summary of Vicarious Experiences.** The Vicarious Experiences described by teachers were composed of observing others teaching and having course instructors model inclusive practices. Observing these models successfully demonstrate their skills allowed teachers to see that inclusion was not just possible in theory, but also in practice. In addition, Vicarious Experiences also came from teachers' own experiences as diverse learners, and being on the receiving end of the inclusive practices that they were currently expected to implement.

#### **4.5.3      *Verbal Persuasion***

While relatively limited in its power to directly influence self-efficacy, Verbal Persuasion in the form of realistic verbal appraisals and feedback have the power to convince the recipient that they have the capability to master tasks (Bandura, 1997). Indeed, this factor was observed in the experiences of pre-service teachers who spoke about their time being mentored by their associate teachers. This verbal mentorship took the form of feedback on performance, and general praise for ability. One pre-service teacher described:

Especially through the practicums I have been able to gain that confidence and, what has contributed, I think my associate teachers have really helped to contribute to my level of confidence because they've been able to give me quick feedback whenever I've been doing something really well.

Pre-service teachers found that this kind of positive, supportive feedback to be very helpful. It aided in validating their experiences, and let them know that they were performing well. Another pre-service teacher described:

I taught my first lesson and I was like, was it good was it not? And my co-op teacher actually comes up to me and she's like, "That was pretty phenomenal for the first lesson you've ever taught in your life." I was like oh my God like that was actually really nice of her to say.



Verbal persuasion is more likely to be effective when the person who is providing the feedback is respected, and shares similar characteristics to the individual receiving the feedback. (Bandura, 1997). Verbal persuasion given by somebody who a person sees as dissimilar, or from someone who is not respected, is unlikely to yield any changes in self-efficacy. Indeed, one pre-service teacher who described their efficacy as having decreased expressed:

My practicum advisor, she's on the supply list but she's never actually taught and we are supposed to do our interview prep with her and she's given some very contradictory advice and I just feel like it's a complete waste of time and resources preparing myself for an interview with somebody that I don't think I respect.

Once pre-service teachers entered the in-service period, they no longer received feedback and support from their associate teacher. The on-the-job feedback and support that they had access to was from school personnel present within the schools in which they were teaching. However, for early career teachers who are beginning their careers by teaching occasionally, they found it very hard to establish consistent relationships with the school personnel, and subsequently receive feedback on their performance. One in-service teacher described:

I think I was losing confidence pretty quickly, not having any feedback from people in how I'm doing and how to support these kids because there's a temporary way. Coming in for a day at a time or a few months at a time for LTOs. I think it's hard to have confidence.

Once teachers were able to secure more stable positions within schools, they were better able to build relationships with the school personnel. This allowed them to receive more consistent verbal support and performance feedback. One early career teacher described

that the support that they received from their administrator softened the impact that difficult days had on their confidence for teaching within inclusive classrooms:

I'd say [my confidence] increased because of the support that I have. When it's an out-of-control day, which with one of my classes it can be, I feel supported. When I have those bad days, my admin really stands behind me and says, "Don't take this on your shoulders, it's not your fault. You're doing the best you can, and don't try and plan don't try and do too much because it's ok". So that really lifts my spirits and makes the job enjoyable again.

Verbal Persuasion was the primary source of self-efficacy information described when teachers spoke about their coursework experiences. In this context, Verbal Persuasion came in the form of course instructors offering helpful feedback and advice, as well as from teaching lessons to pre-service teachers. As described by both pre-service and early career teachers, teaching can be a very overwhelming profession, especially during the first few years. One way that course instructors helped pre-service teachers was by letting them know that even the most expert teachers were once in their position.

One early career teacher described:

I think that hearing from professors, or a special guest of any sort, hearing them say that they didn't know at first but now they have learned, makes me confident that over time things will get easier. Over time I will develop the skills that I may not have already and I think that's very positive and contributes to my confidence that I would take on any classroom.

This kind of Verbal Persuasion helped normalize the journey that teachers take in order to become truly confident in their abilities. Verbal Persuasion, however, has the potential to be a double-edged sword, as it can raise unrealistic beliefs of one's capabilities, or minimize the true level of difficulty of tasks (Bandura, 1997). Indeed, both pre-service and in-service teachers occasionally described their coursework as "idealistic"; where what they were taught, and the confidence that they had built within their faculties did not translate into what they observed within the classroom. One early career teacher

described such an experience, where their coursework had not prepared them for the things that they needed to know to teach within inclusive classrooms. As a result, they described their confidence as having decreased:

I would say weirdly enough my confidence has decreased. Just because I've come to realize that, and I kind of knew this before, but my [coursework] hasn't prepared me for all the things that I'm going to need to know in order to kind of help and support the students and even as we learn more about different disabilities and we develop better tools to help I'm still going to need to learn a lot along the way.

Another teacher described a similar experience. They described having a firm grasp on the theoretical side of inclusion while they were in their courses, but found that the implementation was much harder than they had anticipated:

In terms of working with students with different special education needs um, maybe that's decreased a bit. I felt like I had a really firm grasp on theory when I was at my faculty of education, but putting that into practice hasn't gone entirely smoothly.

Verbal Persuasion was also the most prominent source of self-efficacy information when teachers spoke about their professional development experiences. As previously mentioned, very few teachers described professional development as having a direct impact on their self-efficacy for teaching within inclusive classrooms. Often, teachers found the professional development seminars to be far too theoretical, with limited practicality. Similar to coursework, professional development has the potential to decrease self-efficacy through the unrealistic raising of personal capabilities through verbal persuasion. Indeed, one in-service teacher described such an experience. While they attended a professional development seminar, they felt confident that they would be able to implement the strategies in the moment. However, they found that the knowledge that they gained did not translate to their classroom experience. They described:

For, in the moment when you're in the workshop and you're excited and you're feeling like, "Yeah I can try this, I can do this", and then I go back to the classroom and I think, good gosh, that's, this is just not, I'm like, I'm trying but it's not happening, and so sometimes it starts out as boosting confidence but kind of knocks it back afterwards when you realize that all of these things that other people appear to be able to do somewhere out in the ether. I am not able to do in my space with my current group of kiddos.

*Summary of Verbal Persuasion.* Pre-service teachers appreciated receiving feedback from their associate teachers, as it allowed them to gauge how they were performing. After entering the in-service period, teachers missed the feedback and support that they once had, especially if they were teaching occasionally. Teachers who were only teaching occasionally had a difficult time with forming stable relationships at their schools and did not receive as much feedback for their performance. Teachers who had more stability in their job placements were better able to leverage the school support network, and receive the verbal feedback of their performance, as well as receiving other kinds of verbal support. With regards to their coursework, the instructors of pre-service teachers helped reassure them that they hone their teaching skills over time, and that even the experts were once in their position. With course content delivery, pre-service teachers found the courses to be helpful when the content was directly relevant to what they were experiencing within the classroom. Others however, described their courses as idealistic, where what they were taught within their faculties of education did not reflect the realities of the classroom. Teachers who experienced this kind of discrepancy tended to say that their self-efficacy had remained the same, or decreased. Teachers described their professional development experiences similarly. Often, teachers found that the information presented within professional development seminars were either very similar

to the content of their classes, or did not provide realistic or practical advice that could be fluidly implemented within the classroom.

## Chapter 5

### 5 Discussion

Self-efficacy has been an important focus of education research for decades, as numerous benefits for both teachers and students are associated with high levels of self-efficacy (Colson et al., 2017; Miesera et al., 2019; Skaalvik & Skaalvik, 2010). Self-efficacy for general teaching has been a key topic of research, however, self-efficacy is domain specific (Bandura, 1997). This means that self-efficacy in one domain of teaching does not necessarily translate to self-efficacy in another domain of teaching. As such, research in the area of educational self-efficacy has expanded and narrowed, looking at self-efficacy for specific domains of teaching instead of teaching as a monolith. A domain of teaching that has received much attention is the domain of self-efficacy for teaching within inclusive classrooms.

All faculties of education across Canada prepare pre-service teachers to teach within inclusive classrooms (Falkenberg, 2015), where students of all abilities are taught within an age-appropriate general education classroom. Here they receive the supports and accommodations that best meet their educational needs (Loreman et al., 2014). As such, it is integral that faculties of education are preparing pre-service teachers to teach and believe in their abilities to teach within these classrooms. Research into this topic has primarily adopted a quantitative approach, using valid and reliable questionnaires to distill self-efficacy beliefs into easily analyzable numbers. While this design allows for advanced comparisons between groups and factors, this statistical flexibility comes at the cost of nuance. As previously mentioned, these studies excel at describing *how* self-efficacious large populations of teachers are, by *how much* these large groups differ from each other, and what variables contribute to the *statistical differences* between these

groups. Where they are lacking however, is telling the stories of the teachers. It is known that Canadian pre-service teachers are leaving their faculties of education with a high sense of self-efficacy for teaching within inclusive classrooms (Specht et al., 2016). What is less known are the specific experiences that contribute to this sense of self-efficacy. As such, this study was guided by three questions:

1. What experiences do pre-service and early career teachers credit for influencing their self-efficacy for teaching within inclusive classrooms?
2. What are the similarities and differences between the experiences described by pre-service and early career teachers?
3. Are the experiences cited by pre-service and early career teachers consistent with the theoretical foundations of self-efficacy?

To answer these questions, I conducted a thematic analysis. I analyzed interviews from 49 pre-service and 86 early career teachers to get a comprehensive understanding of the specific, real-world experiences that these teachers were citing as contributing to their self-efficacy. Three distinct themes emerged from the data. The first theme encompassed the hands on, practical experiences described by pre-service and early career teachers. The second theme was related to more hands-off, theoretical learning. The third and final theme was composed of past personal experiences which contributed to the self-efficacy of pre-service and early career teachers.

The following section describes these findings. I first discuss the limitations associated with this study and provide suggestions for future research. I then go theme-by-theme; discussing the results, similarities, discrepancies, and implications for the field of teacher education. Within these sections, I discuss how the findings of this study and

the experiences described by participants fit into the larger theoretical foundations of self-efficacy.

### **5.1 Limitations and Suggestions for Future Research**

The first limitation to the present study was the relatively broad questions that were asked during the interview. While the questions allowed for an open-ended discussion about the experiences that contributed to the development of teachers' self-efficacy, neither the research assistants nor I asked for significant amounts of follow-up regarding participants' responses. Further probes regarding these topics would provide even more insight into the experiences that contribute to pre-service and in-service teachers' sense of self-efficacy for teaching within inclusive classrooms, and the themes which came out of the present study provide several valuable jumping-off points for any researcher interested in this topic.

Regarding the theme of Practical, Hands-on Teaching Experiences, future researchers may wish to ask, for example:

1. How many practicums have you completed? Describe what your practicum experiences looked like.
2. Do you feel as if your practicum impacted your confidence for teaching within inclusive classrooms?
3. What specific experiences during your practicums affected your confidence for teaching within inclusive classrooms?
4. Describe the mentoring style of your associate teacher(s). Did the mentorship style of your associate teacher impact your confidence for teaching within inclusive classrooms? In what ways?



5. What kinds of supports do you feel like you would need, either from your associate teacher or from the school personnel, to help you feel more confident teaching in inclusive classrooms?

For the theme of Theoretical Learning and Professional Development, examples of questions that could be asked to pre-service teachers include:

1. What courses on inclusive education have you taken?
2. Do you feel as if your coursework has impacted your confidence for teaching within inclusive classrooms?
3. What specific course content contributed to your confidence for teaching within inclusive classrooms?
4. Do you find that what you learned in your coursework matched what you saw/are seeing during your practicum?
5. What would you like/have liked from your coursework to help you feel more confident in teaching in inclusive classrooms?

For the final theme of Past Experiences, questions that could be asked include

1. Have you ever worked any jobs which involved working with diverse populations? Have working these jobs impacted your confidence for teaching within inclusive classrooms?
2. Do you have any personal experiences with diverse learners? Have these experiences impacted your confidence for teaching within inclusive classrooms?

The second limitation of the present study was its cross-sectional design. This design allowed for the comparison of pre-service and early career teachers. However, it did not allow for any intra-participant comparison regarding how the contributors to self-efficacy

change from the pre-service into the early career period. Adopting a truly longitudinal approach will allow for such comparisons.

## **5.2 Theme 1: Hands-on, Practical Experiences**

### **5.2.1 *Direct Teaching Experiences***

Direct classroom experiences were the most frequently described type of experience by both pre-service and early career teachers. This result came as no surprise, as direct classroom experience regularly exposed pre-service and early career teachers to three out of four sources of self-efficacy information. For pre-service teachers, direct teaching experiences came from their practicum. During which, under the supervision and guidance of their associate teacher, they were able to try their hands at implementing inclusive practices within the classroom. These attempts at implementation were either positive and successful, which increased self-efficacy, or negative and resulted in failure, which decreased self-efficacy. This finding is consistent both theoretically (Bandura, 1997) and practically (Gale et al., 2021; Narayanan et al., 2023) as these experiences were textbook examples of the most powerful source of self-efficacy information: mastery experience (Clark & Newberry, 2019; Bautista, 2011; Gale et al., 2021; Ma et al., 2022a/b; Narayanan, 2021; Pfitzner-Eden, 2016; Tschannen-Moran & Woolfolk-Hoy, 2007; Wilson et al., 2020).

The direct-teaching mastery experiences that pre-service teachers described were experiencing success with implementing lesson plans, seeing students engaged with the material that they were teaching, successfully managing student behaviour, and successfully navigating the natural difficulties that arise while teaching. Negative mastery experiences, which resulted in the decline of self-efficacy, were seeing first-hand how difficult teaching can be, having limited success with the implementation of inclusive

practices, experiencing significant discrepancies between theory and practice, and simply not having enough opportunities to teach within inclusive classrooms. These findings are consistent with past qualitative and mixed-methods studies investigating the experiences that contribute to pre-service teachers' self-efficacy for teaching (Gale et al., 2021; Ma et al., 2022; Martins et al., 2015). However, this study contributes to the existing literature by highlighting the experiences of Canadian pre-service and in-service teachers, and by highlighting the experiences that contributed to their self-efficacy for teaching within inclusive classrooms instead of self-efficacy for teaching in general.

Direct teaching experiences were also the most commonly cited contributor to self-efficacy for early career teachers, and their experiences were largely the same as pre-service teachers. Early career teachers who described having more positive experiences working in diverse classrooms tended to report increases in self-efficacy, and those who had fewer positive experiences, or fewer experiences in general, tended to report stagnations or declines in self-efficacy. There was one notable difference between pre-service and early career teachers' direct teaching experiences however: the quantity and diversity of experiences. In the early career period, it was common for teachers to work as occasional teachers, covering for sick days or leaves of absences. This experience allowed for teachers to see many different classrooms and teach many different students, resulting in more opportunities for success or failure. Despite the increased risk, few early career teachers described having their self-efficacy for teaching in inclusive classrooms decrease. This finding is in line with previous literature suggesting that more opportunities to work with diverse populations contributes positively to self-efficacy

(Burton & Pace, 2009; Crowson & Brandes, 2014; Leyser et al., 2011; Peebles & Mendaglio, 2014; Specht & Metsala, 2018; Specht et al., 2016).

In addition to directly teaching, observing associate teachers was another commonly cited contributor to pre-service teachers' sense of self-efficacy for teaching in inclusive classrooms. By observing their associate teachers, pre-service teachers were able to see different styles of teaching, different techniques for managing conflict in the classroom, and different ways of building positive relationships with students. Seeing it done in action bolstered pre-service teachers' self-efficacy, and this is consistent with the impact that vicarious experiences have on self-efficacy (Bandura, 1997). As previously mentioned, observing the success of skilled models contributes to self-efficacy, especially if the model is perceived to be similar to the observer. Within the practicum setting, having the opportunity to directly observe a skilled teacher is an essential component to the development of self-efficacy as pre-service teachers likely do not have enough practical experiences to make solid estimates of their self-efficacy (Bandura, 1997). These findings are consistent with the existing literature which highlighted the importance of providing pre-service teachers with the opportunities to observe experienced teachers (Clark & Newberry, 2019; Ma et al., 2022b).

Relatively few early career teachers described observing others teaching as having a significant influence on their self-efficacy. This is an interesting finding, but not one that is without precedent (Ma et al., 2022a). Two explanations lend themselves to why this may have occurred. The first is that the pre-service practicum is designed to include vicarious experiences in the form of observing the associate teacher (Van Nuland, 2011). In-service teaching is not designed this way. Teaching is a profession that rarely allows

the free time required for lengthy, thoughtful observation of skilled mentors. As described in this study, those who actively seek such experiences may be able to find it. However, the reality of the teaching profession in Canada at this time is that such luxuries are rarely afforded. This is problematic, as teachers are still very much in the early stages of skill development during the early career period.

The second possible explanation, and the one provided by Ma et al. (2022a), is that the experience gap between early career and mid-to-late career teachers may at times be simply too large for effective modeling to take place. Vicarious experiences are most effective when the observer closely relates to the model (Bandura, 1997) and there may have been too large of an experience gap.

### **5.2.2**      *Support*

In addition to directly teaching and observing skilled models, the support that pre-service and early career teachers received played an integral role in the development of their self-efficacy. For pre-service teachers during their practicum, this support most often came from their associate teacher. A key role of the associate teacher is to act as a mentor; providing timely, appropriate feedback on teaching practices, and helping pre-service teachers navigate the intricacies of the profession (Van Nueland, 2011). This was indeed echoed by pre-service teachers, who often cited the praise, feedback, encouragement, and knowledge that they received from their associate teacher as contributing significantly to their self-efficacy for teaching within inclusive classrooms. Those individuals who reported feeling a lack of support from their associate teacher, or expressed a desire for feedback but just did not receive it tended to report that their self-

efficacy had decreased. This finding is theoretically consistent, and fits within the verbal persuasion category of self-efficacy information.

Receiving regular performance appraisals and consistent feedback on performance from a skilled mentor is an important component of building self-efficacy beliefs, especially in the early stages of skill development. When feedback and guidance are not provided, it is difficult to make accurate performance assessments and subsequently affects the development of self-efficacy (Bandura, 1997). This finding is also consistent with existing literature on pre-service teachers' perceptions of mentor feedback. High quality, specific, relevant feedback on instructional practice is a powerful tool, and has the power to significantly improve pre-service teachers' self-efficacy (Martins et al., 2015).

Early career teachers also found support to be essential for the development of self-efficacy, and their experiences were largely the same as pre-service teachers. They too appreciated receiving feedback, guidance, praise, and teaching materials. What differed substantially however, was who provided the support, and how frequently. No longer having the direct line of support from their associate teacher, early career teachers had to look elsewhere. This experience was jarring for some, who were used to having the frequent, consistent support that an associate teacher allowed. For early career teachers, support came from school administration, fellow teachers, and EAs within their classroom, implying that the overall school climate began to play a much more significant role in the development of their self-efficacy. This finding is consistent with Narayanan et al., (2023), who highlighted the impact that the school environment can have on teachers' sense of self-efficacy.

A deep investigation into the relative impact on self-efficacy of specific types supports was beyond the scope of this study. However, the consensus of both pre-service and early career teachers was that having support, either from associate teachers or from school personnel, was a key component to the development of their self-efficacy for teaching within inclusive classrooms. As such, it is of great importance that school administrators prioritize creating a supportive environment for both pre-service and in-service teachers. One way that this can be done is thorough evidence-based pre-service mentorship, and support from coaches specifically trained to support teachers with implementing inclusive practices (Black et al., 2016; Gallagher & Bennett, 2017).

For participants who mentioned their associate teachers as having an impact on their self-efficacy, the overwhelming majority of them had positive things to say. However, there were others who did not have such positive experiences. As the associate teacher plays such a significant role in the modeling of inclusive practices, it is essential that associate teachers receive the training and professional development necessary to fill that role. A lack of formal training for associate teachers was a problem identified by Black et al., (2016), who sought to identify the most effective ways to support associate teachers with their role. After surveying and interviewing 281 Canadian associate teachers, they provided the following recommendations. Firstly, they recommended the implementation of formal, multimodal professional development opportunities for mentor teachers where they can learn and be supported in their role. Secondly, they recommended more open lines of communication between associate teachers and faculties of education, where information is shared regarding the types of courses that pre-service teachers are taking, and the kind of feedback that faculties of education are looking for. As associate teachers

play a critical role in the professional journey of teachers and to the development of their self-efficacy, it is crucial that the supporters also receive the support that they need in order to be effective models of inclusive practices.

In addition to supporting associate teachers, administrators can also support early career teachers, through the strategic use of inclusion coaches – itinerant teachers who have expertise in the implementation of inclusive practices (Gallagher & Bennett, 2018). Inclusion coaches can act as mentors and guides to help both new and veteran teachers with their goals toward implementing inclusive practices within the classroom by modeling effective inclusive practices, observing and providing feedback to early career teachers, and setting collaborative goals (Gallagher & Bennett, 2018). Through this kind of support, teachers would be exposed to positive vicarious experiences in the form of observing a skilled mentor, and positive verbal persuasion in the form of feedback.

### **5.3 Theme 2: Theoretical Learning and Professional Development**

#### **5.3.1 *Coursework***

Both pre-service and in-service teachers expressed mixed opinions toward their faculty of education coursework. On one hand, they appreciated learning the theory behind inclusive instruction and found value in the knowledge. Seeing the theory successfully applied to practice bolstered their self-efficacy, as they were able to see that the process is indeed doable. On the other hand, however, they noted that their courses often contained limited practical value once they began to gain experience in the field. Coursework was described as idealistic. Instructors were labelled by some as out-of-touch. What was being described theoretically did not match what was being observed practically which disappointed many pre-service and in-service teachers. These findings



highlight an important challenge for both faculties of education and the schools where pre-service and early career teachers will find themselves. As the paradigm of education continues to shift toward the inclusive education model, more and more school boards are transitioning toward a fully inclusive model, similar to the schoolboard's transition highlighted in Gallagher and Bennett (2017). The transition from a segregated model to an inclusive one is grounded in a substantial body of research, which has routinely shown that the outcomes of students taught within the inclusive education model are equal to or superior to those taught within a segregated education model (Lindsay, 2007; O'Rourke, 2015). However, there are still many schools and boards within the provincial education systems that promote and utilize anti-inclusion policies and procedures. This presents a potential challenge for the development of teachers' sense of self-efficacy for teaching within inclusive classrooms.

As Bandura (1997) wrote, "To raise unrealistic beliefs of personal capabilities, however, only invites failures that will discredit the persuaders and further undermine the recipients' beliefs in their capabilities" (p.101). Having a significant mismatch between the theory that is learned and the practice that is observed invites the kinds of failures which undermine self-efficacy, which is especially problematic in the early stages of self-efficacy development. The courses that pre-service and in-service teachers found to be most helpful focused on developing and practicing practical skills that they would use in the field and had skilled models demonstrating these practical skills.

Past research has demonstrated that courses on inclusive education, if done properly, do have the power to improve the self-efficacy of pre-service teachers (Lancaster & Bain, 2010; Sharma & Nuttal, 2016; Sharma & Sokal, 2015), especially if

combined with field experiences (Peebles & Mendaglio, 2014). However, it is essential that self-efficacy is built upon a realistic foundation that is in-line with what pre-service teachers will experience when they transition into the early career period. As such, if developing teachers' sense of self-efficacy for teaching within inclusive classrooms is a high priority for faculties of education, coursework should aim to provide course content which is both pro-inclusion and mindful of the supports, funding, and resources available within the contemporary education system.

### **5.3.2 Professional Development**

Relatively few early career, and even fewer pre-service teachers cited professional development experiences as having an impact on their self-efficacy for teaching within inclusive classrooms. This finding can be explained in two ways. The first is that participants may not have had access to professional development opportunities or did not know how to access them. In a study surveying Canadian teachers' experiences with professional development, Boulay et al. (2023) found that the single greatest predictor of whether teachers participated in professional development was if it was offered to them. Participants in this study may not have been offered many opportunities to participate in professional development, which explains why it was mentioned so infrequently. As such, school administrators should be mindful to offer professional development opportunities to all teachers when they arise.

The second explanation for this finding is that both pre-service and early career teachers may not have found their professional development opportunities to be all that helpful. Pre-service teachers reported that professional development helped increase their inclusive instruction toolkit but found the content to be too similar to their recently

completed coursework. Early career teachers tended to view professional development more negatively; often describing them as having limited practical value and being too theoretical. Investigating the specific factors of participants' professional development experiences was beyond the scope of this study. However, based on the brief descriptions provided by participants, it is likely that many, if not most of the professional development activities that participants engaged in were of the "traditional" sort (Boulay et al., 2023). Traditional, within this context, is used to describe a kind of professional development which places emphasis on brief lectures, presentations, conferences as means of knowledge translation and skill development. Professional development which is provided in this way is potentially problematic for the development of self-efficacy, as the only source of self-efficacy information present is verbal persuasion. Similar to the coursework experiences of many participants, lecture-style professional development runs the risk of artificially inflating self-efficacy by convincing and motivating listeners that they will be able to implement teaching strategies that they may not yet have the skillset to do successfully (Bandura, 1997).

Indeed, this issue was mentioned by participants who described the difficulty and shock they experienced after trying to implement strategies that they learned within their professional development experiences. For professional development to have positive impacts on teachers' self-efficacy, it must go above and beyond the traditional lecture-style approach. Thankfully, a body of education research has been devoted to modes and methods of "effective" professional development for teachers (Desimone, 2009; Boulay et al., 2023). The general consensus of the literature is that five characteristics underly effective professional development. First, professional development should be directly

related to a specific subject matter, with a strong emphasis on the pedagogical foundations surrounding how- students learn content within that subject (Desimone, 2009). Secondly, professional development should encourage active learning, where teachers practice the strategies learned during the sessions in their classrooms, receive feedback, and are given time to reflect on their teaching practices (Desimone, 2009). This active learning is in part facilitated by the third characteristic: duration. It is recommended that at least twenty hours should be spent on professional development during the course of one school semester (Boulay et al., 2023). Fourthly, coordinators of professional development must take into consideration the values, interests, and knowledge of participants, and ensure that the content of the sessions match the realities of the classrooms (Boulay et al., 2023). Finally, professional development should encourage the collective participation of teachers from the same school to facilitate a sense of safety and community (Desimone, 2009).

If implemented properly, this embedded model of effective professional development should theoretically improve participants' self-efficacy for teaching within inclusive classrooms. The recommended in-vivo practice provides opportunities for mastery experiences. The regularly scheduled, consistent sessions allow for ample feedback and guidance from peers and experts. The group setting allows for the observation of skilled models and can act as a supportive community; helping to mitigate any negative feelings that may arise. However, this remains theoretical, as to date, no studies have investigated the impact of such a professional development program on self-efficacy for teaching within inclusive classrooms, and it is unknown if such a program has been designed.

## 5.4 Past Experiences

### 5.4.1 *Previous Job Experiences and Personal Experiences*

Although not as common as the previously mentioned sub-themes, both pre-service and early career teachers cited certain specific previous job experiences and personal experiences as contributing to their self-efficacy for teaching within inclusive classrooms. The previous job experiences of participants often involved working with diverse learners in some capacity or involved working with the public. Personal experiences came in the form of being diverse learners themselves, having a friend or family member who was a diverse learner, or having a personality where self-efficacy for teaching within inclusive classrooms just came naturally to them. All participants who cited these kinds of experiences did so positively. These findings are consistent with previous literature, which have shown that having more positive personal experiences with diverse learners is associated with higher levels of self-efficacy for teaching within inclusive classrooms (Specht et al, 2016; Specht & Metsala, 2018). Specht et al. (2016) explained this finding by suggesting that having direct experiences with diverse learners tends to reduce stereotypical views of those groups. Findings from Crowson and Brandes (2014) supports this conclusion, as they found that holding negative stereotypical beliefs regarding how students with disabilities learn predicts self-efficacy toward inclusive practices, in that those who hold more stereotypical beliefs tended to report lower levels of self-efficacy for inclusive teaching.

As faculties of education do not have any control over the past personal or professional experiences of pre-service teachers, it is difficult to make direct recommendations as to how to support pre-service teachers within this domain. However,

more indirect recommendations can be implemented. As having more positive personal experiences with diverse learners, as well as holding fewer stereotypical beliefs have been shown to be associated with higher levels of self-efficacy for teaching within inclusive classrooms, faculties of education should continue to ensure that harmful stereotypes toward diverse learners are being challenged.

### **5.5 Conclusion**

The largest of its kind to date, the present study aimed to tell a story about Canadian teachers beginning their careers. Specifically, it aimed to tell the story of their lived experiences, and how these experiences contributed to their self-efficacy for teaching within inclusive classrooms. From the interviews of pre-service and early career teachers, I identified three distinct themes encompassing the different types of experiences which contributed to their confidence for teaching within inclusive classrooms: Hands-on, Practical Teaching Experiences, Theoretical Learning and Professional Development, and Past Experiences. The rich, detailed information present within these themes provides important practical considerations for both faculties of education, and for schools. Both faculties of education and school administration teams should ensure that teachers are not only receiving the kinds of experiences which have been demonstrated to contribute to a robust sense of confidence, but also are also feeling supported within their roles.

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## **Appendices**

### **Appendix A: Letter of Information and Consent for Parent Study**

**Project Title:**

The Development of Inclusive Educational Practices for Beginning Teachers

**Principal Investigator:**

Dr. Jacqueline Specht, Professor, Western University, London, ON

#### **Letter of Information**

**Invitation to Participate**

My name is Dr. Jacqueline Specht and I am a Professor at the Faculty of Education at The University of Western Ontario. I am the director of the Canadian Research Centre on Inclusive Education and we are currently conducting research into preservice teachers' beliefs of inclusive education practices in Canadian classrooms and would like to invite you to participate in this study.

**Purpose of the Letter**

The purpose of this letter is to provide you with information required for you to make an informed decision regarding participation in this research.

**Purpose of this Study**

The purpose of this study is to explore the self-efficacy, beliefs, and instructional practices of beginning teachers identifying the factors that shape their development over time and in the context of their initial teaching experiences. Through this study, we hope to gain a better understanding of how teachers develop their instructional knowledge and practice to meet the needs of students in diverse Canadian classrooms, spanning the period from initial professional development through the first years as an educator.

**Inclusion Criteria**

Individuals who are enrolled in a teacher education program at a participating Canadian post-secondary institution are eligible to participate in this study. Participants must be at the beginning of their teacher preparation programs.

**Exclusion Criteria**

Individuals who are not enrolled in a teacher education program at a participating Canadian post-secondary institution, and those who are not at the beginning of their teacher education program, are not eligible to participate in this study.

**Study Procedures**

If you agree to participate in this study you will be asked to complete survey questions about your beliefs and experiences teaching in an inclusive classroom. Completion of these questionnaires will take place within the Faculty of Education at your respective university and will take approximately 30 minutes of your time in one session. The task will be conducted in person in a course related to special/inclusive education.

After completion of the in-class survey, you will be asked if you would like to participate

in subsequent surveys. Subsequent surveys, should you choose to participate in these, will be conducted online throughout your program tenure and into your first years of teaching, using Qualtrics, a secure survey platform used by Western University. These tasks will take approximately 30 minutes of your time. If you elect to participate in subsequent surveys, you will be asked to leave your contact information in a separate section (not linked to the survey data). Personal information will be removed from the research data and kept separate from this. Unique identifiers will then assigned to each survey for the purposes of protecting personal information while tracking participants for the duration of the research study.

You will also be asked if you would like to participate in follow-up interviews. Participation in the interview component is entirely voluntary and separate from the survey component; involvement in the initial survey component does not mandate involvement in the follow-up interview component. Subsequent interviews, should you choose to participate in these, will be conducted in your first years of teaching. If you elect to be contacted to participate in the interview component, you may be sent an email requesting you to respond to me stating that you are interested. The researcher will contact you to set up an interview time and private location convenient to you. Interviews will be recorded using audio recording procedures; participants who do not wish to have their interview audio recorded will not be able to participate in the interview portion of the study. It is estimated that each interview will take approximately 30-60 minutes. All interviews will be audio-recorded. Audio-recordings will be transcribed verbatim. Any information that could identify you, your place of study, or your place of employment will be removed.

There will be a total of 300 local and 4500 total participants in this study overall.

### **Possible Risks and Harms**

There are no known risks or harms associated with participation in this study.

### **Possible Benefits**

The possible benefits to participants include enhanced knowledge about themselves as educators (strengths and weaknesses) and enhanced knowledge of effective educational practices in working with diverse learners. Participants may benefit from improved teacher training opportunities that develop from this research. Societal benefits of this study include enhanced professional practice for teachers, training and skill development for teachers, and new and enhanced partnerships amongst researchers in education.

### **Compensation**

As an incentive to participate in this study, you will have the opportunity at the completion of the initial survey to enter your name to win a draw for 1 of 15 \$100 gift certificate for Indigo/Chapters. Participants who participate in subsequent aspects of the study (surveys, interviews) will automatically be entered into a draw in each year in which they participate. Each year they will have a chance to win 1 of 15 gift certificates.

## **Voluntary Participation**

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time with no effect on your future academic status or employment. Withdrawing your participation or not answering questions will not disqualify you from being entered into the draw for a gift certificate in the year.

## **Confidentiality**

All data collected will remain confidential and accessible only to the investigators of this study. Personal information in this study will only be collected if you offer this information to the researcher on the initial survey. Personal information will be stored separately from the research data; research data, therefore, will not be identifiable in connection to personal information. Unique identifiers will be assigned to each survey collected in order to protect personal information.

All hard-copy data will be stored in a locked filing cabinet in a locked institutional office. Digital data will be stored on a password-protected computer on a secure network behind institutional firewalls, which will only be accessible to the researchers. The Qualtrics survey platform ensures secure transmission of data through the enablement of the TLS (transport layer security) encryption feature, and the masking of participant IP addresses from the survey author. For those who elect to participate in the interview component of the study, the researcher will maintain confidentiality through non-disclosure of identifying information (i.e. real names, locations, personal details). Pseudonyms will be used to protect confidentiality in the final research product. If the results are published, your name will not be used. If you choose to withdraw from this study, your data will be removed and destroyed from our database. All data will be kept by the researcher and stored securely for a minimum of five years. Data will be destroyed when no longer needed.

## **Contacts for Further Information**

If you require any further information regarding this research project or your participation in the study you may contact Dr. Jacqueline Specht, Principal Investigator, by telephone or email.

Representatives of Western University's Non-Medical Research Ethics Board may contact you or require access to your study-related records to monitor the conduct of the research.

If you have any questions about your rights as a research participant or the conduct of this study, you may contact The Office of Research Ethics.

## **Publication**

If the results of the study are published, your name will not be used. If you would like to receive a copy of any potential study results, please provide your name and contact information in the designated area after completion of the survey.

**Consent**

Written consent will be obtained in person in the initial surveys.

Completion of subsequent online surveys is indication of your continued consent to participate.

*This letter is yours to keep for future reference.*

**Consent Form (Initial Survey)**

**Project Title:** The Development of Inclusive Educational Practices for Beginning Teachers

**Study Investigator's Name:** Dr. Jacqueline Specht

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction. I understand that I do not waive my legal rights by signing the Consent Form.

Participant's Name (please print):

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Participant's Signature:

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Date:

---

Person Obtaining Informed Consent (please print):

---

Signature:

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Date:

---

**Consent Form (Interview)**

**Project Title:** The Development of Inclusive Educational Practices for Beginning Teachers

**Study Investigator's Name:** Dr. Jacqueline Specht

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate in the interview. All questions have been answered to my satisfaction. I understand that I do not waive my legal rights by signing the Consent Form.

I consent to being audio recorded during the interview

Participant's Name (please print):

---

Participant's Signature:

---

Date:

---

Person Obtaining Informed Consent (please print):

---

Signature:

---

Date:

---



**Appendix B: Ethics Approval**

# Western Research

**Date:** 13 July 2022

**To:** Dr. Jacqueline Specht

**Project ID:** 106761

**Study Title:** The Development of Inclusive Educational Practices for Beginning Teachers

**Application Type:** Continuing Ethics Review (CER) Form

**Review Type:** Delegated

**Meeting Date:** August 5 2022

**Date Approval Issued:** 13/Jul/2022 16:54

**REB Approval Expiry Date:** 17/Jul/2023

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Dear Dr. Jacqueline Specht,

The Western University Non-Medical Research Ethics Board has reviewed this application. This study, including all currently approved documents, has been reapproved until the expiry date noted above.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as

Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely,

The Office of Human Research Ethics

***Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).***

### Appendix C: Coding Manuals

#### Initial Codebook

Code	Definition	Example
Practicum	Participants mentioned their practicum experiences.	“I think especially through the practicums I have been able to gain that confidence and, what has contributed, I think my associate teachers have really helped to contribute to my level of confidence because they've been able to give me quick feedback whenever I've been doing something really well”
Coursework	Participants mentioned coursework taken at their faculties of education.	“We had to all take a mandatory course about diversified education where we learned about different developmental disorders for students, learning disorders for students, how to create, implement and what are IEPs, individual education plans. So that was really great. It was a great course.”
Professional Development	Participants mentioned participating in professional development.	“I have gone to workshops. I have found a lot of the workshops that are available at the school have been uhm...I found some of them useful but I haven't, I felt like...they also have been somewhat repetitive from what we've learned in school”
Personal Experiences	Participants mentioned experiences taking place outside of their educational or professional lives.	“My mom was also a reading recovery and special education teacher when I was growing up, so

		I kind of grew up thinking that all classrooms were inclusive, because it's how I saw my mom [teach]"
Professional Experiences	Participants mentioned experiences related directly related to a profession. This includes teaching.	"I've had to teach flute lessons and so I've learned that everyone learns different and I've had to switch up the way I say things or the way I instruct them so that they can learn the same content"

### Final Codebook

Code	Definition	Example
Practicum	Participants mentioned their practicum experiences	"I think especially through the practicums I have been able to gain that confidence and, what has contributed, I think my associate teachers have really helped to contribute to my level of confidence because they've been able to give me quick feedback whenever I've been doing something really well"
Coursework	Participants mentioned coursework taken at their faculties of education	"We had to all take a mandatory course about diversified education where we learned about different developmental disorders for students, learning disorders for students, how to create, implement and what are IEPs, individual education plans. So that was really great. It was a great course."

Professional Development	Participants mentioned participating in professional development	“I have gone to workshops. I have found a lot of the workshops that are available at the school have been uhm...I found some of them useful but I haven’t, I felt like...they also have been somewhat repetitive from what we’ve learned in school”
Personal Experiences	Participants mentioned experiences taking place outside of their educational or professional lives	“My mom was also a reading recovery and special education teacher when I was growing up, so I kind of grew up thinking that all classrooms were inclusive, because it’s how I saw my mom [teach]”
Teaching Experiences	Participants described their experiences directly teaching	“I’ve supplied in this very very high-needs classroom and I just felt so unprepared for somebody who’s just finished my teaching degree”
Observing Others Teaching	Participants describe watching another teacher teach	“I was able to see how other teachers deal with students, so that really helped me have a better experience, or better exposure which improved my confidence in dealing with students...”
Interactions with Students	Participants describe directly interacting with students	“I had a student in one of my placements in kindergarten that they, he is only 4 years old, had come from a traumatic background already, and they obviously didn’t know what was going on yet, but somehow I was able to connect with him”

Lack of Experiences	Participants describe having a lack of experience, or inadequate preparation	“Walking into the grade 6 class this year my confidence dropped a lot during the first week only because I don’t have the experience working with older students”
Support from School Personnel	Participants mention receiving support from school personnel	“Seeing how other teacher even the most experienced teachers um, talk to their peers and lean on their peers and get advice from their peers when they’re facing a situation has also given me confidence to know that it’s okay to need that support”
Support from Associate Teacher	Participants mention receiving support from their associate teacher during practicum	“I’ve also been very fortunate because I have had very forward thinking associate teachers that are very caring and they were willing to work with me and willing to give me the space and willing to give me the support and I think that’s also contributed to my experiences in teaching.”
Lack of Support	Participants describe feeling like there is a lack of support	“It definitely has decreased, my confidence of teaching in diverse classrooms. Going through teacher’s college, you have this support you have this safety net of your associate teacher and someone kind of guiding you. And now that I’m in a situation where I’m kind of flying solo”

Previous Job Experiences	Participant describes their previous job experiences	“I've had the opportunity to work with kids with all kinds of different learning needs. Ever since I started babysitting when I was 11, and I've appreciated that. It's helped me to understand different children and understand how they learn and what they need”
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### Self-Efficacy Codebook

Code	Definition
“Positive” Mastery Experiences	Statements where the participant describes experiencing success and/or describes positive experiences related to the factors that contribute to self-efficacy for teaching within an inclusive classroom.
“Positive” Vicarious Experiences	Statements where the participant describes being positively influenced by observing others experiencing success teaching within inclusive classrooms.
“Positive” Verbal Persuasion	Statements where the participant describes being positively influenced by the verbal persuasion of another person. This includes coursework, feedback from colleagues, and support from school personnel.
“Positive” Physiological States	Statements where the participant describes feeling positive emotions related to teaching within inclusive classrooms.
“Negative” Mastery Experiences	Statements where the participant describes experiencing failure or difficulties related to the factors that contribute to self-efficacy for teaching within inclusive classrooms. This includes statements where participants describe not having enough experiences to feel confident.
“Negative” Vicarious Experiences	Statements where the participant describes being negatively influenced by observing others experiencing difficulties teaching within inclusive classrooms.
“Negative” Verbal persuasion	Statements where the participant describes being negatively influenced by the verbal persuasion of another person. This includes difficulties with coursework, lack of feedback, and lack of support.
“Negative” Physiological States	Statements where the participant describes feeling negative emotions related to teaching within inclusive classrooms.

## Curriculum Vitae

**Name:** Evan Charles

**Post-secondary Education and Degrees:** Western University  
London, Ontario, Canada  
2019-2023 Ph.D. School and Applied Child Psychology

Western University  
London, Ontario, Canada  
2017-2019 M.A. Applied Psychology in Schools

University of Ottawa  
Ottawa, Ontario, Canada  
2013-2017 B.A. Specialization Psychology

**Honours and Awards:** Inclusive Education Research Award  
2021

Dunlop Distinguished Contribution Award  
2020

Ontario Graduate Scholarship  
2020

**Related Work Experience** Psychology Resident  
Thames Valley District School Board  
2022-2023

Graduate Research Assistant  
Western University  
2017-2022

Advanced Practicum Student  
Mary J. Wright Child and Youth Development Clinic  
2021-2022

Practicum Student  
Thames Valley District School Board  
2020-2021

Practicum Student  
Mary J. Wright Centre at Merrymount  
2020-2019

## **Presentations and Publications**

Charles, E., Metsala, J., Lau, Z., & de Lugt, J. (2021, June). *Predictors of Teacher*

*Efficacy in Beginning Teachers: How Pre-Service Teacher Self-Efficacy Changes Over Time*. Presented at the Canadian Society for the Study of Education Conference, Alberta, Canada.

Delorey, J., Specht, J., Fairbrother, M., Ismailos, L., Villella, M., Charles, E.,

Vanderloon, M., Gallagher, T., Howell, G., & Whitley, J. (2020). Experiences that shape pre-service teachers' inclusive practice beliefs. *International Journal of Inclusive Education*, <https://doi.org/10.1080/13603116.2020.1862403>.

Specht, J., Charles, E., & Puka, K. (2023, August). The development of efficacy for

inclusive practice: Initial teacher education to early career teachers. Presented at the European Conference on Educational Research, Glasgow, UK

Specht, J., Delorey, J., Ismailos, L., Fairbrother, M., Charles, E., & Villella, M. (2021,

August). Experiences that shape beginning teachers' inclusive practice beliefs: a group concept mapping study. Presented at ISEC2021, London, UK, Conference virtual

Specht, J., Charles, E., de Lugt, J., Delorey, J., Gallagher, T., Howell, G., Ismailos, L.,

Lau, Z., Maich, K., McGhie-Richmond, D., Metsala, J., Sider, S., Thompson, S., Thorne, C., Whitley, J., Young, G. (2020, May/June). Inclusive education and beginning teachers: Implications for research and practice. Symposium presented at the Canadian Society for the Study of Education presented at the Canadian Society for the Study of Education, London, Canada. (Conference cancelled)



Specht, J., Vanderloon, M., Fairbrother, M., Whitely, J., & Charles, E. (2019, August).

Inclusive education In Canada. Presented at the International Association for the Scientific Study of Intellectual Disabilities, Glasgow, UK.