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Beginning Teachers' Development of Inclusive Practices: A Longitudinal Multiple-Case Study Approach

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Abstract

Classroom teachers are expected to have the competencies to teach in inclusive classrooms, with the goal of providing diverse learners the support and opportunities they deserve to learn at their best. However, teachers worldwide have reported their teacher education program was inadequate in preparing them to teach in inclusive classrooms. To address this, Sharma (2018) proposed the 3H framework – the three apprenticeships that preservice teachers should be prepared with to become effective inclusive educators: the *heart* (attitudes and beliefs of inclusive teachers), the *head* (knowledge and self-efficacy to teach diverse learners), and the *hands* (inclusive instructional practices). The goal of this study was to investigate the development of these three apprenticeships in teachers' early career longitudinally. Eight Canadian beginning teachers were interviewed for four consecutive years about experiences that have contributed to their beliefs, self-efficacy, and instructional practices to teach in diverse classrooms, presented as case studies. Participants' ideas were further examined collectively, resulting in nine themes: (a) "getting thrown in" to experiment with strategies; (b) gap between theory and reality – what worked or did not work in formal education; (c) what is inclusion?; (d) beliefs in children's ability and exposure to diverse learners; (e) responsibilities as teachers and recognizing limits; (f) building relationships with students and caregivers; (g) a supportive and knowledgeable team; diversity and other components that affect learning; and (h) books, media, and technology. Developmental patterns were also noted. First, inclusive beliefs and instructional practices taught in teacher education programs were consistently mentioned across the four years of interviews but were not attributed to the influence of their education. Second, participants often began their career with confidence, but it decreased sharply as they experienced a "reality shock"; as time progressed, they either (a) accepted their limits as teachers and met students' needs to the best of their abilities or (b) felt defeated and lost faith in the inclusive education system. The findings of this study added to our understanding of beginning teachers' perception of where the issues lie, and directions for improving educational programs so they can better prepare preservice teachers for inclusive education.

Keywords

Summary for Lay Audience

Inclusive education is the practice of including children of the same age and diverse abilities in the same classroom, where teachers are expected to meet all individual's learning needs. However, teachers worldwide have expressed that their teacher education program was insufficient in preparing them to teach effectively in inclusive classrooms. To prepare efficacious inclusive teachers, there are three key elements (the 3H framework): the *heart* (attitudes and beliefs of inclusive teachers), the *head* (knowledge and feeling competent to teach in inclusive classrooms), and the *hands* (inclusive instructional practices). The goal of this study was to examine how teachers at the beginning of their career develop these three elements. Eight beginning teachers from Canada were interviewed for four consecutive years. They were asked to share experiences that have contributed to their beliefs, feelings of competency (self-efficacy), and instructional practices to teach in inclusive classrooms; their interviews were presented as individual cases. Their ideas were further examined collectively to identify prominent themes and developmental patterns. Specifically, it was found that inclusive beliefs and instructional practices taught in teacher education programs were consistently mentioned across the four years of interviews, but the participants did not attribute them to the influence of their education. Further, participants often began their career with confidence in their abilities and skills, but their confidence decreased sharply as they encountered the challenges of a real-life classroom. As time progressed, the participants either (a) accepted their limits as teachers and met their students' needs to the best of their abilities or (b) felt defeated and lost faith in the inclusive education system. The findings of the study added to our understanding of beginning teachers' perception of the issues and struggles, which provided preliminary directions on how we can improve our educational programs and prepare teachers to be efficacious in teaching inclusive classrooms.

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Chapter 1

1 The Research Problem

Inclusive education, the practice of educating same-age learners of diverse abilities in the same classroom and accommodating for individual learning needs, has been promoted for almost three decades internationally (United Nations Educational, Scientific and Cultural Organization [UNESCO], 1994). Yet, the successful implementation of inclusive classrooms remains an immense challenge for many educators and education systems around the world (Ainscow, 2020). Canada – one of the leading nations in supporting and endorsing inclusive education – is no exception to this struggle. Researchers and educators across the country continue to explore potential solutions to address the discrepancy between the inclusive philosophy and the reality of implementation (Bunch, 2015; Hutchinson & Specht, 2020).

To understand how we could address this issue, I will start with introducing what inclusive education is and briefly what its implementation has looked like in Canada. Following that, I will describe how we can approach successful implementation of inclusive education according to the current literature and guidelines, highlighting the role of teacher education programs in preparing inclusive educators. I will then identify the gaps between our current and the ideal inclusive education system, and how this study aims to gain insights to bridge the gaps through exploring how Canadian beginning teachers develop their inclusive practices, using Sharma's (2018) 3H framework (*heart* for beliefs, *head* for knowledge and self-efficacy, and *hands* for instructional practices).

1.1 A Very Brief History of Inclusive Education in Canada

A special education model was historically used across Canada, meaning children with disabilities were separated into special schools or classrooms, segregated from their same-age peers based purely on their disabilities. From the 1970s to 1980s, community organizations and parent groups began questioning whether this educational approach was truly serving students with disabilities (Hutchinson & Specht, 2020). This facilitated a growing body of research in examining the practice of the special education model,

such as the efficacy of segregating students with disabilities, and conversations about educational practices for children with disabilities. In one such meetings, advocates from across North America gathered in Toronto, Ontario in the belief that there was insufficient progress in the education for people with disabilities under the special education model (Bunch, 2015). The discussion encouraged the use of the term *inclusion* in the context of education to represent a new vision for people with disabilities and the term gained popularity amongst advocates and educators who were seeking for greater equality. Then, at the 1994 conference in Salamanca, Spain, UNESCO endorsed the idea of *inclusive education,* with the guiding principle that all schools should include and accommodate all children regardless of their differences or difficulties (UNESCO, 1994). In other words, "every child has the right to quality education and learning," and schools should accept and support the individuals for who they are (UNICEF [United Nations Children's Fund], 2017).

UNESCO's statement called upon governments worldwide to prioritize improving education services, making sure programs have been adjusted and modified to meet the principles of inclusive education. Yet, the mandating of inclusive education in Canada remained a work in progress for decades following its introduction (Hutchinson & Specht, 2020; Sokal & Katz, 2015). One of the biggest challenges to implementing inclusive education in Canada was that the responsibility of creating education curriculum and policy was left in the hands of each of the 10 provinces and three territories in Canada (Sokal & Katz, 2015; Specht & Thompson, 2022). This resulted in some provinces creating provincial acts to support the national legislation at a much slower rate. In fact, Manitoba proclaimed a legislation for an inclusive educational approach in 2005 – almost 20 years after the UNESCO's call to commit and was the last province to do so (Manitoba Government, n.d.; Sokal & Katz, 2015).

Although legislations for inclusive education have finally been put in place across provinces and territories, variances in the implementation of inclusion in Canada still exist. For example, the mandate in New Brunswick is for all children to attend their neighbourhood school with same-age peers, whereas Ontario continues to have segregated classroom placements for students with disabilities (Bennett et al., 2019;

Specht & Thompson, 2022). As Bunch (2015) described, "most educational jurisdictions have opted for inclusive policy for students with disabilities in theory, but have not mandated it as compulsory in practice."

The inclusive education model also disputed many beliefs of the special education model, which made it challenging for educators who have had long-held beliefs to reposition their stance and adjust their practices accordingly. For example, the notions *integration* and *mainstreaming* have long been in place when considering how to involve diverse learners under in the special education model, but they implied that learners with disabilities must change to fit into the general classroom (Bunch, 2015). Previously popular terminologies such as *impaired, handicapped, or disabled people* also placed emphasis on deficits and the disability before the person, which nurtured the perception of seeing students as their disabilities (Flink, 2021). The consideration of beliefs is important because beliefs influence how individuals perceive the world and behave towards their surroundings; therefore, teachers' beliefs affect their acceptance of inclusive values and their instructional practices in the classrooms (Jordan, 2018; Jordan & Stanovich, 2003; Jordan et al., 2010; Kavanoz et al., 2017). Many factors could contribute to the development of an individual's beliefs, but in the context of inclusive education, teacher education programs play a particularly critical role in influencing teachers' attitudes towards inclusion and students with disabilities (Sharma & Nuttal, 2015).

Since educational policies have been inconsistent and loosely maintained among provinces and territories, the design of teacher education programs across Canada has also been variable. The inconsistency between teacher education programs was not limited to differences from province to province but even from university to university within the same province (Bunch, 2015). For instance, Sokal and Katz (2015) highlighted that not all preservice teachers receive formal education in working with students with disabilities in Canada. This means there has been a lack of standardization and consensus in how teachers should be trained and whether preservice teachers have been provided with sufficient knowledge to understand inclusion and to develop a positive attitude

towards inclusion – inevitably adding to the challenge of implementing inclusive education across Canada.

In conclusion, the shift towards an inclusive attitude nationally has been observed but happening very gradually (Bunch, 2015). Despite the progress we have made as a nation in better supporting all learners regardless of their abilities through inclusive education, much more work needs to be done to achieve successful implementation across Canada.

1.2   How to Successfully Implement Inclusive Education

Researchers and advocating organizations continued to explore how to make successful inclusive education a reality in Canada and internationally. According to UNICEF's (2017) *Including Children with Disabilities in Quality Learning: What Needs to be Done?* document, a successful inclusive education system involves the following components: (a) commitment and investments from education ministries, that it takes time and money to change systems; (b) support for teachers (adequate training and guidance to work in inclusive schools) and students (provided with services to overcome learning barriers); (c) promotion of respect for diversity and inclusive learning, challenging negative attitudes against children with disabilities; (d) high expectations of all students, meaning teachers need to invest in and support all children; (e) safe and inclusive environments because students cannot learn if they are frightened; (f) partnerships between parents, supporting organizations, and schools to share knowledge; and (g) systems to monitor progress to measure improvements or assess necessary changes. In short, it requires the larger system to facilitate changes (commitment to inclusion and providing knowledge to teachers) but also work at the school and individual levels to create an inclusive environment for all learners.

UNICEF (2017) further listed seven requirements to make inclusive education happen. These include an end to discrimination, an end to excluding children with disabilities, access to primary and secondary education, practical support or adaptations for students to enable them to learn, individual education plans for children with disabilities, services for specific impairments, and teachers adequately trained to work in

inclusive schools. Here, the list highlighted the importance of attitude towards inclusion, providing the appropriate support to diverse learners, and again, providing teachers with the necessary training to be effective inclusive educators.

Elaborating on UNESCO's (2017) *A Guide for Ensuring Inclusion and Equity in Education*, Schuelka (2018) also identified three stages that are required for successful implementation of inclusive education. Stage 1 is the initial review and evaluation of school structure and culture to define success. This means schools have to understand their own challenges, assets, resources, value frameworks, stakeholders, and where to locate data and evidence to implement inclusive education effectively. Stage 2 is getting teachers trained and on board, where inclusive pedagogy should be embedded and emphasized in all preservice teacher education, and the training of inclusive instructional techniques should be continual rather than short-term workshops. This stage shed light on the importance of ensuring preservice teachers are equipped with knowledge and beliefs about inclusion, fostering inclusive teachers who can effectively meet the goals of inclusive education. Stage 3 is that leaders should demonstrate positive values, which provides an inclusive and innovative environment for teachers to flourish.

In a more recent paper, Ainscow (2020) reviewed international experiences, research, and policy documents to add insights to how to address the continual challenges of implementing inclusive education around the world. The author identified several crucial components: (a) policies should have clear definitions of inclusion and equity, (b) use strategies based on the participation and achievement of all students, (c) a whole-school approach where teachers are supported in developing inclusive practices, (d) education systems that promote inclusion and equity as guiding principles, and (e) policies that draw on the experiences and expertise of everyone involved in the children's lives. The author also highlighted that the key to promoting inclusion and equity in classrooms is the processes of social learning – meaning collaboration to share ideas and experimenting with new practices – rather than the introduction of specific techniques or organizational arrangements.

Collectively, there is agreement that to implement inclusive education successfully, it requires effort on multiple levels. First, the larger commitment of the ministry and its policies to promote inclusion. Second, the school creating a supportive environment and culture for teachers to exercise inclusive practices. Third, teachers at the individual level can choose to (or not to) instruct in accordance with the inclusive philosophy. Successful implementation of inclusive education additionally requires work across time, meaning from the preparation of preservice teachers to the early stages of the new teachers' career, where they are learning to balance their responsibilities as inclusive educators. Seasoned teachers then need support to keep their knowledge about inclusive practices up to date. As UNICEF's document (2017) highlighted *adequate training for teachers* as a key to successful inclusive education system and one of the requirements to make inclusive education happen, the next question to consider is – are our teacher education programs currently sufficient?

1.3 Are Teacher Education Programs Sufficient in Promoting Inclusion?

UNICEF's *Rights, Education and Protection Project* (REAP) aimed to learn about teachers' views on their teacher education program, collecting survey data from just over 600 teachers in 111 countries (Pinnock & Nicholls, 2012). Most respondents expressed that their teacher education program was inadequate in preparing them to teach in diverse classrooms. Specifically, one-third of the participants indicated that inclusive education was not covered in their training. International researchers continued to examine the issue in recent years, with corroborating results in some countries (Nketsia et al., 2016; Okorley, 2020; Thomas, 2016; Tracey et al., 2021). As many educators already struggle with the high demands of a typical classroom, having to navigate through the concept of inclusion with limited knowledge can present as an additional layer of challenge to teaching.

Participants' qualitative comments from Pinnock and Nicholls' (2012) study further identified that teacher education programs may have consist of inclusive principles, but the knowledge was not translated into useful practical guidance. As Sharma (2018) explained, preservice teachers can be learning from university academics

who are not teaching in inclusive schools and completing their field experiences with practicing teachers who do not necessarily hold an inclusive philosophy. These common training methods lead to a disconnect between practice and theory. Consequently, it becomes difficult for preservice teachers to infuse the philosophy of inclusion they have learned from lectures into their instructional practices when they teach in diverse classrooms.

Almost all the participants in Pinnock and Nicholls' (2012) study also agreed that improvements must be made to teacher education programs to address this large gap between theory and practice. Some of the respondents' recommendations included (a) providing teacher training that promotes inclusive beliefs and attitudes, (b) developing inclusive school curricula that limit conflicts between teaching methodology and content, (c) involving an inclusive education advisor when designing teacher education programs, and (d) ensuring the managers and trainers of teachers also receive practical training and exposure to inclusion philosophy. In summary, the presented findings illuminate that current teacher education programs may not be enough to prepare teachers as effective and confident inclusive educators. This may be especially true for those at the beginning of their teaching career, who are learning to navigate through much more responsibilities than experienced teachers.

1.4   Research Questions and Terminologies

The presented overview identified several barriers to implementing inclusive education successfully. This included the unstandardized process of creating education curricula and policies across Canada, resulting in variations of what inclusive classrooms look like in different provinces and territories. These variations led to a slow, gradual transition towards an inclusive attitude and inconsistent programming in preparing preservice teachers. Guidelines to the successful implementation of inclusive education added that on top of commitment on the government level, school-level support and teacher buy-ins are just as important. Further, sufficient training is key to making inclusive education happen. Yet, internationally, many teachers shared the perspective that teacher education programs are insufficient at preparing them with the knowledge of inclusive beliefs and practices. To summarize, barriers occur on the government level

(policies and providing sufficient training), school level (creating a supportive environment for teachers to practice inclusion), and individual level (teachers' beliefs, knowledge, self-efficacy, and instructional practices).

To help understand how we can bridge the gaps between our current and the ideal inclusive education system, this study approached the question on the individual level – building an understanding of teachers' perspectives on what supports them in feeling and becoming efficacious to teach in inclusive classrooms – for ideas on how to address issues on the school and government levels. The goal of this longitudinal case study is to investigate Canadian beginning teachers' development of inclusive practices in diverse classrooms, noting consistencies and changes in experiences that influence the beginning teachers over time. **Inclusive practices** are defined as the following three components, according to Sharma's (2018) 3H framework: the heart (attitudes, beliefs, values, and morality), the head (knowledge, understanding, and self-efficacy), and the hands (instructional practices, how to perform and act in inclusive classrooms). The **beginning teachers** were interviewed from the time of completion of their teacher education program through the first three years of teaching. The following questions guided this study:

1) How do beginning teachers develop inclusive practices? What are experiences that contributed to the beginning teachers' beliefs, self-efficacy, and instructional practices?
    a. What are beginning teachers saying about inclusive education?
    b. How were beginning teachers prepared for practicing inclusion in classrooms?
2) How have the beginning teachers' inclusive practices changed or remained the same as they progressed through their early teaching career?

As each province has their own terminologies and acronyms in relation to inclusive education, the common vocabularies are defined below.

Inclusive classroom or diverse classroom: used interchangeably in this study to indicate a classroom setting where all the same-aged peers learn together, regardless of their abilities and learning needs.

Diverse learners, students or children with exceptionalities, diverse needs, disabilities, or special needs: in this study, our preferred terminologies are *diverse learners* or *students or children with diverse (learning) needs* to be respectful and inclusive in representing students of a range of abilities. Therefore, we defined the term *diverse learners* with the participants at the start of the interview, referring to students who could be identified with a disability or as gifted.

Participants have used *students or children with exceptionalities, diverse needs, diverse learning needs, disabilities, or special needs* throughout interviews to refer to this population. These terminologies are presented as is where quotes of the interviews are included. Some participants also referred to taking a course titled *exceptionalities* or *special education* – these terms remain unchanged in this context. In some referenced literature, the term *students, children, or people with disabilities* is used to maintain the original meaning of the research study.

Teacher education program: some participants continued to refer to their education as *teacher's college*, which has been substituted with *teacher education program* throughout this study. This term refers to the 16-month preservice program that all participants were enrolled in and graduated from. All participants in this study received course work in working with students with diverse learning needs during their teacher education program.

Formal education: in this study, formal education is used to reference any type of *training* for preservice or in-service teachers. This may be training that the participants engaged in beyond graduation (e.g., additional qualification courses, professional development), or referring to the teacher education program and training beyond graduation collectively. The term *training* is used when referencing literature and in quotes of the interviews to maintain the speaker's original meaning.

AQ course: *additional qualification course*. These are courses offered to certified teachers for more learning on specific topics.

PD: *professional development*, opportunities often offered by the school board to enhance teachers' understanding and knowledge on specific topics.

UDL: *universal design for learning*, a framework or approach to teaching promoted in inclusive education that gives all learners an equal opportunity to learn and succeed. The concept was inspired by architectural work, when a building is designed to provide accessibility to everyone in mind from the start (e.g., wide doorways and ramps benefit people with and without physical disabilities). Some guidelines to make teaching activities accessible for all learners include making the physical environment safe for everyone, varying instructional methods, providing a high level of support for all, assessing student progress flexibly, and providing specific feedback frequently (Hutchinson & Specht, 2020).

DI: *differentiated instruction*. It is the process of tailoring lessons or instruction to meet each student's individual interests, strengths, needs, modalities they rely on, current level of knowledge, level of functioning, etc. Some principles for differentiated instruction include offering varied response formats, modeling learning or studying strategies, and considering student interests to try to engage everyone in lessons (Hutchinson & Specht, 2020).

IEP/IPP: *individual education plan (IEP)*, a written document that describes the modifications, accommodations, and/or services to be provided by the school to meet the needs of the student. In some provinces, *individualized program plan (IPP)* is used to represent the same document. The corresponding term is used based on the participant's location and interviews.

EA/EPA: *educational assistant (EA)* and *educational program assistant (EPA)* refer to support staff in school classrooms. The corresponding term is used based on the participant's location and interviews.

LTO: *long term occasional*, a position with school boards where the teacher substitutes for a permanent teacher for a certain period.

TOC: *teaching on call*, also referred to as *substitute teaching*.

ESL: *English as a second language*, refers to students who speak another primary language(s) other than English at home.

1.5 Researcher's Perspective

The qualitative nature of the case study approach prompts us to think about the positionality of the researcher, who is the instrument of data analysis and interpretation. It is thus important that I disclose how I position myself, as the primary researcher, in relation to my upbringing and educational background.

I grew up in two metropolitan cities. I spent the first decade of my life in Hong Kong, the origin of my family and based on my experience, a city with limited cultural diversity and acceptance of differences. I was later raised in Toronto, Ontario, a city with much more robust cultural and ethnic diversity. It was an eye-opening experience to shift from being in a homogeneous cultural environment to becoming an ethnic minority, where people expressed genuine curiosity as well as discrimination towards my culture. My experience has inspired me to become more attentive in thinking about the role of ethnicity and cultural differences in all subject areas.

At the same time, as noted in Specht and Thompson (2022), Toronto is a densely populated area which allows easier segregation of students with disabilities; it is similar in Hong Kong. This means I grew up in education systems where I was not placed in the same classroom with all of my same-age peers of diverse abilities. While I now recall having classmates who required accommodations or had diverse learning needs, my understanding of what those meant was minimal as a child. As my knowledge of what inclusion is and should look like has grown with my research experience, I became aware of how my student experience contributed to how I view the inclusion model and the education system. With this reflection, I became eager to better understand inclusion; I

also came to recognize how a person's upbringing and interaction with the education system as a child could impact their values.

Therefore, while this study focused on describing diversity in terms of ability and there was limited ethnic diversity present in the current sample, I paid attention to the potential role of cultural differences in the participants' experiences. I also attended to the influence of a person's upbringing, which may be acknowledged by some but disregarded without reflection by others. For example, I considered how people's ethnicity and experience as a student may have influenced their perspective on what inclusion and diversity are. I further noted any mentioning of cultural differences with the students and/or the parents that impacted the individual's experience as a beginning teacher.

Finally, I studied psychology in both my undergraduate and graduate studies. I cannot directly relate to the participants in this study as I do not have formal teaching experience nor am I an Ontario Certified Teacher. My involvement with teachers stemmed from being a teaching assistant for a mental health course for preservice teachers, and my clinical practicums and research experiences in public school settings. However, one way I related to the participants as I analyzed the data was through being a clinician who is also at the beginning of their career. I noticed similarities in how I must navigate the nuances of being a new clinician and learning how to bridge my knowledge from class and my clinical practices, while being mindful that my experience as a clinician differs from that of a beginning teacher as we had different training and roles.

Given my interest in psychology, I was also more attentive to whether the participants' understanding of mental health, social-emotional learning, and burnouts were prevalent and meaningful in the interviews, adding to the themes that I found interesting to highlight. These are topics I am passionate to address as I work with teachers and diverse learners in my clinical practice.

1.6   Organizational Overview of the Remaining Chapters

In the remaining chapters, Chapter 2 provides a review of the selected literature related to this study. Sharma's (2018) 3H framework is explained to provide an

understanding of what constitutes inclusive practices that are important in creating teachers who are effective in practicing inclusion in diverse classrooms. This is followed by a review of factors that contribute to the development of the heart (beliefs related to inclusive education), the head (knowledge and self-efficacy to practice in diverse classrooms), and the hands (inclusive instructional practices), and the existing literature on the developmental changes of these three components.

Chapter 3 is a discussion of the methodology used in this study, explaining the study background, recruitment and data collection procedures, and the data analysis process based on Bazeley's (2013) suggested ideas on how to qualitatively analysis case studies. A profile of each participant is provided in this section.

Chapter 4 presents the results of this study, starting with describing the key ideas from the interviews of each participant with quotes from the transcripts. The interviews are in chronological order (first interview to last interview) for each participant and the presentation of participants is organized by age (to help with showcasing whether age plays a role in their ideas or values). A summary follows each participant's four interviews to highlight the developmental changes in each person. Prominent themes across all interviews are then identified, along with a chart for each theme to display each participant's ideas at different interviews.

Chapter 5 is the discussion, making sense of how the themes and ideas relate to the research questions. Ideas on how to apply the findings of this study to improve policies and practices are proposed, with limitations of the study presented to consider where this study leads us in terms of thinking about future research directions.

Chapter 2

2   Literature Review

To address the research question – how do beginning teachers develop their inclusive practices – I need to start with defining and reviewing several topics. First, what are the elements that beginning teachers need to be prepared with so they can become genuine inclusive educators? In other words, what are *inclusive practices*? Second, what are the factors or experiences that influence teachers' inclusive practices? Third, how do these experiences contribute to the development or changes of inclusive practices – especially during the initial years of the teachers' career? The following sections will provide a review of what is currently known and what are the gaps to be addressed in the current literature.

2.1   Theoretical Framework

Starting with a theory in understanding what is necessary for preparing an individual to become a member of the profession, Shulman (2005) proposed that to prepare anyone for any profession, one needs to be prepared with the three apprenticeships that work in synthesis: a cognitive apprenticeship, a practical apprenticeship, and a moral apprenticeship.

The job of educators, put in the simplest terms, is to pass on their knowledge of a subject area to their students. When it comes to preparing preservice teachers for their job, however, Shulman (2005) argued that there is so much more than providing them with the knowledge of a discipline. First, a preservice teacher needs to learn to think like an educator. This means the individual needs to have the mindset of being an educator, to understand what they need to know as a professional – also known as the cognitive apprenticeship. In addition to having knowledge and an understanding of what it means to be an educator, preservice teachers need to be prepared to perform like a professional. In other words, when standing in front of the class, the teacher knows how to act based on the circumstances. This is the practical apprenticeship that allows educators to teach and manage the classroom skillfully. There is, yet, another crucial factor in preparing

someone to become a good teacher. As preservice teachers prepare to become professionals, they undergo *character formation*. This means the individual is shaped into the kind of person with the value and moral systems of the profession, one who is truly dedicated and mindful of their practices as an educator. Shulman (2005) thus emphasized the importance of "educating for character", or a moral apprenticeship, as a part of preparing preservice teachers.

Elaborating on Shulman's ideas, Sharma (2018) proposed that the three apprenticeships can be used as a framework to help us understand what preservice teachers need to learn in order to teach effectively in diverse classrooms and how to improve teacher education programs accordingly. The author described it as preparing teachers with the three key elements of the heart, head, and hands (The 3H framework).

2.1.1   The Heart

The *apprenticeship of the heart*, which refers to one's attitudes and beliefs that are crucial to one's profession, is equivalent to Shulman's (2005) idea of a moral apprenticeship. A person's belief and value system support how the individual makes decisions in ethical and moral dilemmas of one's profession (Maslovaty, 2000). In inclusive education, it is important for educators to have positive attitudes towards people with disabilities and inclusion. Teachers need to accept the values and philosophy of inclusion to implement inclusive practices naturally and successfully (Kavanoz et al., 2017).

Effective inclusionary practices further depend in part on the teachers' beliefs about their responsibilities for students with disabilities (Jordan et al., 2009). However, teachers can hold biases towards students with disabilities and their responsibilities as inclusive educators because they lack formal education, support, contact, or experience in working with people with disabilities. It is also not uncommon for educators to have a negative view towards inclusion because of misconceptions, such as believing that students with disabilities need to be taught by teachers with specialized training (Buell et al., 1999). The key to addressing these misconceptions requires deep-rooted changes to

attitudes and beliefs – and perhaps doing so through teacher education programs is the way to tackle this issue (Forlin et al., 2014; Sharma et al., 2008).

2.1.2   The Head

The cognitive apprenticeship, one's knowledge of theories in the profession, can also be referred to as the *apprenticeship of the head*. In the context of inclusive education, we need to ask, "What specific knowledge do preservice (or in-service) teachers need to acquire to teach effectively in inclusive classrooms?" (Sharma, 2018, p. 8). Some scholars proposed this knowledge is about types of disabilities, how to identify disabilities in students, and how to develop and deliver programs that suit the needs of students with disabilities. For Sharma (2018), though, he emphasizes that preservice teachers should be prepared with content and pedagogy to create an inclusive learning environment for *all* learners, knowing teaching approaches (such as cooperative learning and collaborative problem-solving) that can benefit every child in the classroom.

However, having knowledge of inclusion is not sufficient in creating a teacher who is mentally prepared to teach in a diverse classroom. According to the author, preservice and in-service teachers cannot implement effective inclusive practices under two conditions: (a) when the teacher education program does not cover enough materials about inclusion practices and diverse learners, so the individuals do not feel knowledgeable and (b) when the program emphasizes on presenting lessons about severe forms of disabilities and the individuals feel incompetent in teaching diverse learners who are "out of scope". As the latter condition demonstrates, sometimes it is not about the amount of knowledge one has but how much confidence the individual has in one's ability to apply the knowledge (also known as *self-efficacy*). In another study, Woolfolk Hoy at al. (2009) also suggested that educators with high self-efficacy work harder and persist longer to assist students in difficulty, which further corroborates the importance of viewing oneself as a competent teacher in ensuring student success. Therefore, the apprenticeship of the head consists of knowledge, understanding, and confidence derived from self-assessed sufficiency in knowledge.

2.1.3   The Hands

The practical apprenticeship, a preservice teacher's preparedness to act like a professional, is also described as the *apprenticeship of the hands*. This can be interpreted as preservice teachers' ability to practice inclusion in real-life classrooms and manage the behaviour, cooperation, and learning of students of diverse needs effectively. As previously mentioned, many teachers find that the theoretical knowledge learned in lectures does not translate well into instructional practices when the individuals become in-service teachers. It is not uncommon for preservice teachers to learn how to perform under ideal circumstances, but once they start teaching, they realize it is not possible to implement what they have been taught.

According to Sharma (2018), the disconnect between theory and practice is because what is being covered in teacher education programs is so far removed from the real-world context. Preservice teachers need to learn about actual practices that are being implemented and effective in teaching and including diverse learners, which derive from experiences of practicing school staff who work with students with diverse learning needs in the school context. Additionally, the difficulty in implementing inclusive practices effectively is sometimes attributed to educators having to handle multiple responsibilities that are ongoing in and outside of the classrooms (e.g., connecting with colleagues and parents, administrative activities outside of teaching, personal life; Eisenhart et al., 1988) or teaching in a school environment with limited support, resources, and policy to promote inclusion (Peters, 2004; Pinnock & Nicholls, 2012).

2.1.4   Application of the 3H Framework

Using this framework of preparing teachers with the heart, head, and hands of inclusive educators, Sharma (2018) suggested several ideas that may help with the reform of teacher education programs. To bridge the gaps between theory and practices, the author proposed having practicing teachers co-teach the subject on inclusive education with university lecturers. Also, university academics and schoolteachers should jointly support preservice teachers at practicums.

All the materials that preservice teachers learn need to be infused with the inclusion philosophy. It is insufficient to have separate courses on exceptionalities and inclusive education. Rather, the teacher education program should include "a rationale for inclusive education, assessment for learning, knowledge of inclusive education strategies (e.g., cooperative learning, peer tutoring, differentiated instruction), working with parents and para-professionals, Universal Design for Learning and assistive technology" (Sharma, 2018, p. 16).

Finally, the author also shed light on the idea of having teachers thoroughly assessed during practicums to determine whether they are ready to teach in inclusive classrooms. This can help target areas that the preservice teacher require improvement and truly prepare them to be teachers who can practice effectively with confidence and inclusive values. It is also worth noting that some of these ideas, based on Sharma's (2018) theoretical framework, aligned with suggestions from the teachers who participated in Pinnock and Nicholls' (2012) study.

In summary, the three key elements in preparing teachers as inclusive educators are (a) the apprenticeship of the heart, teachers' *beliefs* and attitudes towards people with disabilities, and teachers' roles in educating students of diverse abilities in inclusive classrooms; (b) the apprenticeship of the head, which comprises *knowledge* and *self-efficacy* about teaching in inclusive classrooms; and (c) the apprenticeship of the hands, the ability to implement effective *instructional practices* in inclusive classrooms.

2.2   Factors that Influence the Development of the 3H

The next step is to gain some preliminary understanding of what factors or experiences support the three apprenticeships. I am particularly interested in what influences educators early in their teaching career; yet, given that research on beginning teachers is still a growing area of studies, I also reviewed some studies in the literature examining experiences that influenced teachers in general for an added understanding of factors that could play a role. As the following research will demonstrate, the three apprenticeships are highly interrelated and variables that influence the development of

one apprenticeship may also contribute to the expression of another apprenticeship (Sharma, 2011).

2.2.1   What Impacts the Heart

The heart refers to the *beliefs* and *attitudes* of teachers. There are several types of teachers' beliefs and attitudes related to the implementation of inclusive practices in classrooms: attitudes towards inclusion, attitudes towards people with disabilities, beliefs about student's abilities, and beliefs about teacher's responsibilities and roles.

Many studies have focused on the impact of teacher education programs on the development of attitudes towards inclusion, as it has been considered one of the most influential factors for successful inclusive education in schools (Avramidis & Norwich, 2002; Lautenbach & Heyder, 2019). It is often suggested that teacher education programs should provide preservice teachers with both cognitive knowledge (e.g., study in the area of disabilities) as well as opportunities to engage with people with disabilities (e.g., field experiences) to foster attitudes that support inclusion (Forlin & Hopewell, 2006). In a systematic review examining 23 studies, teacher training – either information-based courses or information and practical field experiences combined – overall contributed to a significant increase in attitudes towards inclusion; a few studies in the review detected no changes (Lautenbach & Heyder, 2019). In the United States, there is also evidence that preservice teachers from a combined teacher education program (using general education and special education curricula) had more positive attitudes towards inclusion than preservice teacher from separate programs (Kim, 2011).

Sharma and Sokal collaborated on several studies to understand the correlation between teacher education programs and teacher attitudes as well. In one study, Sokal and Sharma (2013) explored the relationships between teacher attitudes, teacher efficacy, and teacher concerns about inclusion (such as a lack of time for other students or a lack of adequate resources for effective inclusion to take place). The study included 131 in-service Kindergarten to Grade 8 teachers in Manitoba and it was discovered that teacher education programs explained attitudes towards inclusion. Therefore, it was suggested that teacher education programs can influence teacher attitudes and concerns. Yet, in an

international comparison, Sharma and Sokal (2015) found mixed results regarding the impact of a special education/inclusive education course on preservice teachers' attitudes towards inclusion. In the study, preservice teachers in Canada and Australia completed questionnaires related to attitudes towards inclusion, concerns about inclusive education (practical aspects of implementing inclusion), and self-efficacy at the first and final sessions of a course on special/inclusive education. While the Australian participants had a positive change in attitudes towards inclusion, becoming more positive about including students with disabilities in their classrooms, the Canadian participants became more apprehensive about such practice. The authors proposed that the more negative attitudes towards inclusion in the Canadian sample may be related to the course not adequately addressing their concerns about the practical aspects of implementing inclusion. Results related to self-efficacy from this study will be presented in the appropriate section below.

In terms of the effects of field experiences, Niemeyer and Proctor (2002) interviewed six preservice teachers before and after they completed a full-time practicum to understand changes in their beliefs about inclusion. They found a mix of experiences contributed to preservice teachers' beliefs related inclusion in the study. For instance, positive interactions with individuals with disabilities through personal encounters or their practicum led to positive beliefs about children with disabilities and to view them using a strength-based approach, creating a foundation for stronger beliefs in inclusive education. They also found that interactions with students with disabilities provided preservice teachers the knowledge about children's abilities to function in an inclusive classroom, which then facilitated the perception that it was their role and responsibilities as teacher to be able to use the environment around them to support diverse learners. Further, they acknowledged the role of coursework in contributing to positive beliefs about inclusion – that it was to meet the needs of all children – but it needed to be supported by practicum experiences, which allowed for the integration of practical knowledge and theoretical knowledge.

In Weber and Greiner's (2019) study, the authors examined teachers' attitudes towards inclusive education during their first four-week practicum. They found that positive experiences before the practicum experience predicted attitudes about the

influence of students' behaviour on teaching and learning in an inclusive classroom, while perceived support from university supervisors predicted attitudes towards the effects of inclusion. The authors also suggested the importance of "a sufficiently scaffolded teaching practicum" to increase attitudes towards inclusive education. Another study found that the experience of including a child with intellectual disability in the general education classroom increased teachers' willingness to include students of disabilities and positive attitudes towards the population (Sermier Dessemonte et al., 2014). Likewise, Jordan and colleagues (2009) examined the ways beliefs and attitudes interact with effective inclusive teaching behaviours. They suggested that initial teaching beliefs and attitudes were malleable through teachers' direct experiences with children in their classrooms, where these preservice teachers acquired evidence of improvement in student learning.

Past research also specifically found that prior contacts and/or knowledge of people with disabilities are often correlated with positive attitudes towards students with disabilities and inclusion (Burke & Sutherland, 2004; Parasuram, 2006; Sermier Dessemonte et al., 2014). Kunz and colleagues (2021) conducted a recent study in Switzerland, asking preservice teachers to complete a survey before and after a formal education course on inclusive teaching. The authors found that participants who were in contact with people with disabilities had significantly more positive attitudes towards inclusion at the start of the term and a higher self-efficacy in dealing with disruptive behaviour and individualizing teaching structure – which were indicators for positive attitudes towards inclusion. In Specht and colleagues' (2016) study, which asked Canadian preservice teachers to self-report their beliefs about teaching and learning, it was found that having prior experience with people with diverse learning needs was correlated with participants having more inclusive beliefs. On the contrary, some studies have found little support for the effects of teachers' previous experience on their attitudes towards inclusion or attitudes towards people with disabilities (Hastings & Oakford, 2003; McManus et al., 2011).

In a literature review, Avramidis and Norwich (2002) highlighted other variables that could influence teachers' attitudes, as divided into three categories: child-related,

teacher-related, and educational environment-related variables. First, child-related variables are based on the type of disabilities – such that teachers have more positive attitudes towards including children with physical and sensory impairments than those with learning difficulties and emotional-behavioural difficulties in the classrooms. Second, teacher-related variables include gender (some findings suggesting female teachers have more positive attitudes than male), age (younger teachers with few years of teaching experience are more supportive of integration/inclusion), grade level taught (inconsistent, but secondary school that are more focused on subject-matter may be less compatible with inclusion), prior experience with people with disabilities, formal education, perceived responsibilities in accommodating the needs of students with disabilities, and socio-political views (low scores on conservatism have less negative attitudes to integration/inclusion). Finally, educational environment-related variables refer to availability of physical support (e.g., resources, teaching materials) and human support (e.g., learning support assistants, speech therapists, in the form of encouragement from supervisors) in classrooms or at school.

In a more recent study, Delorey (2020) compared the development of beliefs for preservice and new teachers (in their first five years of a permanent position). Using a concept-mapping methodology, where participants were invited to sort statements from their interview transcripts into categories, themes were identified for the group of 15 preservice teachers and 13 new teachers. For the preservice teachers, their beliefs were influenced by education, work experiences, personal experience with diversity, and practicum/collaboration. As for the new teachers, they identified double the number of themes, including teacher collaboration, learning from personal experiences, organizations, overall teaching experience, classroom experience with diverse learners, learning from students, formal education, and other (included statements that are not considered experiences, such as having respect for students and sincere empathy for others). Despite the difference in the number of themes, the two groups of individuals identified being influenced by similar experiences overall.

Different types of beliefs and attitudes also interact to influence one another. A line of research led by Jordan and colleagues (Jordan, 2018; Jordan & Stanovich, 2003;

Jordan et al., 2009, 2010) explored the relationships between teachers' epistemological beliefs (high-level beliefs about knowledge and learning) and how they influence their instructional practices for students with and without disabilities in the Supporting Effective Teaching (SET) project. Jordan and Stanovich's (2003) study concluded that the differences in teachers' beliefs about students with disabilities may be related to their epistemological beliefs, which may lead to differences in teachers' beliefs about inclusive instructional practices and their roles and responsibilities as teachers in inclusive classrooms. Relatedly, Silverman (2007) found that individuals with higher-level epistemological beliefs were more likely to have more positive attitudes toward inclusion.

Further, Jordan and colleagues (2005; Glenn, 2018) developed the Belief about Learning and Teaching Questionnaire (BLTQ) to explore teachers' beliefs about teaching in the broader context. In relation to developing this questionnaire, Glenn's (2018) study closely examined the correlation between the teachers' beliefs about ability (whether ability is a stable or changeable trait) and teachers' beliefs about their responsibilities in working with students with disabilities. Participants provided a narrative of their experiences in working with one student with disabilities and one student at risk of academic failure in the previous school year; their responses were coded subsequently. The results showed that teachers who viewed ability as fluid also perceived themselves as having stronger responsibilities for accommodating students with disabilities. In contrast, teachers who viewed ability as stable were more likely to hold the belief that students with disabilities were not the responsibilities of regular classroom teachers, but those of special education teachers.

In summary, factors that influence beliefs related to practicing inclusion include: (a) teacher education program, including coursework, practicum experiences, and support from professors; (b) previous encounter and experience working with diverse learners; (c) personal factors, such as age, gender, and socio-political views; (d) environmental factors including resources and school support; and (e) beliefs about learning and abilities, which interacts with beliefs about one's responsibilities and roles as a teacher.

2.2.2   What Impacts the Head

As described, the head of the 3H framework comprises of *knowledge* and *self-efficacy*. Regarding teaching knowledge, Buehl and Fives' (2009) study analyzed the questionnaire responses of 110 preservice and practicing teachers, and six sources to the emergence of teaching knowledge about teaching were revealed: formal education, formalized bodies of knowledge, observational learning, collaboration with others, enactive experiences, and self-reflection. The authors found that different aspects of teaching knowledge come from different sources. For example, knowledge of child development was learned from books and lectures while knowledge of classroom management was obtained through teaching experience. Conclusively, the authors highlighted that the development of teaching knowledge results from (a) formal preparation and professional development, (b) personal experiences and self-reflection, and (c) observational learning and collaborating with others.

In the context of inclusive education, knowledge could also refer to the understanding about diversity of abilities. Robinson and Young's (2019) review of the literature identified the commonly explored factors include knowledge about intellectual disabilities, learning disabilities, autism spectrum disorder, other mental health disorders (such as depression, anxiety and ADHD), and giftedness. The authors indicated that teacher education programs with the goal of improving teachers' inclusion-related knowledge and skills can have a positive influence on the outcome of students with disabilities, highlighting the role of teacher education program in enhancing teachers' knowledge about disabilities. Further, the authors suggested that teacher education programs may provide knowledge about disabilities (and skills to deliver inclusive instructional practices to meet diverse learners' needs) through covering different types of disabilities more broadly, whereas formal education for in-service teachers may need to be more specific to align with what they encounter in their personal teaching contexts.

Like beliefs, self-efficacy for inclusive practices can be broken down into different aspects. This derived from the study of Sharma and colleagues (2012), who created a measure called the Teacher Efficacy for Inclusive Practices (TEIP) scale to measure teacher self-efficacy to teach in inclusive classrooms. They identified three

factors, including efficacy in using inclusive instruction (strategies that promote the inclusion of all learners), efficacy in managing behaviour (dealing with disruptive behaviours), and efficacy in collaboration (in working with parents and other professionals; Sharma et al., 2012). Many factors that impact the development of beliefs in inclusion also influences self-efficacy.

Malinen et al. (2013) completed an international study, comparing teacher's self-efficacy for inclusive practices in China, Finland, and South Africa. The results showed that different variables played a role in explaining self-efficacy in different countries, including experience in teaching students with disabilities, interactions with persons with disabilities, years of teaching experience, teacher type (regular or special education teacher), amount of training, gender, and age. The one factor that explained teachers' self-efficacy across all three countries, though, was experience in teaching students with disabilities, highlighting it as one of the most straightforward methods to gain experiences of successful inclusive teaching. A study has also shown that experience in including a child with intellectual disability in the general education classroom increased their reported feelings of competencies in teaching (Sermier Dessemonte et al., 2014), while another study highlighted positive experiences in inclusive classrooms predicted preservice teachers' self-efficacy (Weber & Greiner, 2019).

In a systematic literature review of 71 studies, it was revealed that preservice teacher education programs and in-service teacher training are important factors in improving teacher self-efficacy (Wray et al., 2022). Sharma and Sokal (2015) also found that both Australian and Canadian preservice teachers' self-rated efficacy for inclusive practices significantly improved after the completion of a special/inclusive education course. In the Australian sample, the authors found a correlation among concerns, attitudes, and self-efficacy. It was suggested that as concerns about the practical aspect of implementing inclusion declined, the preservice teachers became more positive about including diverse learners and more confident about their ability to teach diverse classrooms.

Likewise, Tournaki and Samuels' study (2016) demonstrated that, comparing self-efficacy at the beginning, after the first semester, and at the end of a graduate teacher education program – efficacy significantly increased from the beginning to the end of the program for both general and special education students. Sharma and Nuttal (2016) also completed a study, measuring preservice teachers' changes in attitudes, concerns, and self-efficacy towards inclusion after a nine-week university course on the benefits of inclusive education and techniques needed to successfully implement it. Their study found that for preservice teachers who were not acquainted with a person with disabilities, their efficacy significantly increased and their concerns decreased, compared to those who knew of people with disabilities.

Prior contacts and/or knowledge of people with disabilities relate to teachers' self-efficacy to teach in diverse classrooms as well. Charles and colleagues (submitted) found that elementary preservice teachers who had previously interacted with or worked with people with disabilities had higher self-efficacy for inclusive practice. Specht and colleagues' (2016) study found that based on self-reported efficacy, Canadian preservice teachers who had prior experience with people with diverse learning needs felt more efficacious.

The same study compared other factors as well, including age, gender, and the length of the teacher education program. The authors found that male participants perceived themselves as more efficacious in managing classroom behaviours compared to female participants, and elementary preservice teachers reported higher self-efficacy in collaboration than secondary preservice teachers (Specht et al., 2016). Similarly, Wray et al.'s (2022) systematic literature review supported experience interacting with people with disability and age as two variables that impact teacher self-efficacy.

In another study investigating factors that affect teacher self-efficacy for inclusive practices of 380 teachers across four countries (Canada, Australia, Hong Kong, and Indonesia; Loreman et al., 2013), the results showed that beginning teachers who reported lower levels of previous training in special education, knowledge of local law or policy related to inclusive education, previous interaction with people with disabilities,

and previous teaching experience displayed lower levels of teaching self-efficacy compared to those reporting average to some knowledge and experience. Some findings from this study were corroborated by others. For example, in a study with a sample of over 400 in-service teachers in Hong Kong, the authors found that self-efficacy was predicted by knowledge of legislation and policies for inclusive practices and confidence in teaching students with diverse needs after a one-week teacher formal education course on inclusion (Chao et al., 2016). The impact of knowledge of policy and legislation on teacher self-efficacy was additionally found in the mentioned systematic literature review (Wray et al., 2022).

In summary, factors that influence knowledge and/or self-efficacy related to practicing inclusion include: (a) formal education, including teacher education programs and professional development; (b) observational learning and collaborating with others; (c) experiences of successful inclusive teaching in classrooms; (d) prior experience with diverse learners through personal experiences or teaching experiences; and (e) knowledge of legislation and policies for inclusive practices.

2.2.3　What Impacts the Hands

Compared to the existing research on the heart and the head of the 3H framework, studies on the hands – the inclusive *instructional practices* – are scarcer in the current literature.

In a systematic review, Tristani and Bassett-Gunter (2020) found that formal education (including teacher education programs and professional development) overall positively influenced teachers' attitudes, knowledge, and strategies/skill development. Focusing on strategies and skill development, it was found that training with repeated feedback over one year increased teacher use of behaviour-specific praises (Allday et al., 2012); enhanced knowledge on how to access resources and teaching strategies for students with ASD from teacher training (Leblanc et al., 2009); and an online teacher education program course fostered preservice teachers' knowledge of strategies to create an engaging learning experience for students with disabilities (Peterson-Ahmed et al., 2018).

The systematic review also highlighted the importance of field experiences and practicums as a part of the teacher education program. For instance, field experiences provided preservice teachers the opportunities to "synthesize, apply, and reflect on the knowledge" (Burton & Pace, 2009, p.114). In Hopkins and colleagues' (2018) study, which examined the benefits of field experience in working with young adults with mild intellectual disability, it showed that the 38 participating preservice teachers learned effective strategies for differentiating a program of work. This included learning ways to *improve participation* through (a) increasing motivation and task engagement and (b) building rapport, as well as to *improve learning* through (c) modifying activities to address the student's learning needs appropriately and (d) promoting student's understanding with fluency (e.g., being adaptable, using visual aids, draw on real-life experiences).

Using a multiple case study approach, Carlson et al. (2012) observed the instructional practices of six teachers in inclusive classrooms and then interviewed the teachers to identify the enablers (the *how*) and the rationale for these strategies (the *why*). The authors revealed that the effective use of support systems, collaborating with others, professional development opportunities, and teaching experience all contributed to strategies that were employed in the classrooms. Collaboration with other staff, specialists, and parents was particularly highlighted as the key to ongoing development and implementation of inclusive practices. The authors further reasoned that strategies that were not observed could be due to the lack of in-service training or support in those practices. A model of inclusive practice was developed based on the findings, proposing that the mentioned enablers shape teachers' attitudes, which affects what instructional strategies the teachers employ and influence students' learning outcomes.

Bandura (1994) hypothesized that self-efficacy affects an individual's choice of activities, effort, and persistence, meaning teachers with high self-efficacy are also more likely to continually try and evolve their instructional practices to meet the needs of students and succeed. In an early study, Allinder's (1994) findings corroborated this hypothesis, which found that teachers who had higher self-efficacy were more likely to

try different ways of teaching, be organized and planful in their instruction, act fair and firm when dealing with students, and be confident and enthusiastic about teaching.

In more recent years, research showed that teachers' self-efficacy has been found to predict teacher reports of instructional practices (Sandholtz & Ringstaff, 2014; Schiefele & Schaffner, 2015). Schwab and Alnahdi (2020) explored the relationships between teachers' attitudes towards inclusive education (measured using the Attitudes to Inclusion Scale; Sharma & Jacobs, 2016), self-efficacy beliefs (measured using the Teacher Efficacy for Inclusive Practices [TEIP]; Sharma et al., 2012), and teachers' daily teaching practices (measured using the Inclusive Teaching Practices Scale [ITPS-T]; Schwab et al., 2022) in an Austrian in-service teacher sample. The study used Ajzen's (1991) theory of planned behaviour as the theoretical framework, which explained that beliefs about the consequences of a behaviour also guide the direction of an individual's attitudes towards the behaviour, which eventually contribute to the performance of a behaviour. Overall, the results demonstrated that teachers' attitudes and self-efficacy were associated with inclusive teaching practices, and self-efficacy predicted teachers' use of inclusive instructional practices.

Overall, research have highlighted (a) teacher formal education, (b) field experiences, (c) collaboration with others and support systems, (d) beliefs, and (e) self-efficacy as contributors to teachers' development of instructional practices.

2.2.4   Developmental Changes

Research examining changes often focused on a short timeframe, primarily to compare participants' inclusive practices before and after engaging in a teacher education course or practicum, which sometimes could be as short as a few weeks in time (Kunz et al., 2021; Niemeyer & Proctor, 2002; Sharma & Nuttal, 2016; Sharma & Sokal, 2015; Weber & Greiner, 2019).

Some studies pursued tracking changes through a longer timeline. For instance, Tournaki and Samuels' (2016) study examined changes in self-efficacy at three timepoints – at the beginning of the program, after the first semester and completing a

course on inclusive education, and at the end of a graduate teacher education program. In another study tracking changes in teacher's inclusive practices, Mintz et al. (2020) explored how teacher attitudes, perceived knowledge, and self-efficacy in inclusive classrooms change as individual progress from the end of the preservice to the end of the novice teacher year. Participants were 122 teachers in Ireland. Their findings indicated the transition was a "reality shock" for these teachers – they had more negative attitudes to inclusion, reduced perceived knowledge about effective strategies for inclusion, and reduced self-efficacy about their ability to include children with diverse needs in inclusive classrooms.

Savolainen et al.'s (2022) study was one of the longest and most recent studies, using a cross-lagged-panel design to examine teachers' development of inclusive practices and the effect of the elements on each other. The Finnish sample consisted of over 1300 teachers with expert and novice teachers, where novice teachers were defined as those who have been teaching five years or less and they accounted for about 100 participants of the sample. Participants' self-efficacy was measured seven times using the TEIP scale (based on Sharma et al., 2012) and attitudes was assessed using the Sentiments, Attitudes, and Concerns about Inclusive Education scale (SACIE; from Loreman et al., 2007) three times over a three-year span. The authors found both constructs were stable over time for the entire sample. Further, self-efficacy had a positive effect on teacher attitudes and concerns, but not the other way around. These results provided evidence for developing courses and practicums with the goal of increasing preservice teachers' self-efficacy in implementing inclusive education, keeping in mind the need to create a safe and supportive environment to allow mastery experiences in diverse classrooms.

2.3   Purpose and Research Questions

Through a review of the current literature, we can see that there is a readily available theoretical framework to understand the necessary elements for preparing teachers with the skills and mindset to teach as inclusive educators. Further, research in understanding factors that influence the development of the three elements is insufficient but beginning to grow. Yet, there are several critical factors missing from these studies:

(a) most of the aforementioned studies focused on one or two points in time for the participating teachers; (b) there has yet to be studies tracking changes of individuals using a longitudinal model; and (c) many studies primarily used questionnaires to gather quantitative data. It is thus unclear what helps to advance teachers' effective instructional practices in diverse classrooms, build positive attitudes towards inclusion, and improve teachers' confidence in practicing inclusion *over time*. To address these gaps, I believe the key is to learn the trajectory of how these three components evolve for educators during their early years in the profession through in-depth interviews with the same individuals. This can give us a detailed, qualitative understanding of what factors are in play realistically and add to how we can target what needs to be modified in teacher education programs.

The goal of the present study is thus to investigate the perspective of beginning teachers and explore what experiences influence the development of their apprenticeships of the heart (attitudes, beliefs, values, and morality), the head (knowledge, understanding, and self-efficacy), and the hands (instructional practices, classroom management, how to perform and act; Sharma, 2018), from the time of completion of teacher education program through the first three years of teaching. Specifically, I am interested in obtaining longitudinal, qualitative information from the same individuals through interviewing them with the same questions annually to track changes and development. The following questions were considered to help address the main research question:

1) How do people develop inclusive practices? What are experiences that contributed to the beginning teachers' beliefs, self-efficacy, and instructional practices?
    a. What are beginning teachers saying about inclusive education?
    b. How were beginning teachers prepared for practicing inclusion in classrooms?
2) How have the beginning teachers' inclusive practices changed or remained the same as they progressed through their early teaching career?

Data were collected using questionnaires and semi-structured interviews and then presented as individual case studies. The case study method facilitated the within-case

analysis, focusing on understanding each individual's ideas and development. A coding system was further devised to generate meaningful themes from across the interviews. Finally, participants' ideas were compared through a cross-case examination for beginning teachers' perspectives collectively in relation to the research questions.

Chapter 3

3 Methodology

This chapter provides the background of the research study, the recruitment and data collection process, and the profiles of the participants. It also describes the reasoning for using a qualitative case study approach and the analysis plan.

3.1 Study Background

The present study is part of a larger, five-year project entitled *Beginning Teachers Study*, funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). The *Beginning Teachers Study* project has been reviewed and approved by the Research Ethics Board at Western University (see Appendix A). It started in 2015, when scholars in the field of education across Canada gathered in the interest of exploring experiences that support the development of teachers prepared to work in inclusive classrooms.

Using questionnaires and interviews, data were collected on beginning teachers' self-efficacy, beliefs, instructional practices, demographics found in previous research to contribute to inclusive teaching practices, and experiences that teachers believed influenced that practice. The participants were followed longitudinally, from the start of their teacher education program to the first few years of teaching. The current study analyzed interview data collected from the second year (November 2016) to the last year (February 2020) of the project.

3.2 Recruitment and Data Collection

Participants were recruited in a class on special and inclusive education, one of the initial courses in their teacher education program. The project was explained to the students at the end of the class without the instructor present in the classroom. Interested students were asked to stay and complete the Introductory Questionnaire voluntarily.

The Introductory Questionnaire was used to gather the participants' demographic information and their experiences with diverse learners (see Appendix B). This included participants' date of birth, gender, ethnicity, and highest level of education completed prior to entering the Faculty of Education. Participants also indicated their self-assessed levels of professional and personal expertise in working with individuals who are diverse learners (e.g., none at all, little, moderate, extensive). Participants were invited to provide their email address if they consent to being contacted for the following parts of the study.

Every school year, individuals were contacted about their interest to participate in a semi-structured interview. Phone-call interviews were arranged with the respondents who agreed. Each interview lasted 30 to 60 minutes in length. Verbal consent for recording and participation was obtained before the interview. The conversation began with a confirmation of where the participant was at in their teaching career and a definition of *diverse learners* used in the present study ("we want you to think about experiences related to students who could be identified with a disability or as gifted and their inclusion in a general education classroom"). The terms *diverse learners* and *students/children with diverse (learning) needs* were preferred to be more respectful and representative of all learners.

The dialogue was followed by questions in three specific areas: (a) instructional practices – *What experiences have influenced the instruction that you use in diverse classrooms?*; (b) beliefs – *What experiences have contributed to your beliefs in how children learn in diverse classrooms?*; and (c) self-efficacy – *How confident do you feel in teaching in diverse classrooms? Has this increased, decreased or remained the same over the last year? What has contributed to your level of confidence for teaching in diverse classrooms?* Prompts were used to encourage elaboration of responses if necessary, such as reminders about whether course work and practicum experiences from Faculty of Education, professional learning opportunities (e.g., Professional Development days, workshops, seminars, readings), or personal experiences outside of school (e.g., experiences with friends or family members, community experiences) had influenced any of the aforementioned topics.

3.3 Participants

Participants who consented to being contacted as a part of the longitudinal study were approached a total of four times for interviews: around the time they exited the program (Interview 1) and once every year for three years following graduation (Interviews 2, 3, and 4). By the end of the data collection process, there were eight beginning teachers who participated in the interviews for four consecutive years and constituted the sample for the present study.

The eight participants were part of a 16-month preservice teaching program from six faculties of education across Canada. All programs included coursework on working with students with diverse learning needs. The participants have all completed a bachelor's degree prior to entering the teacher education program. Seven participants identified as female and one identified as male. For ethnicity, one of the participants identified as Indigenous while the remaining sample identified as White. The average age was 31.86 years (ranging from 23.28 to 39.73 years of age) at the first interview. All beginning teacher participants were provided pseudonyms for the purpose of maintaining anonymity.

3.3.1 Bonnie

At her first interview, Bonnie was 23 years old and in the second year of her program in the Faculty of Education at an Ontario institute. Despite being the youngest participant in the present study, she already had nine years of experience coaching for the Special Olympics and gained experience in working with children with diverse needs (e.g., non-verbal, autism spectrum disorder) through coaching figure skating. At Interview 1, Bonnie self-rated both her levels of professional expertise and personal expertise she has had with diverse learners as moderate. Following her graduation from her Faculty of Education, Bonnie was substituting daily (Interview 2); she then earned a permanent position as a Grade 6/7 teacher (Interviews 3 and 4). Bonnie continued to advance her knowledge through taking the Special Education Additional Qualification (AQ) courses during her early teaching career.

3.3.2   Jessie

Prior to entering the field of education, Jessie studied Film and Media in her undergraduate studies and was a multi-media design specialist/graphic designer with a wedding photography business. She completed her teacher education program at an Ontario institute with a focus on international education, which gave her the experience of living abroad. Jessie was 25 years old in the second year of her Faculty of Education at the first interview, at which she self-rated as having extensive levels of professional expertise and personal expertise with diverse learners. After graduation, Jessie taught a Grade 7/8 English as a Second Language (ESL) class at a private school over the summer. She then became a long-term occasional (LTO) teacher, who taught a Kindergarten class for a month and was teaching a Grade 1 class at the second interview. In the following summer, Jessie expanded on her teaching experience outside of the classroom through supervising science, technology, engineering, arts, and math (STEAM) camps that served a high ratio of children with diverse needs (e.g., autism spectrum disorder, behavioural challenges). Subsequently, Jessie obtained a permanent high school teacher position: she taught Grade 9 religion and Grade 10 media arts in her first year in this role (Interview 3) and taught Grades 10 and 11 media arts in the following year (Interview 4).

3.3.3   Riley

Riley was 30 years old, got a bachelor's degree in Education with a focus on Special Education and was in her second year of the teaching program at the first interview. During the interviews, Riley drew upon a diverse range of experiences, including parenting her children with diverse needs, her decade-long experience as a martial arts instructor, personal experience as a student who was affected by anxiety, and being an avid researcher on her own time. She perceived herself as having a moderate level of professional expertise and little personal expertise with diverse learners. After graduating from the Faculty of Education at an institute in Ontario, Riley became an Educational Assistant (EA), a professor at a college, and an occasional supply teacher. She furthered her higher education journey and was working on her master's degree at the last interview.

3.3.4   Ellie

Ellie was a youth support worker and volunteered in a youth custody centre for seven years before entering the teacher education program at an institute in British Columbia. She was almost 31 years old and had just graduated from the program at Interview 1 but also reported already having a year of on-call experience as an EA. She perceived herself as having little professional expertise and personal expertise with diverse learners. Ellie was an occasional teacher in her first year of teaching (Interview 2) and got a full-time position teaching a Kindergarten/Grade 1 split class afterwards (Interviews 3 and 4). Regarding her personal experience as a student, Ellie shared she was in an advanced math program in elementary school, an informal gifted program at her school that provided an enhanced curriculum and challenges to keep their advanced learners engaged in class.

3.3.5   Russell

Russell was the only male beginning teacher participant in the present study. He was almost 32 years old at Interview 1. He graduated from his teacher education program in British Columbia two months prior to the first interview and obtained a teaching contract. At that time, he perceived himself as having an extensive level of professional expertise and little personal expertise with individuals who are diverse learners. Russell was an occasional teacher who taught daily in different classrooms at the time of the second interview. At Interview 3, he continued to be an occasional teacher four days a week while also instructing math one-on-one at an independent learning centre four hours a week. Russell did not specify his teaching position in Interview 4 but indicated that he continued to have a teaching contract. During conversations, Russell revealed his wife worked in inclusion in sports.

3.3.6   Colette

At the first interview, Colette was almost 36 years old and had graduated from a teacher education program in British Columbia. She identified being a mother and a small business owner, where the latter gave her the experience of interacting with people from different fields such as farmers and politicians. At Interview 1, Colette had just been

hired as a full-time literacy and numeracy support teacher to work with the Indigenous population. She self-rated as having little professional expertise and personal expertise with diverse learners at the time. After five months in the position, she started co-teaching two Grade 1/2 French Immersion classes three days a week and remained in the role for two years. At the last interview, Colette taught a Kindergarten/Grade 1 French Immersion class as the primary teacher four days a week. In terms of Colette's personal experience as a student, she stated she interacted with diverse learners since a young age and was a part of the gifted program in elementary school.

3.3.7   Edna

Edna was 38 years old, identified as Indigenous, and attended an institute in Nova Scotia for her teaching qualifications. She was in the second year of her teacher education program at the first interview but had plenty of experience from community involvement, including teaching swimming lessons for over 15 years and tutoring young adults at a sheltered workshop. At Interview 1, she rated her level of professional expertise in working with diverse learners as moderate and her level of personal expertise she has had with diverse learners as extensive. Edna taught science to senior students in elementary school in English and in French for her first two years of teaching (Interviews 2 and 3) and then became a high school science/biology teacher in her third year of teaching (Interview 4).

3.3.8   Helen

Helen, who was 39 years old at the time of the first interview, was the oldest participant in the present study. She specialized in Special Education in her undergraduate studies and already had years of experience volunteering, tutoring, and supply teaching in the classroom prior to entering the Faculty of Education. Helen was in her second year of studies at a Faculty of Education in Ontario at the first interview. During the interview, Helen shared her experience working with people of a range of abilities, including children with autism and people with intellectual and physical disabilities. She self-rated as having an extensive level of professional expertise and a moderate level of personal expertise with diverse learners. Upon graduation, she became

a LTO teacher who taught daily. By Interview 3, Helen had a permanent position as a Kindergarten teacher, instructing in both English and French. She taught at schools located in low socioeconomic neighbourhoods with a great population of immigrants and students demonstrated high social-emotional-behavioural needs in class. Helen was also trained in all three levels of Applied Behaviour Analysis (ABA) through professional development opportunities by the last interview. During conversations, Helen revealed being the mother of four children.

3.4   A Qualitative Case Study Approach

To present the collected data, a qualitative analysis of case studies following Bazeley's (2013) *Qualitative Data Analysis: Practical Strategies* was used. According to Bazeley (2013), the focus of a *qualitative* study is to observe, describe, interpret, and analyze "the way that people experience, act on, or think about themselves and the world around them" (p. 4). *Analysis* involves "a close engagement with one's [data] and the illumination of their meaning and significance through insightful and technically sophisticated work" (Antaki et al., 2003, p. 30). In other words, the focus of a qualitative study is to interpret and contextualize meanings from people's beliefs and practices in the society. This qualitative analysis methodology was thus appropriate for the current study because the goal was to obtain an in-depth understanding of beginning teachers' perspective and development of inclusive practices in the real-world context.

Further, qualitative analysis is *case-oriented* in nature, where cases should be "similar enough to be seen as examples of the same phenomenon, yet with distinctions that enable comparison across them" (Bazeley, 2013, p. 5). The current study included eight cases of teachers at the beginning of their career, who attended a Canadian teacher education program, and were preparing to instruct in inclusive classroom – but each participant had their unique experience and perspective of inclusive education. By studying cases, it allows researchers to gain a deep, holistic view of the research problem. Yin (2012) suggested this means addressing *descriptive* questions ("What is happening or has happened?") and explanatory questions ("How or why did something happen?"). In the present study, the researchers addressed *descriptive* questions such as "What has contributed to beginning teachers' develop of beliefs, self-efficacy, and instructional

practices?" and *explanatory* questions including "How has these changes in inclusive practices and values come about?"

3.4.1   Working with the Data

Bazeley (2013) introduced the following non-linear steps, which required the researcher to go back and forth between them to best understand and work with the data: *read and reflect, explore and play, code and connect,* and *review and reflect.*

3.4.1.1   Read and Reflect

Read and reflect were the first steps to help the researcher gain a holistic perspective on each individual data source and on the project as a whole. The interview audio recordings were transcribed verbatim with all identifying information removed from the documents. The transcripts were then reviewed alongside the audio files again to verify their accuracy, to mark important intonation of the speaker that may potentially provide additional meaning or context, and to correct any typos in the documents.

3.4.1.2   Explore and Play

The following steps involved taking on an adventurous stance to *explore* what was covered by the data and what surrounded them, and then being curious and *playing* with all the possibilities to help draw connections between data and test the connections that might have been observed. When reviewing the interview transcripts, the researcher also observed emerging themes in a general sense to draw connections and extracted preliminary ideas for the next step – establishing the coding system.

3.4.1.3   Code and Connect

Interpretation of qualitative data unavoidably gets coloured by the researcher's personal, social, and cultural experience (Bazeley, 2013). The purpose of introducing a coding system and a second reader were to help with broadening the interpretation of the data through a second perspective and increasing the consistency in comprehending the transcripts. *Coding* is a thoughtful process that allows researcher to build familiarity with the detail of the data, prompts reflective questions around the developing themes, and

builds a comprehensive picture of what the data are dealing with. It also expedites the retrieval of evidence to support emerging ideas and conclusions for the study (Bazeley, 2013).

To begin the coding process, the researcher read the interview transcripts of each participant in chronological order. This meant reading the interview transcripts of a participant from the first interview (when the interviewee exited the program) to the most recent interview (the interviewee's third in-service year) and then proceeded to read the transcripts in the same order for the next participant. This served to highlight significant themes related to the three interview questions (beliefs, self-efficacy, and instructional practices) within an interview, as well as connecting ideas or prominent changes in ideas across the interviews of the same individual. Comments and keywords were added to highlighted texts in the documents, constituting the basis of a coding system. The developed code words with descriptions were transferred onto a spreadsheet, constituting a "codebook", which allowed for easy retrieval of codes and facilitated the process of pattern searching within and across participants in the later analysis. Based on Bazeley's (2013) suggestions for generating a coding system, the codebook detailed characteristics of each code word (what the participants referred to when they talked about an idea), boundaries (when to use and when *not* to use), and examples of when each code was used (quotes extracted from the transcripts).

Using the developed coding system, a second researcher reviewed two coded interview transcripts of different participants. The main purpose of this review was to generate new ideas from the perspective of a new pair of eyes. The second researcher provided feedback on how the coding system worked and additional interpretations for consideration. This led to a refined codebook where codes were categorized for clarity, reworded with more meaningful terms, and included more detailed descriptions to better reflect the participants' ideas. Using the updated codebook, the first and second researchers then independently recoded all four interview transcripts of one participant. This recoding of transcripts of the same participant at all timepoints allowed the second researcher to also note developmental themes within the participant. The two researchers compared their coding of the transcripts and further discussed any discrepancies and new

ideas, finalizing the coding system. All the previously coded transcripts were then re-examined by the first researcher to match the finalized coding system, to code passages that fit into the existing codes but were missed at the first stage of coding, to verify if there were no other meaningful ideas that required a code, and to ensure consistent application of the codes.

Following, making *connections* through the narratives, building a storyline, and understanding how the participants have made meaning of their experience were required. Each interview was summarized with extracted quotes to highlight the participant's ideas, which are presented in the results section. This within-case analysis included identifying changes or trends overtime and overarching ideas from examining the four interview transcripts of each participant.

3.4.1.4   Review and Refine

Throughout the process of coding and connecting the data, the researchers had to *review* and reflect on what was being extracted. Concepts and codes were split, merged, rearranged, and regrouped to best reflect the data (see Appendix C for the final codebook).

3.4.2   Analytic Writing

To move from the codes to analysis and writing, Bazeley (2013) suggested taking a three-step sequence for each prominent theme or core concept identified using the codes: *describe, compare, and relate. Describe* involved recording characteristics and boundaries of a theme, such as *how* did people talk about it, *how many* talked about it, and what was *not* included. Then, *compare* differences across contrasting cases in the context of the described theme, asking questions such as *who* talked about the idea, *why* did they talk about the idea, *what* was described related to the idea, and *when* was the idea brought up – recording meaningful associations that prompted further questions in the researcher's mind. The last step was *relate*, looking for patterns of association in codes or themes across cases and between sets of codes in the data. Consider under what conditions did the theme arise, did it have the same form of expression in all circumstances, what else was involved in relation to it, and what preceded or followed.

To facilitate this analysis process, a spreadsheet was used to track which codes or prominent themes appeared in which interview of the participants. The purposes of this cross-case examination were to highlight repetitive and/or contrasting patterns in participants' responses (at a similar point in time and across time), discuss widely mentioned concepts (and, if applicable, where those concepts were absent), and explore how similarly or differently the participants' ideas have progressed through their beginning teacher career collectively.

3.4.3   Making Sense of it All

The last step in Bazeley's (2013) procedure was to make sense of all the information. In other words, drawing the implications of all these findings in relation to the research questions and the described theoretical framework. This involved *extracting* relevant data, *explaining* how phenomena have come about, *contending, defending* the conclusions based on the presented evidence, and *extending* the findings to beyond the immediate setting and considering how the knowledge can be useful in a broader context. This will be reported in Chapter 5.

Chapter 4

4   Results

The results are presented based on the analysis plan detailed in the previous chapter. Specifically, I will start with presenting important ideas from each interview in chronological order for each of the eight participants: Bonnie, Jessie, Riley, Ellie, Russell, Colette, Edna, and Helen. Each participant's development is summarized following their interviews, highlighting prevalent ideas and changes for the individual. Key concepts related to common experiences or prominent ideas are bolded in the summaries following each interview and in the summaries of each participant at the end of all four interviews.

Following, prominent themes are presented using Bazeley's (2013) *describe, compare,* and *relate* procedure, as described in the previous chapter. Each theme includes a developmental chart to present how the ideas of each theme have progressed through the four years of interviews for the participants, where applicable.

4.1   Bonnie

4.1.1   Bonnie: Interview 1

At the first interview, Bonnie was in her second year of the teacher education program and in the middle of a practicum. Even though she was young and had limited experience in diverse classrooms, she has had a lot of coaching and volunteering experiences with learners of a range of abilities and ages, forming her foundational understanding of diverse learners.

For instance, Bonnie spoke fondly of her coaching experience for the Special Olympics, where she has been working for nine years. Bonnie said,

Because of the Special Olympics and working with people with very different disabilities ranging from one kind of the end of the spectrum to the other, I've gotten to really understand that there's no one way of teaching. You can teach

something to someone in one way and try it again to another person and it may not click for them. So really being able to differentiate instruction from… whether it be one group of students to another, or one class.

Similarly, as a figure skating coach, Bonnie explained that since children are grouped by ability rather than by age, she would sometimes coach a group of students of different ages at the same. Bonnie described the situation of having a 3-year-old child and a 6-year-old child in the same group learning the same skills, "so the language needs to be used to hit those 3-year-olds, but not be too young for the 6-year-olds, […] tailoring everything you do to the students that are right there in front of you." Therefore, these coaching experiences have given Bonnie opportunities to experiment with different strategies, learn to accommodate, and adjust her instruction accordingly based on the child she was working with.

As part of the Special Olympics, Bonnie also traveled with a group of athletes to international competitions for one week annually. She found the experience of getting to know the athletes beyond the coaching context, such as learning about how they socialize and their everyday life, has aspired the way she interacts with her students in the classroom. "Getting to know students beyond sitting at a desk in front of you is very helpful in being able to tailor instruction for them to understand, and for them to create that mutual relationship with the teacher and the student," she said. Adding to this belief in building relationships with her students was her volunteering experience in classrooms, where she got placed in different classrooms weekly to support students with diverse learning needs. She explained, "I haven't been able to really build that relationship with the student to get to know them more. And that's challenging for me walking in, especially depending on the student." Yet, she has learned to get to know her students in a short amount of time to gain a sense of "what's their reaction going to be" and how to support them. Bonnie added,

I find students with certain disabilities may have a "flight" reaction to a new person coming into their personal space […]. And usually, it doesn't go well at

first. But if I'm there for most of the day, by the end of the day, I'm able to have the student working with me.

From coaching figure skating, Bonnie also learned to communicate with some of her skaters who are nonverbal using different means and methods. She recalled,

Last week I was able to teach a routine – so like a set of steps in a particular order – to a skater who was nonverbal, 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. And that was a really cool thing, that we were able to communicate even though there wasn't really a language.

All these experiences from coaching and volunteering gave Bonnie the confidence that, even though she had limited experience teaching in inclusive classrooms, she already had some skills and strategies in working with diverse learners that could be transferred into the classroom context.

Bonnie's practicum experiences were also important in adding to her strategies and gaining more confidence. From teaching a Grade 1 class, she learned to differentiate instruction for learners at different stages of their learning because "they're all maturing at different rates and growing at different rates, [and] that was challenging for me because you could [almost] group the class into four different levels within Grade 1." It gave Bonnie more confidence to hear her associate teacher describe the class as "the most difficult class she's had in 17 years" and reassure her by saying, "if you can survive the nine weeks in this class, you will be fine." The words of an experienced mentor provided comfort to Bonnie. In her following practicum, where Bonnie taught a Grade 6 class, she stated, "my confidence dropped a lot during the first week only because I don't have the experience working with older students." She realized that strategies she has learned to use for the Grade 1 class (such as differentiated instruction) were not as needed for the older grade, and she experienced a "cultural shock" seeing the students "dabbing and doing these water bottle flips, and I don't even understand the slang that they're using." To make up for this difference, Bonnie spent more time "to develop more of a

relationship with the students and get to know them and what their interests were" by going on yard duty to observe her students' interactions and social groups. Bonnie stated gaining this understanding of her students gave her a bit of confidence.

Getting the opportunities to work with her students directly and plan lessons for them during this practicum also presented as, in her words, "a big learning curve" for Bonnie. She was assigned the task to make a Social Studies lesson plan for a Grade 6 student, who had a modified IEP to work at a Grade 2 level without an EA. Bonnie tried several strategies – mimicking how the classroom teacher formatted the worksheets, giving the student tests to figure out what she knew and what level she was at. But things did not "click" until Bonnie made a fill-in-the-blank worksheet related to the topic that the student had researched. Bonnie discovered that while the student needed guidance to put her thoughts onto paper, she had a strong vocabulary, good social interactions, and completed the research for the project all by herself. These close interactions helped Bonnie realize that her assumptions about the student – that her "writing output would match her verbal output" – was incorrect. Bonnie further found that another struggling student without an IEP benefited from using the same resource. She said,

> Using that worksheet as an extra step, he was able to come up to par with the rest
> of the class. So, that had me thinking too, like I'll just make a few extra copies of
> whatever I'm modifying for her and anyone that's struggling, it's just a little extra
> boost to get them up to the rest of the class.

This experience of lesson planning elicited the use of trial and error of different strategies, encouraged Bonnie to get to know the students and help them succeed based on their strengths, and allowed Bonnie to discover that inclusive strategies could benefit beyond just one student.

Other than learning directly from working with the students, Bonnie highlighted it has been helpful to observe how educational assistants approach or work with specific students with diverse learning needs or a group of students during her practicum. Although Bonnie has gained some confidence in diverse classrooms, she was not fully confident in her abilities just yet:

I think that there's always more learning to be done with regards to instruction and meeting the needs of students. […] If I were to have a different class next year and have a new set of students, I don't know how I'm going to approach them or how I'm going to work with them. I think that it's always an ongoing learning curve in learning how to work with different students because no two students are the same in the way that they learn or their output of work.

In terms of her formal education, Bonnie recalled a workshop on supporting diverse learners in the classroom offered by the Ministry of Education through her university and a course on social-emotional learning, where they "dove into the ministry documents about individual education plans and how those are developed and the process that teachers have to go through to even initiate an IEP." She found a lot of overlaps between the workshop and the course, but the workshop was more insightful by inviting a former principal to share his personal tips. Overall, though, "as far as courses at [my university] goes, there was just that one last year and we don't have any this year that pertain specifically to [teaching diverse learners]." Therefore, she planned on taking the Special Education Additional Qualification (AQ) course after graduation to further her learning.

Regarding Bonnie's beliefs, she used a recent incident as a skating coach to demonstrate her view on children's ability and her responsibilities as a teacher. She talked about a boy with autism spectrum disorder (ASD) in her skating program, who the other coaches viewed as "a problem child with behaviour issues on the ice who doesn't want to be there" and "too slow and not able to keep up with the rest of the group so that's just the way it is." And yet, Bonnie saw the situation very differently. She said,

There's music, there's lots of kids everywhere, it's busy and we just need maybe a one-to-one support for a little while for him to establish the routine that happens on the ice and to get him, his skills a little bit stronger and then maybe working on weeding off that one-to-one. [… I believe] that every student has the potential as long as they have the correct supports in place and that the supports are being used not in place of a physical person there with them, like don't just give a kid an

iPad and think that it's going to help them. Every support or strategy that you use

should be monitored and you should see progress with it.

This summarized what Bonnie perceived as her role as an instructor – that it is her responsibility to ensure the provided accommodations are truly meeting the needs of the child. From this incident, Bonnie also identified as using a "new generation of thinking", such as the *growth mindset* that was taught in her teacher education program. She worried about having conflicts with an experienced teaching partner who might have "a very different way of thinking" in the future.

Finally, Bonnie provided some insights on how she viewed inclusion. She said, "I'm on the fence about this inclusion versus segregation debate. I don't think there's one way that's going to work for everyone." She explained that she used to think "full inclusion [is] the only way to go," but her perception of segregated programs has changed after conversing with a mother with a son who has ASD. Relaying the words of the parent, Bonnie shared the child was in an ASD class that focused on teaching life skills, such as bringing them to the grocery store and the bank. She recalled the parent describing it as "the most wonderful program" because "she did not see this success in her son in a full inclusive class than he has in this more segregated life skills class." Bonnie commented that conversation was "really eye opening to me." Bonnie's growing experience of teaching diverse learners contributed to her view too, she said:

I think it's all a trial and error to figure out what works best for every student, just like students in the class with or without a disability, whatever works for them to be successful. Whether that be pen-to-paper writing or using speech-to-text through an iPad, as long as they are able to produce the work that is needed to meet the expectations, whatever path they need to take to get there, should be available to them. [So] I don't think that I could say I am totally for inclusion or totally for segregated programs, I think it's whatever would work best for a student.

In the first interview, even though Bonnie did not have a lot of experience teaching in diverse classrooms, her ideas about **inclusive philosophy derived from**

working with diverse learners in other coaching and volunteering contexts. Her practicum added to her understanding of **how to align her instructional practices to her values**, particularly through trial and errors, getting to know her students, and working with the students directly. Bonnie also recognized the **limitations to her teacher education program** in terms of providing her with knowledge about diverse learners and was keen on building her competencies beyond her teacher education program.

4.1.2 Bonnie: Interview 2

Bonnie was supply teaching and had some short long-term occasional (LTO) contracts at the time of the second interview. She continued to refer to coaching the Special Olympics, where she has worked at for over 10 years at the time of this interview, as an experience that provided her with the confidence and a foundation on how to work with diverse learners. She said, "[I] have probably learned way more from my athletes than I've been able to teach them with regards to different strategies to use when delivering an instruction." For instance, to teach the athletes, she might have to demonstrate, verbally explain, draw, and/or have the student move through the movements themselves. She found that she has been able to transfer this knowledge of using a differentiated instruction approach from coaching athletes with diverse needs to teaching in inclusive classrooms.

At this interview though, Bonnie found her direct, in-class experiences – including her day-to-day supply teaching, LTO, volunteering in the classrooms, and practicum experience – to be more crucial in adding to her toolbox of inclusive practices. These experiences gave her opportunities to observe teachers and educational assistants for their instructional strategies or even how to set up a classroom for diverse learners:

> Even when I was in [my teacher education program], it was a big piece for me to really learn as many different things from different teachers at different grade levels as possible, so just seeing what they use. And even supply teaching now, I have created a huge bank of photos on my computer just from really neat things that I've seen bouncing from different classrooms every day. Whether it be different reading strategies and how teachers have displayed them on their

bulletin boards, or different activities that they have left me to instruct their

students. I really just picked up on those and it's always like an ongoing learning,

even though the teacher's not even in the room – which has been very surprising

for me because I didn't think I would really notice or be able to learn so much just

from being in like a classroom with whatever is on the walls and what not.

Bonnie added she would love to recreate some these observed components when she has her own classroom one day. She also described the educational assistants in her supply teaching classrooms as "over-the-moon incredible" and the "most supportive people", who were "not just focusing on the student that they're particularly in the classroom for, but they've been there to help [all] the students [in the classroom] as a whole."

More importantly, Bonnie learned from working with the students directly. She said, "the biggest piece that has really influenced my instruction is getting to know the students themselves, to really know what their interests are, and what their learning styles are, and what their needs are" and "in order to address any of the diverse learning needs in the classroom, you have to start with just getting to know your students." She shared for her six-week LTO, she spent two and a half weeks of her time getting to know her students. It allowed her to find out the class loved projects and inquiry-based work, which informed the way she taught. Another experience Bonnie recalled learning from her students was teaching a Grade 3/4 split class for her LTO. In that class, students' abilities ranged from gifted to below grade level "on top of all the different behaviours and social atmosphere that each of those grade levels were experiencing." She learned to tailor her instruction to meet the needs of her students, which involved building their understanding of social and cooperation skills as well as life skills.

This LTO experience also bolstered her beliefs in inclusion. She said,

I think it's great to have a diverse classroom in the sense that students can learn

from one another, they can learn empathy, they can learn about different problem

solving and patience. All those things come when you've got lots of differences

that are celebrated all together.

Particularly, she remembered having a student with ASD in the class, but she did not know until she read through the individual education plan (IEP) binder. According to Bonnie, "I just found that really interesting, but awesome at the same time, that [he]'s just like another kid in the class [to all the other students]." Although the student struggled with connecting with other students in terms of, for example, talking about what they enjoyed watching and what they did over the weekend, but at the same time, "they treated him as any other student in the classroom and wanted to help him." Bonnie added,

> If I paired him up with someone else, there was no issues that way, so it was really a warm and welcoming environment for sure. And he was able to learn from the other kids as much as they were able to learn from him, so I really valued watching that all blossom and come together.

While Bonnie acknowledged that "there are some cases where standard inclusive classrooms aren't the best fit" – such as when she supplied in and witnessed the benefits of essential classes that taught life skills – but "I've always been in favour of inclusive classrooms so long as it's a good fit for that student and can improve their individual learning." She used the example of an image she saw online, where three children of different heights were given boxes to stand on and to see over the fence, to explain the concepts of equity versus equality. Bonnie said, "that's what I attribute my beliefs to. Some students need more blocks to see over the fence. [I also think about] what can we do to eliminate the fence altogether [so] we can all just see over [the fence]." Overall, her beliefs about students' ability remained unchanged: "I strongly believe that all students are able to learn, but just they may need different supports to be able to get to the end results and everyone's end result may be a bit different from somebody else's."

According to Bonnie, her confidence has "taken some steps forward since last year" with her increased teaching experiences. Even though it was terrifying, she said, "I think one of the best ways to learn is to really just be thrown into it" – and it helped to have a lot of support getting through challenging situations. For instance, in one of her LTOs, she worked with the special education resource teacher and sat in on psychoeducational feedbacks to develop IEPs for students who were gifted. It furthered

her ability in instructing and understanding diverse learners by having chances to work with gifted students, a population that differed from students she was used to working with.

However, Bonnie found that she still struggled with using assistive technology:

I'm just feeling overwhelmed with, like, where do I even begin? And where can I learn more? Because they have programs to teach students how to use the iPads and the apps, but they don't educate the teachers on how to do it. As much as I think I'm tech savvy, there's so many amazing apps that are out there, but how do I even begin to know that such a thing exists?

This speaks to gaps that exist in teacher education programs when thinking about theoretical knowledge versus practical knowledge. In contrast, Bonnie described the Special Education AQ course instructed by her school board's special education consultant as phenomenal. She found it particularly helpful that the instructor linked what she was teaching to "real-world, current experiences, in situations that are happening." She also enjoyed opportunities to converse with other educators in the course who were much more experienced. For instance, she asked these experienced teachers about acronyms she heard at school meeting, but "don't know what that stands for [and] feel silly asking [at work]."

Additionally, Bonnie has developed supportive relationships with other teachers. She remained in contact with two of her friends from her teacher education program. They had a group chat where they could "share [their] experiences throughout the day or at the end of the day of what happened." This became a place where she could go to "instead of having to ask someone else [at school] and having to be embarrassed asking." She also expressed learning a lot from hearing about her friends' experiences in difficult situations that could have been "terrifying" if they were to happen to her. Bonnie's aunt, who has been a teacher for 20 years, served as "one of [her] biggest role models and supports" as well.

In summary, some of Bonnie's previous experiences and developed beliefs about inclusion and students' ability continued influence her instructional practices and were **corroborated by her new teaching experiences**. In this interview, Bonnie highlighted components of **formal education beyond graduation** she found helpful and her **newfound appreciation for networks and other experienced teachers** she could go to for questions and support as a beginning teacher.

4.1.3   Bonnie: Interview 3

Bonnie held a permanent position, teaching a Grade 6/7 split class, by the third interview. "This year definitely is the most challenging thing I've ever been through," she stated and explained it has been a very different experience to have her own classroom. First, "working with the same kids every day [where] they become more comfortable and they try and push your limits" was challenging. Second, with more knowledge in how to work with diverse learners, it made her confidence fluctuate more: "some days, I go home feeling super confident and other days, like today, I feel totally defeated because every strategy I tried failed." Specifically, she said a strategy might only work for a few days so when she was supply teaching, she would feel "I got this because you had your bag of tricks and you could roll through them all in a day. But now it's like, okay, I've got nothing left."

What further decreased her confidence were the *nuances* she had to learn as a beginning teacher but were never taught in her teacher education program. For example, she recently had to bring her class on a field trip. She learned that her responsibilities included filling out forms, making a bus list and giving a copy to the office, and carrying a student's extra EpiPen in her backpack – all things she had not known prior. "It's all those little [things that are actually very important]. They're almost like common knowledge for those who have been in this career for a while, but for me it's like, I didn't know I had to do [them]." She added, "when someone is asking you for the form and you have no idea what they're talking about and it's like, 'okay, how great do I look right now?'" This showed how Bonnie was very conscious of others' judgments of her capabilities, impacting her sense of efficacy.

At other times, Bonnie felt confidence from being able to contribute at meetings, introducing ideas that no one has heard of. Feeling well-supported was also crucial to her confidence level. She said,

> There's a lot of supports in the school system and even in our school alone. I've reached out to our child and youth counselor; I've reached out to our special education resource teacher. So, I'm confident that it doesn't reflect negatively on me to reach out to other people for help. I know there's a lot of other help out there and I feel very comfortable asking for that help, which at first, I was like, 'no, I got this,' and tried to rock it on my own and realized I need other supports.

Speaking of the importance of networks, Bonnie suggested that her aunt and her two close friends from her teacher education program continued to inspire her ways of teaching and thinking. Bonnie said, "their approach to education as a whole, it's very positive, it's very student-centered. Like what can we do? What can I change to make this a great space for learning for the student?" Bonnie shared that her aunt was her role model, who has been a teacher for two decades. She described an occasion where her aunt went to a student's soccer game, which made Bonnie realized what it meant to the student and how amazing it was to see a teacher-student connection outside of the school context. She commented, "just those little examples, how showing and seeing how much they care for their students has been really impactful on me. And just the different ways you can show it, it doesn't have to be any big grand gesture." Her aunt also recently became her colleague, teaching next to Bonnie's classroom in an essential skills class with students of different grades and disabilities. This gave Bonnie the opportunity to get to know her aunt's students, adding to her learning of diverse needs. Bonnie and her aunt also connected regularly at the end of the day to talk about what her aunt did in her class and to bounce ideas off one another.

Other than her aunt, Bonnie stated her group chat with her teacher education program friends were "still going strong." She elaborated, "we're all going through the first year, like the struggles and highs and lows of being a new teacher, and what all of this means and all of the things we learn." They have been in consistent communication

and could chat about any questions they have, ask for ideas from each other about what to do next in situations, or even just share moments where they experienced something new or unexpected. "It's a good outlet," she said, "it's nice to just debrief and have someone in the teaching world understand. As much as I can go home and vent about it, my family isn't in the teaching world, so they don't really get it." Her relationship with these two other beginning teachers was unique in that they were learning and problem-solving together, as well as providing validation and emotional support to each other as they navigated through the start of their career.

Bonnie added Twitter has been used as a networking tool in her school board as well. She described it as a platform "for everyone to show off cool things you're doing in your classroom" so teachers can share and borrow ideas. Through this platform, Bonnie also built connection with an instructor who spoke highly of her to others, so Bonnie felt she could go to this experienced teacher for help if needed.

In this interview, although Bonnie stated her confidence has been undermined overall, her passion to support diverse learners to the best of her ability remained unchanged. She said, "I believe that every child can learn… It's my job to figure out how they learn and what I can do to support that." Bonnie continued to credit her coaching experiences, formal education, and working with difference experienced teachers for the development of her ways of viewing teachers' responsibilities. From the teachers she worked with, she "learn[ed] from their teaching style and how those influence the way they connect with different students", "the different classroom set-ups that different teachers had, the different strategies that they would use, and even in their notes that they would leave me for how to deal with certain students." Bonnie particularly thought of a mentor teacher, who "made the decisions in the best interest of her students, day in and day out, whether she had support from other people or not – and I think that has really impacted me." This teacher also taught Bonnie a lot of tricks to work with students with diverse needs that Bonnie still used. In terms of formal education, Bonnie referenced the Special Education AQ course, which gave her knowledge about paperwork and how to follow through with an IEP document, provide accommodations and modifications, and

get students a psychoeducational evaluation. She described them as "little things that if I didn't take the course, I would totally be blind in knowing."

Most importantly, though, her beliefs and knowledge on how to work with diverse learners came from working directly with her students – "just seeing that with the right support and approach that kids can really have the opportunity to learn" and "the biggest thing that I've come to realize is being able to make a connection with the students." One of Bonnie's current students had Tourette's syndrome, attention-deficit hyperactive disorder (ADHD), and ASD, and she referred to him as "one of those kids that I'll remember right to the end of my career, if not longer," because of the learning she has gained from working with this student. She said,

> Every day I go home with something new that I've learned about him, about myself, [and] about classroom management styles. He's just really had a great impact on me in a positive way as far as knowing how to connect with different kids. And just that saying, "you work with one child with autism, you've only worked with one child with autism," because they're all so different and it couldn't be more true. Just that some days are great, some days are challenging and it's a rollercoaster that we're riding through and just [doing] what I can do to best support him and the class as a whole. […] I knew that I really needed to gain trust because […] he's one of those kids that if you break that trust, you're never going to get it back. I realize it's all in your approach and making the connections. If you can connect with kids, you've made that connection for them to trust me as their educator and to grow those opportunities for them to learn.

Through teaching at several schools, Bonnie also came to recognize how factors outside of the classroom play a role in students' learning. She learned that "the different demographics that each school has comes into play with what students expect, what parents expect, how involved parents are, and how much the students care about their work or how much they don't." This spoke to how socioeconomic status, a component outside of her control, could affect her teaching and connection with students. Additionally, "having parents on your side" was critical. When she first started teaching

her current class, the parents were easily frustrated; she later realized it came from disappointing interactions with the previous classroom teacher. She said,

> But once they gained trust [in me], the rest of the year has been smooth sailing. […] You've just really got to get everyone on board and making sure everyone realizes that we're all on the same team here. Like, we're all here for their child and just having them on your side. And what I mean by that is they support me and what I'm doing in the class, and I'm helping to support them with what they're doing at home.

In this interview, it was prevalent that Bonnie built a lot of knowledge and insights in working with students in inclusive classrooms. This included specific strategies in the classrooms but also knowing how to **build relationships with students and parents**. However, Bonnie also **felt less confident because she knew so much more but was still struggles on days**. Fortunately, Bonnie has found many **people she could connect with** – such as the school team, other teachers, her aunt, and her cohort – for instructional ideas and emotional support. Her **inclusion beliefs stemmed from working with diverse learners** in a range of contexts.

4.1.4   Bonnie: Interview 4

In the final interview, Special Olympics continued to be one of the experiences Bonnie referenced. She stated,

> It has been a really big influence in just getting to know a variety of different learners. Although I'm teaching them on the ice, a lot of that can easily translate into different teaching styles within the classroom itself and just being able to have experiences with [… students of] all varying disabilities.

With her 12 years of coaching experience, Bonnie has learned to teach a skill or technique in a variety of different ways. "Some days it just depends on [the] particular athlete," she said, "if they're usually a visual learner, but they come to the rink one week and that strategy is not working, being able to really quickly adapt to what their needs are that day." As Bonnie previously mentioned, Special Olympics also gave her the

opportunity to travel with athletes to competitions and "seeing them both on the ice and in that teachable atmosphere, as well as outside and all the different challenges in their day-to-day, [has] really influenced [how I interact with] different students that I've come in contact with." Overall, Special Olympics remained a significant experience to Bonnie because it was one of the first experiences that contributed to her knowledge of how to teach diverse learners.

From talking to other teachers, Bonnie also realized that her Special Olympics coaching experience has helped her *normalize* how she viewed and interacted with diverse learners. She stated that other teachers could get "very nervous when it comes to having students from [the essential skills class] into their classroom." While "people who don't have experience working with students with disabilities, they struggle to know how to go about it," she saw students with disabilities as "just another student that may have a different learning or teaching style that I need to go about." This perspective gave her the comfort to work with diverse learners in inclusive classrooms.

Bonnie has learned a lot from her teaching positions as well, but especially in the past year of being a permanent teacher with her own classroom. For instance, Bonnie has found it crucial to "greet the students in the morning and see how they're coming into school, whether it be like they are in a great mood, or something happened at home the night before." She elaborated, "connecting with them made a big impact on how I would approach the rest of the day." Bonnie recalled her Grade 7 student with Tourette's syndrome, ADHD, and ASD, describing him as her most challenging student but also her favourite student and someone she has learned so much from. Some strategies she developed included making sure she was at the door of the classroom during her planning time in the morning to found what condition he was in that day, "even if it was just to say a quick hello and check in with him to see how his day was going." She also learned to set boundaries by giving students a "trackable" warning system, where he had to go to the office if he got "three strikes".

Her responsibilities as a teacher for this student required more than just navigating how to work with the student himself. She needed to consider what his actions meant to

the other students in the classroom since his tics involved the use of swear words. Another strategy she noted as beneficial was letting this student use the computer first thing in the morning, which helped to distract him and calm him down, decreasing the chances of him showings tics. Bonnie felt it was important to "protect his dignity [but also] ensuring that the rest of the students were feeling like they were in a comfortable and safe environment." Bonnie expressed that other students were often understanding, but the biggest challenge "was not so much the students but the parents who didn't understand why like certain swear words are being said in class." She added, "and you can't share a student profile with another parent, so it's so hard [to get their] empathy and understanding," and building this connection with parents was something that Bonnie was still learning to navigate.

Additionally, Bonnie shared it has been a "really challenging but rewarding" experience to integrate students from the essential skills class (for students with high learning needs) in her Grade 7 classroom several times a week. Bonnie was committed to "not just having them come in and sit at the back in my classroom, but to actually be integrated within the classroom with my students." She said it was important to not "center them out or make them seem as, 'oh, these are the kids in that class coming into our class.'" This required her effort in learning about those individual learners, making her lessons relevant and understandable for them as well as for the rest of the students. This process of learning and reflecting on how to best approach integration has become the core value of how Bonnie planned her instruction and lessons in inclusive classrooms. This also represented Bonnie's beliefs on what inclusion is about – creating a welcoming environment that truly encouraged harmony and promoted learning in all students, regardless of where their ability was at.

In addition to learning on the job, formal education beyond graduation and opportunities to collaborate with other teachers helped Bonnie develop her inclusive strategies as well. She shared having taken the second part of the Special Education AQ course that was instructed by a retired special education teacher from her school board. The instructor brought in relevant cases for the educators to work their way through, such as learning how to attend meetings that involved principals and psychologists. Her

biggest takeaway was "knowing what my role is and how I'm able to best support the student that I'm representing at these types of meetings." She also learned about how to talk to parents and have parents support the decisions made for their child, because "it can often be really scary for parents but as long as you go about it in the right way and get them to trust you, then you've got them on your side." Moreover, Bonnie enjoyed having the chances to collaborate with different teachers in these workshops, talking about strategies or technologies they might use to support their students.

In terms of Bonnie's feedback on formal education, she said,

You can sit in a workshop or an AQ course and they can tell you all about special education. But unless you are actively in it and working with students with diverse needs, then it's two totally different things. I mean it's just like [teacher education programs], like they can tell you what it's going to be like. [But] it's when you actually get into it, it's like, "holy crap, this is not what they taught us."

Once again, Bonnie suggested how reality differed from theory on teaching students in inclusive classrooms. Yet, rather than seeing hands-on learning as *superior to* formal education, Bonnie has highlighted that the two should be done in *combination* with one another. It would be hard to understand how to apply the knowledge she has learned in class without the opportunities to practice and experiment with them in real life. Therefore, formal education without a practical component would be insufficient in preparing effective inclusive educators.

Finally, Bonnie shared feeling confident in diverse classrooms because she has had more hands-on teaching experiences. She believed that she would always be learning and gaining new skills or strategies, so her confidence would continue to grow. She further gained confidence from speaking with her colleagues:

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 boost myself but 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 think that that's so great." Or when the teacher of the essential skills class

comes in and she's like, "my students came back and they had such a great time learning about […] healthy eating. If you're able to get information to really stick with them, then you've made an impact in your teaching that day." So, that's definitely a confidence booster when other staff members around are giving praises.

In the last interview, Bonnie highlighted how **her experiences have all contributed to the development of her inclusive practices**, including coaching Special Olympics, teaching in classrooms in various positions, formal education, and learning from colleagues. She **developed more practical strategies** she would use in the classroom, including with specific students she got to know and with meeting students' needs in the class as a whole. She was **still learning to navigate how to build relationships with caregivers** but **sounded much more confident about teaching diverse learners**.

4.1.5   Summary of Bonnie's Development

Bonnie started her career with **firm beliefs in inclusive values – what she perceived diverse learners are capable of** and **her responsibilities to find out how to best support these students as a teacher**. These values rooted primarily in **her exposure and experience in working with diverse learners in contexts outside of the classroom**. She continued to hold these beliefs as she learned to navigate through inclusive classrooms as a beginning teacher and practiced integrating students with high learning needs into her classroom. Bonnie valued **building relationships with her students**. By getting to know her students inside and outside of the classroom, she was better able to tailor her instruction to meet their learning needs. **Getting parents on her side** was an important component she later came to value in her practice.

Bonnie's **knowledge to work with diverse learner grew relatively steadily** throughout the four years. Each year, she put effort into **getting to know her students to build skills and strategies**, **observed and interacted with experienced teachers to gain more ideas**, and participated in **formal education beyond her teacher education program to increase her knowledge**. However, challenges were sometimes a setback to

her confidence, especially when she felt she has **learned a lot but was still insufficient to be efficacious** in teaching diverse learners at the third interview. Bonnie was particularly bothered by **not knowing the details and nuances of how a classroom works**, which highlighted what was absent to her in her teacher education program. She found it most helpful when she attended workshops where the instructor shared **real-life cases** for her to consider and practice, connecting the learned theories to her reality. **Colleagues and other experienced teachers she met** through the beginning of her teaching career gave her support and confidence boosts. At the final interview, Bonnie has developed insights/beliefs, confidence, and inclusive strategies, noting that these were influenced by all her experiences combined.

4.2   Jessie

4.2.1   Jessie: Interview 1

At the first interview, Jessie was in the final year of her teacher education program. According to Jessie, her personal life experiences have played a major role in how she viewed diversity and consequently how she instructed in diverse classrooms. To start, Jessie drew upon her life story and family situation. She explained, "I came from a pretty stable and then suddenly turned unstable home. My parents got divorced at an early age and I was dealing with all of that and there was some abuse and alcoholism and all that stuff." As a result, she observed and experienced what it meant to have teachers who are accepting and caring for their students:

> […] my own teachers that I had in my childhood. They were accepting of how I came to school, and when I came to school and if I could, and then also the patience that they had. I find that they understood that not everyone came from the same background and that everyone was fighting their own battle, but they did not necessarily need to know what was going on at home, they just needed to know that I might need a little bit of extra help in the classroom because I might not be getting that at home. So, I think that's really shaped my beliefs and just making sure you have that individualized approach to each student and not kind of generalizing everything as, "I think they're just having a bad day."

She added her life experience has helped her connect with some students in her practicum and support them through their learning, as she understood the process of having Children's Aid Society (CAS) involved in their lives. Overall, Jessie's experience prior to being a teacher built a strong foundation in how she perceived her role as a teacher and, in her words, "shaped [her] entire view on teaching, as a whole".

Adding to her student experience, Jessie reflected on her own learning style, which helped her become "very conscientious about applying UDL (Universal Design for Learning) approaches to all my instruction." She described herself as not being an oral learner and she struggled with lectures in university, but she found that it really helps when she can manipulate objects, or someone shows her how to do it – "so I try to at least incorporate two to three of those instructions in each of my lessons." Interacting with diverse learners in her personal life also added to her understanding of diversity. Jessie stated having a family friend who was "bipolar and developmentally slow." "I spent a lot of time with him through high school and I got to see how his brain works and what shifts his moods and everything," she explained. This gave her the knowledge of strategies that could be "applied to my own students and deal with [different needs] through classroom management styles."

Next, Jessie named her unique experience of travelling and studying abroad as one of the most influential experiences to her instructional practices. She belonged to the *international* cohort in her teacher education program, which gave her the opportunity to live abroad and travel through Europe. Jessie found that "connecting to other parts of the world is a great way to [understand] that diversity in the classroom." Therefore, exposure to diversity – not just in terms of differences in ability but also interacting with people from across the globe – has inspired her to be more open-minded and accepting of individual differences. Learning through the international perspective and her classes further added to these insights. She said,

> With my cohort, I think we're able to see how to exactly approach an intercultural learning style and make sure that if it's diversity in the racial or cultural context, we're showing everyone that their identities may be different from one another but

that doesn't make us separate identities. It's, "we're all together and we're embracing one another" but [also] recognizing everyone's history and culture.

Jessie also discussed other components of her teacher education program that have been beneficial. Starting with the courses themselves, Jessie stated they provided a basis to her instructional practices, including a special education class and a mental health literacy course. In the latter course, Jessie particularly appreciated the course providing fictitious scenarios of students who are new to the classrooms and from the teacher's point of view, who may or may not know what is going on at home. Based on the situation, the class learned to analyze without diagnosing but also how to get professional help and approach and welcome the students. Jessie indicated all the tactics they have learned so far have been really helpful. This feedback shed light on the fact that supporting diverse learners is not limited to knowledge about disabilities or diverse needs and the inclusive philosophy but also how to meet students' social-emotional needs that could impact learning.

Other than the courses, the practicum component of her teacher education program added to her instructional practices because "the hands-on experience that the practicum gives you lets you see firsthand how to adapt and feel what those kind of students need and meet those specific needs." Yet, more crucially, "it's definitely been the practicums that have given me the most confidence in all teaching aspects, especially pertaining to diverse needs." Jessie explained as a student, she attended schools with limited diversity, so she had limited understanding of diverse learners and did not feel confident teaching in inclusive classrooms. But for her practicums, she was placed in schools with a range of financial and emotional needs. From "the richest school in the city", where only three students in a class of almost 30 students had IEPs – to a school in a neighbourhood that was seen as "a little bit more dangerous", with half of the class being English as a Second Language (ESL) students and a third of the class having an IEP. She indicated the latter practicum opened her eyes to the diversity she could get in a classroom. She also built "the most personal connection" with the diverse learners in this practicum experience, which made her feel much more confident.

The associate teachers who worked with Jessie in her practicum also increased her confidence "because they've been able to give me quick feedback whenever I've been doing something really well." For instance, the associate teachers gave Jessie the reassurance when she connected with a Kindergarten student with a trauma background, calming him down when he became aggressive in the classroom. It also helped Jessie to be in difficult situations and observe what the teachers might do, learning which strategies work better for which type of learners. Reflecting on her teacher education program as a whole, Jessie concluded,

> The courses that we've gone through at [my teacher education program], they've attempted to prepare you as much as they can, but when you get into the classroom it's a whole different game. So, it's like they can prepare you for years and years, but I think the most valuable experience a teacher, especially in the beginning will get, is just getting thrown right in and being like, "this is what the reality is."

Overall, influences from Jessie's **personal life experiences** were noted, especially on **how she understood diversity and how she instructed diverse learners**. While courses from her teacher education program gave her some useful skills, Jessie pointed out the importance of her **practicum experience in the classroom**, where she could **try and observe different strategies**, **build an understanding of diverse learners through interactions**, and **create genuine relationships with her students**.

4.2.2   Jessie: Interview 2

At the second interview, Jessie continued to gain experience working with students of different age groups and abilities through various opportunities. During the summer, Jessie taught a Grade 7/8 ESL class at a private school, where the students' English was at around a Grade 3/4 level. The students were hesitant in raising their hands when they did not understand or were confused. This experience made Jessie more mindful of how she presented instruction. She said, "it really helped to fuel my lessons now because I had to speak in such broken-down language that now I always remember – when I'm using those bigger words that it can go right over students' heads."

Following, Jessie became a LTO teacher in the new school year – she taught as a supply teacher daily in a Kindergarten classroom for one month and was teaching a Grade 1 class at the time of the interview. Because she has been teaching young children, sometimes the students were yet to be identified but could present with needs for learning support. It was challenging because she "[doesn't] have a lot of modelling or expectations to go off of." Therefore, Jessie relied on her beliefs about how diverse students learn, that "every single student is going to be different with how you need to approach things," and using a lot of trial and error to develop an approach that she thinks work best for her learners with diverse abilities:

> I think my beliefs are similar to universal design for learning and differentiated instruction [and] that every student is unique. […] There's going to be one or two students in every classroom, it doesn't matter how many different ways you explain it, they need that one-on-one individual time of just, breaking it down and finding that way, like I said, trial and error of getting there. […] So I've started, especially with the younger grades the experience that I've had now is, using a tiered approach to almost every lesson, especially with math and science. Doing an oral explanation then doing visuals, and then doing manipulatives because it seems that the gifted students like the challenge of seeing the manipulatives and experimenting with those, and my ones with disabilities actually get to see a visual example of it. And it's a great way for them to interact with the actual material.

This tiered approach also came partly from reflecting on her personal learning style. Jessie explained that growing up, she did not enjoy math because she cannot learn from someone just verbally explaining the concepts to her. It was not until she had teachers who showed her step-by-step explanations with real life examples and manipulatives that she began to fully understand certain math concepts. She recalled thinking to herself, "I could have gotten it all these years? I could have been awesome at math if only teachers had that tiered approach to it." Jessie added, "that's also a differentiated instruction I wish I had more of growing up. I'm trying to bring as much as

I can of it into the classroom so I can reach those independent learners with those unique learning needs."

In addition to incorporating differentiated instruction in her practice, Jessie valued inclusivity and promoting inclusion in the classroom. Jessie shared having a student with ASD who was nonverbal and had a full-time EA, and how she was learning to be an inclusive educator through working with her own students. "I think that having a student with that high of an exceptionality, it does bring in inclusivity," she elaborated, "no students are ever mean or rude to her. They understand that she can't control when she's having a bad day because she doesn't have those same communication skills." Jessie also reflected on her interactions with the student with diverse needs and being mindful of how she modeled acceptance to her class:

> Even though sometimes it's that student screaming at the top of their lungs in the middle of my lesson, and I want to say, "can you please leave the classroom?" Just because I can tell we're all struggling but reminding myself [that] she can't control it. And if I say, "can she leave", that's bringing into the students' minds that that's okay for if she acts out, they can ask her to please go away. And I want to be that role model for them. […] It's also showing the students that they are just like us and that we need to include everyone in our lessons, even if they aren't participating the whole time, or they're not doing the same material, they want to be there just as much as you do.

Finally, Jessie described how her confidence has been shaped in the past two years. When she was completing her teacher education program, "reading the books and doing the assignments, I [thought], you know what, I definitely can do this. I can handle diverse classrooms. I have all these different approaches and unique ways I can approach that one individual student." However, Jessie felt her "confidence was shaken" when she first encountered young students with diverse learning needs, because she "didn't quite know how to approach that situation and it was like every single day was a struggle with that student". She made the distinction that she was "book smart" as a preservice teacher,

whereas now, she felt she was "street smart", knowing how unique each learner is and having different techniques she has used in real life.

These comments highlighted how the experience of discrepancy between theory and reality impacted Jessie's confidence. Having theoretical knowledge straight out of her teacher education program gave her the confidence, but then her confidence took a hit when she realized what she knew was *not enough* in handling a real-life classroom. The rebuilt of confidence took time, learning how to work with each of her students and experiencing successes. Jessie concluded,

> No matter how many assignments you do, or how much you do the readings and all these studies et cetera, it's not the same as being in that classroom with that student and staring them down saying, "I have one finger up. If I add three more how many do I have?" and they can't even look at your hand and read the numbers on your hand sticking up. And I think a lot of teachers would get frustrated like I did at the beginning and now I'm learning they are trying their best, [but] there's no study that says that. Like when you do that it usually says, "they'll understand" or "it's a better approach for them." Whereas when you're in that real life situation that's not necessarily the truth. So, I think the alteration of my confidence has been that, until I actually get an established relationship with that student set in place, I'm not going to fully understand how to approach them.

She further recognized it was a new challenge every time she worked with a different child. Although it took a lot of effort and time to find out what worked and what did not with each student, Jessie found a sense of joy and satisfaction when she succeeded. This also kept Jessie motivated in continuing her career. She said, "when that one student gets it finally, even though it might be days and days, […] Once they get it and they get excited about it and that light goes off, it's the best feeling ever."

In this interview, Jessie emphasized the importance of **accumulating teaching experiences** and shared many skills and insights she has come to along the way. Her confidence was shaken at first when she realized her **teacher education program did not prepare her enough** to handle a diverse classroom. But she continued to hold **strong**

beliefs about UDL, DI, inclusion, and that **each student is unique**. She learned from **reflection, trial and errors, and working with each student closely** to expand her toolbox and discover how to apply inclusive concepts more effectively.

4.2.3   Jessie: Interview 3

After her LTO position in the previous schoolyear, Jessie diversified her experience through being a summer camp supervisor before becoming a full-time, Grade 10 teacher for media arts and religion at the third interview. During this interview, Jessie talked about what she has learned from each of her previous positions and how she used these learning to improve her skills and approach at her following teaching positions.

From her LTO, where she primarily supplied in elementary school, Jessie got more exposure to diverse learners, developed inclusive strategies, and learned how to deal with unexpected situations when working in diverse classrooms. She said,

> 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. [… Seeing] lesson plans, how teachers broke it down for me as a supply of how to approach each student during a laid-out lesson that they gave me, and I got really great ideas from talking to educational assistants and SERTs (resource teachers) around the school while I was supplying. [For example,] "oh, I had this issue with this student today – what does the teacher usually do, or how does the teacher usually handle this?" I think that really helped to influence my instruction going forward.

Jessie then explained she was a supervisor at STEAM summer camps, focused on topics such as video game design and junior robotics for children who might not fit in at sports camps typically offered in the summer. As a result, the camps attracted many campers with high needs (such as children with ASD) to return weekly. It gave Jessie the opportunity to adjust her work with individual campers and practice adapting to individual needs on the spot, through reflecting on issues such as, "what worked last week with that camper is not working quite as well this week" or building on previous knowledge like, "this camper interacts better with campers he can lead."

As the supervisor who was the only certified teacher and had much more experience than her fellow staff, Jessie made use of her previous classroom experiences and passed on her knowledge to younger instructors. For instance, Jessie taught instructors how to handle situations with students "who might have educational assistance at schools but they don't have it at camp," how to do classroom management, communicate with parents, and learn information on the fly – such as learning about 60 new campers every Monday morning. One very important skill she transferred from teaching in the classrooms to camps was how to communicate with the children when they were experiencing heightened emotions:

> I have students with autism and that were nonverbal, so I really learned from that placement how to communicate in other ways as opposed to words. It was like how to calm a student. I took that from associate teachers from practicum, how they took a student and removed them from a situation and calmed them down, just had them taking deep breaths. I find that's the first thing I always tell student, like, 'Take a breath. This isn't like a mountain, it's a little mole hill – let's take a breath and we'll talk through it, we'll get through it together,' but I'm not going to get through to them without them being calm. And I think a lot of my instructors during camp, they saw a student upset, and they went up to them and if the student didn't want to talk, then they kind of thought they weren't doing something properly.

Interestingly, this supervision experience gave Jessie a moment to reflect on her skills and added to how she perceived her self-efficacy as a teacher. She said,

> When I guided [the younger instructors] through the situation, I learned more about myself. […] Every time I [participate in] studies and they ask me a question of "how prepared do you feel about handling students with disabilities?", I always felt I didn't know as much as I wanted to know and now, after those experiences, I'm like – perhaps I actually do know how to handle these situations better than I think I do.

Then, in her current full-time position, she taught a media arts class, which was an open class in high school. This meant she got a wide range of different needs and abilities in her classroom – from students who were gifted to students "who have communication delays and disabilities that are very difficult to navigate around the computer." Jessie still found that "every day is a new learning experience" because all students were unique. She elaborated,

> I think the more experience you have with those different types of students, I feel like you think you know how to handle those situations. You've seen them on an IEP and you think, "Oh, it's a communication disability. I know exactly what to do here – you give extra time, you lead in different ways." But at the same time, I have two students with almost the same IEP and they approach lessons and tutorials completely different. I could say things in 50 different ways, and it will get through to one and it won't get through to the other. So, I've really learned that every student needs to be treated as an individual.

She added that even for the same student, "one interaction may be different from the interaction the day before with that student." Jessie found this experience of having to constantly adapt to each student's needs helped her to get more prepared for diverse learning needs in each classroom. To Jessie, each of her opportunity to work with a new student enriched her toolbox of inclusive instructional practices, as she learned to be creative and tried different strategies with different students or even the same child. Jessie also discovered other strategies she found to benefit all learners, such as providing a collaborative environment and scaffolding.

Drawing upon her own learning needs as a student and her perceived responsibilities as a teacher, Jessie came up with her unique style of lesson planning and providing instruction to the class. For example, Jessie would complete a project herself before she assigned it to her students to make sure it was feasible. She would also attempt it multiple times so she knew the material thoroughly and could communicate the instruction in different ways. Another strategy came from what she had mentioned in previous interviews, that she was a "kinesthetic and visual learner". It has been helpful

that she and her teaching partner had different learning styles "because we can break down a lesson so much that we're providing all of these different outlets for students to learn through." They would include various formats of instruction including video, PDF, and in-class tutorials; they also created tutorials that are more broken down as well as more advanced tutorials for students who might finish a task early. As she pondered on how to prepare for teaching Grade 9 religion in the upcoming semester, she said,

> In order to engage them, you need to think about what they're all listening to and talking about and watching. I think that's really important and I think that some teachers forget that the students have their own interests, and that's not always just the course material that's in front of them.

Finally, Jessie discussed her level of confidence. She stated she was "feeling more like a teacher now as opposed to like, 'I just got out of teacher's college.'" Her confidence came from supply teaching at the elementary school level, where she had to be "ready for anything and walking into a classroom and reviewing documents" and it gave her the confidence to handle anything that might come up. Jessie was learning to have confidence in the way she taught as well. She explained sometimes students might not do well on an assignment, despite her giving them the accommodation, resources, and time they need to the best of her ability and understanding of the student's needs. She would remind herself that "if I have 80% of the class that did really well on an assignment […], I need to have that confidence that I did provide that material and that lesson in the correct way."

Since Jessie has gained much more confidence and knowledge in teaching, she felt that she could invest more time in supporting her students on a personal level:

> I'm becoming more confident to handle situations like that and to know in my own ability as a teacher that I can help students succeed as much as they want to. And I've also provided extra conversations with students about future possibilities and volunteered with other teams and even guided students through other courses or [have] difficult conversations that they're nervous about having with other teachers. I've guided them through that. I don't need to be doing this, but I care so

much about these students and my job that it's given me the confidence to know I'm handling things properly.

She saw her responsibilities as a teacher beyond just *teaching* but also supporting the students in whatever ways she could.

Another unique experience that gave Jessie extra confidence was her expertise in another area. Jessie went to a school for Film and Media and was a multi-media design specialist. She incorporated the use of technology into her lessons regularly, such as using a form on Google classroom to have her students assess their own skills or allowing her students to share feedback privately on Google classroom "because some students aren't always comfortable coming up [in a physical classroom]." She recognized it as an advantage over other experienced teachers who might not be comfortable with technologies. She felt she was "really putting my two passions together."

In the third interview, Jessie talked about using what she has learned from her **previous teaching experiences to inform her current practices**. Along with reflecting on her own learning experience and what she values in her teaching, she developed many strategies to best meet the needs of her students, such as **scaffolding and presenting instruction in multiple formats**, while also being mindful that **every person is unique** and continued to learn from working with her students each day. She gained confidence through **having more faith in her own ability** and recognizing the role of her expertise in other areas.

4.2.4   Jessie: Interview 4

Jessie continued to teach media arts at the high school level. Given that it was an open course with students of a range of abilities and diversity, Jessie maintained it was important to provide instruction and materials in ways that were accessible to diverse learners. Jessie stated that even for the same topic, she would provide PDF tutorials, video tutorials, and teacher-guided lessons. She said,

I take into account the different learning styles that students have and how I can actually meet and exceed their learning style in different ways. I find that having

them learn in their style that they prefer, it not only builds their confidence in the course but it also makes them more comfortable with me that I'm providing that access.

Her approach derived from lots of trial and errors, seeing what worked and what did not with her students.

Jessie added that other previous experiences, such as "watching how [my associate teachers] approached each situation [with diverse learners]" helped facilitate her trial and error process because she could think about whether she "liked the idea or thought this would have been a better approach" through an observer perspective. Coaching sports and supervising summer camps, where she "had a lot of interaction with kids outside of a classroom but in a camp environment, where they still need to maintain certain rules and expectations" also gave her chances to experiment with different strategies and informed her practices.

Jessie moved on to describe new ideas she has come to emphasize in her current teaching practices. The first factor was *building relationships and rapport*. Jessie made use of her interactions and dialogues with her students to inform her instructional practices. For example,

I ask students to answer anonymously and see what they are learning from best. I think that's really helped with all my practices, actually asking them instead of looking at research and looking at what colleagues have done. I just legitimately ask the students, like, "Would you rather learn this way or [that] way? What helps you the best and how is my pace? Am I speaking clearly? Would you rather I circulate after I give a few instructions or just do all the instructions?" I think that's helped to inform my practice.

She added how she approached students in the classroom now came from reflecting on her personal experience growing up and thinking back to teachers she had as a child. According to Jessie, her upbringing has "helped shift her beliefs." She said,

You could have two students sitting next to each other that are achieving the same mark, but one is emotionally drained from getting that mark versus the other one that simply can get it just because they understand the material perfectly. […] The [teachers] that I remember in a favourable way were the ones that could tell when something wasn't clicking, or they could tell when there [were] external factors affecting me in the classroom. And especially understanding that even though you might not have an IEP for a certain thing, it might be undiagnosed.

Therefore, she tried to be those teachers she remembered favourably to her students now, focusing on developing a rapport with them so they felt comfortable enough to approach her for extra help. She provided flexibility through extra work hours before and after school for the students to attend in a more private way. These insights have become Jessie's beliefs in how children learn and that "every student is an individual being and that they're not defined by their actual IEP."

This shift to building relationship not only changed Jessie's way of instructing students with diverse learning needs but also increased Jessie's confidence. She explained that in previous years, reviewing IEPs of students before meeting them gave her anxiety, thinking about how she was going to handle the needs and what the student was going to be like. This year, Jessie decided to spend the first week focusing on building rapport before reading the students' IEPs. She said,

I was so surprised that some students had IEPs because I would never have guessed. I think it gave me an unbiased opinion of that student. So that's really shifted my confidence because I think that if you read those kinds of things, then you think you already have this pre-set in your head of, 'this is how I need to approach them, this is how they may react to me' versus like I just treated them like I treat every other student.

Therefore, Jessie focused on getting to know the individual students to discover how to best meet their needs, increasing her sense of self-efficacy to teach.

The second factor Jessie has placed more emphasis on was her students' emotional wellbeing, which was something she came to value through her accumulated teaching experiences, interacting with her current students, and professional development opportunities. Jessie found that it has been beneficial to use strategies she has learned from working with her Grade 1 and Kindergarten students from two years ago, with her current students who were showing similar behaviours and emotional needs. Jessie began to converse with her students and observe her students' interactions more, which opened her eyes to the stress and pressure they face. For example, she saw "many students have such anxiety about their marks versus just going to school and enjoying being a kid" and feeling like they had to "figure out their entire lives when they are 16, 17." Using the relationship she had with her students, Jessie has been offering support to them through conversations. She added, "I think what's changed my beliefs is that the teacher can make the difference" and now she viewed supporting her students emotionally to be a part of her responsibilities as a teacher. Further, Jessie stated learning some ideas related to mental health through professional development (PD) led by the child youth counsellors at school. She felt that the PDs have "really helped to inform how I teach in my classroom" and wished there were more PDs on how to support diverse learners.

In this interview, Jessie sounded much more confident as a teacher, with the experiences of teaching students of a range of age under her belt. A particularly important experience was "supply teaching, [which] just gave me a lot of confidence walking into a classroom and basically learning in five minutes what you need to know." It increased her sense of self-competencies knowing she could handle unexpected situations with ease. She concluded, "I think all of these have helped build my confidence up. And being not only confident in my own abilities but also the material I'm teaching that students at all abilities can learn it." From Jessie's descriptions, it was not hard to recognize that she valued her experiences in teaching and interacting with her students over her teacher education program. She concluded,

> I think just becoming a better teacher and listening to your students and being in a
> classroom no matter what capacity, like volunteering or teaching, or supplying, or
> student teaching… I think that's the only thing that's going to teach you how to

be a teacher. Because I think with [teacher education programs], it's not difficult to pass, but once you get to practicums, that's where it's real life now. And if you can't handle those kinds of situations in an actual, mature, responsible way, then you might not have what it takes, because you deal with those kind of things every single day. […] When I think back on [my teacher education program], I'm like, you can read a textbook all you want but until you're in that situation, you don't really know how you're going to react.

In the last interview, Jessie used her accumulated teaching experiences and trial and error to see what works for her students, but she relied even more so on **communicating and building rapport with her students**. She has shown **much greater confidence in her competencies teaching in diverse classrooms**, especially after having gained experience working with students from preschool to high school and **finding strategies that work for her teaching style**. She acknowledged that she **did not recall much from her teacher education program**, but ideas such as differentiated instruction have been **engrained in her practices**.

4.2.5   Summary of Jessie's Development

Jessie started off with drawing primarily on her **personal life experiences** – traveling, family circumstances, her own upbringing a student – to inform her beliefs and instructional practices. She felt competent and resourceful straight out of her teacher education program. As she **accumulated experiences** teaching in different circumstances and environments, she felt her **toolbox grew but her confidence was not as strong as she first graduated**. The more experiences she had with more diverse learners, the more she felt it was difficult to have all the strategies to meet the needs of all her students.

At the same time, it was clear that Jessie continued to value **inclusive principles in her practice**, implementing strategies rooted in the concepts of UDL and DI – even though Jessie **rarely credited her teacher education program for these inclusion ideas**, especially as she progressed through her teaching career. Instead, Jessie focused on how she learned to execute these values through **practical experiences** in the classrooms as a teacher, **building relationships with her students** to find out what each person

needs based on the **belief that everyone is unique** and could learn with the appropriate support. In the end, Jessie was finally able to develop a teaching style that allowed her to integrate values from her personal life experiences (primarily, being a teacher who cares for and supports her students outside of just "learning") and although unrecognized by Jessie during the interview, the inclusive philosophy that first derived from her teacher education.

4.3   Riley

4.3.1   Riley: Interview 1

Riley specialized in Special Education and her practicum experiences were primarily within exceptional classrooms or behavioural programs at schools. In the first interview, Riley brought up two areas of experiences that contributed to her instructional practices and beliefs to teach in inclusive classrooms: her personal life experiences and her teacher education program.

A particularly unique experience to Riley was growing up with anxiety. It was not until she was diagnosed as an adult and reflected on her student experience that she realized how it impacted her learning. Riley explained,

> I didn't get diagnosed with [anxiety] until I was 25, so I went my entire education with it. It definitely affected my life in negative ways but nobody… I just thought that nobody understood that I had an issue that was causing me problems and just assumed it was a personality flaw. That's had a huge impact on how I view exceptionalities in the classroom [… and] definitely affected some of my decisions in the classroom.

Based on Riley's description, she struggled with being misunderstood when she was a child and had to inaccurately attribute her learning challenges to a part of her personality. It was not until she became an adult that she realized how much that has impacted her self-perception. This personal experience served as a reminder that her current students could very much be struggling with something she could not physically see and, if not recognized, would experience what she felt as a child. It made Riley more mindful of the

way she taught and how she viewed her students and their abilities in a diverse classroom.

Riley also described having had a lot of experience with children who presented with diverse abilities and different behavioural needs, such as encountering children with ADHD or oppositional defiant disorder (ODD) as a martial arts instructor and being a parent of two children. "Having my own kids gave me an interesting perspective on how kids develop and how different they can be," Riley said, "my stepson was diagnosed with ODD when he was younger, so I have some direct experience dealing with that and everything that comes with that." As an avid reader and researcher, Riley read a lot of articles and books to better understand how to support her stepson, which has affected how she handles and manages a classroom as well. Further, being a parent allowed her to observe other teachers through a different lens. In her words, "I've seen the difference of what one teacher to another teacher can make on a child like [my stepson]," which sparked a thought on how important her role is as a teacher.

Overall, then, Riley's personal life experiences outside of formal education provided her with a foundational understanding of diversity and the role of a teacher or another adult in a child's life. However, Riley added, "I don't know that I would say that those experiences helped with confidence as much as understanding. […] I think I was very trepidatious to work with exceptional students even though I had direct personal experience with an exceptionality." Therefore, the *exposure* to diverse learners in other roles had little impact on her confidence in teaching students with diverse needs in classrooms.

Riley followed by explaining how her practicums made her feel much more comfortable working with diverse learners because they gave her chances to "actually be in an inclusive classroom, get to know students with exceptionalities, get to know how to teach them and interact with them." She shared, "when I started, I was quite anxious to work with children that weren't the social norm, the average. So, I guess when I had those experiences already under my belt, it took the anxiety away." Teaching in diverse classrooms also meant Riley could experiment to see what worked and what did not,

experiencing successes and failures with her strategies in the real-life classroom to let her know when to move onto new strategies.

For one of Riley's practicums, where she spent three weeks in a behavioural program for students with disabilities, she described having "learned a lot very quickly from that program" and an experience that had one of the biggest influences on the way she taught. She said,

> Having that specific, dedicated experience with children with exceptionalities has really changed my perception in how I handle myself in a diverse classroom. I think I've altered my expectations. It's definitely made me consider the fact that children with exceptionalities do need to be considered somewhat separately from children who aren't diagnosed with exceptionalities, just the expectations teachers have of them and how you approach them. It's hard to think of an example, I guess that I would expect a child with – let's say a behavioral exceptionality – to react differently to my instruction and I would probably give them more… I would probably accommodate them more in my expectations with them, I would probably give them more leeway in what they do in the classroom versus a child that's of normal function. […] I felt more confident and I just felt that, it's okay that I treat one child slightly different than the other because they need that. Like just to have that understanding for myself was really, really helpful in my practicum.

In other words, Riley has learned from her practicum that rather than equality – providing every child with the same teaching based on the assumption that they would all benefit from the same support – diverse classrooms need equity – giving each child what they need to access learning and succeed in their own way. Working directly with children with diverse needs in the classroom formed her beliefs in how children learn and how she perceived her responsibilities as a teacher. The exposure to diverse learners also gave her the confidence and comfort, which impacted her attitude towards students with disabilities and her corresponding instructional practices.

On top of highlighting her practicum, Riley valued her classes, the associated work, and the faculty members in her teacher education program. As a part of her Special Education program, she completed introductory courses on special education and a lot of research and writing on different areas of disabilities. Having more knowledge in the field of special education compared to fellow teacher candidates from the regular B.Ed. program also made Riley feel more well-prepared; the expertise itself added to her sense of self-efficacy. Riley added that their teacher education program offered workshops with different guest speakers to expand their knowledge outside of learning from the faculty members.

One person that stood out as the most influential to Riley from her teacher education program was her instructor for the Special Education class, who was also her mentor for the practicum. Riley remembered that early in her practicum, she encountered a student with violent behaviour that made her felt afraid to go into the classroom. She overcame this challenge with the support of this mentor:

> I was able to go to her and talk to her through that experience and she was able to give me resources to help me. It was just, not knowing what to do and having someone to go to give me that guidance was like, all the difference in the world. […] That was probably the biggest one I had to deal with, but beyond that, there's been so many more small things that she's been so helpful for.

Her mentor not only provided practical knowledge and emotional support but also heavily influenced Riley's beliefs. According to Riley,

> She was very clear on her beliefs because she was also my special education instructor, so she was very clear that she believed in exceptional kids and she clearly had an amazing attitude about inclusivity and their capabilities and just playing to their strengths, differentiated instruction, all of these things were really clearly… She was really passionate about them and cares very much about them.

Therefore, because this mentor provided Riley with a sense of safety when she felt scared and unsure of how to handle a classroom situation, Riley developed trust in

her mentor's expertise and acquired her mentor's beliefs in the process. To add to the list of personnel who influenced her instructional practices, Riley stated, "having associate teachers that demonstrate differentiating techniques and they give you guidance towards that, I think that also helped a lot. […] Mainly just like how to differentiate for specific students and different ways of differentiating."

In the first interview, Riley discussed that while her **personal life experiences** (such as parenthood and her experience as a student) contributed to her understanding of diversity, her **confidence came mainly from working directly with diverse students** in the classroom during practicum. In the process, **her teacher education program and her mentor** supported her in developing more knowledge and foundational beliefs, which further impacted her confidence.

4.3.2   Riley: Interview 2

At the second interview, Riley was an educational assistant (EA) and worked primarily with children with disabilities at the same school repeatedly, which became the most influential experience to Riley at this stage of her career:

Working one-on-one or a smaller class setting with students that are exceptional has really given me the opportunity to get to know a lot of different exceptionalities and the wide range that exceptionalities have in behaviour and ability. I've had the opportunity to do a lot of intensive work with students in the schools that I go to, where I get literally pulled from classrooms and I get to do math work with them, I get to do some language work with them. It's intensive and it's geared directly for them. I feel like that, in addition to the caring aspect of working with these students has helped me understand a lot more about their capabilities, a lot more about their individuality and it's taken away some of the fear factor too. So just having more of that direct experience, or that one-on-one where you're really getting a whole bunch of that experience as opposed to the whole, dealing with the whole classroom on top of that.

This specialized experience, where she got to work with the same students with high needs over and over again, allowed Riley to build a relationship and get to understand each individual child more. It then translated into how she believed in children's abilities. She said, "the more I get to know students, the more I realize that sometimes people shortchange what they are able to do." She shared the experience of working with a student who had her convinced that he could not do something for weeks, but once she showed faith in him, he accomplished the task. Consequently, Riley's confidence to work with diverse learners also increased.

Other than her new and comprehensive EA experience, Riley again brought up how her personal experience as a student influenced how she viewed children's ability. For instance, growing up with anxiety had a huge influence on her education as a child. Once she was diagnosed and treated as an adult, she then able to successfully complete university and went into education. It made her realize that "it's not always about effort, it's not always about motivation, sometimes there's underlying factors." Riley then highlighted "being a parent, [which] has taught me that kids are a lot more capable than sometimes they like to let on that they are," as well as acknowledging her personality, where she described herself as trying to "aim for the kind way to teach people things. I'm a very positive discipliner. I don't really like negative consequences." These values based on her personal experiences combined to influence her beliefs about how children learn as well as how she saw her roles and responsibilities as a teacher. They subsequently influenced her instructional practices in inclusive classrooms.

Finally, Riley mentioned her education – having obtained a bachelor's degree specialized in Special Education, taking courses, and completing her practicum taught by the same professor in her teacher education program – overall has helped with the development of her instructional practices but she did not elaborate on these experiences. She added that while she has done a few professional development seminars and courses (in math, Literacy, etc.), she was disappointed that "there was almost no instruction for exceptionalities in those."

In this interview, Riley's experience as an EA gave her the chance to **work repeatedly with same students with specific learning needs**, which influenced her beliefs, confidence, and instructional practices. Some **personal values and life experiences continued to be at play**, but her teacher education program appeared to have a smaller role in impacting how Riley viewed the diverse classroom at the time of the second interview.

4.3.3   Riley: Interview 3

Riley reported she was an occasional teacher and taught at a local college during the third interview. In contrast to the second interview, Riley spent more time looking back on the importance of her teacher education program in this interview. She recalled learning from her Special Education focus courses and experiences of the alternative practicum, which "I definitely found a lot of that coloured how I am still teaching." Riley then commented that,

> Honestly, it was the experience, it was the professors, it was the teacher I was working with. They all really coupled together just to create this wonderful base of information that I had, [which] really created a bit of confidence that I've been able to build off of as I go forward.

However, there were some aspects of formal education that were insufficient to Riley. For instance, most courses in her teacher education program touched on the beliefs about how children learn in diverse classrooms, but Riley felt was "not quite as powerful as my own experiences." The AQ course she took after graduation was also not helpful in improving her skills and knowledge to work with diverse learners. Based on what Riley said, her experience in the teacher education program as a whole was crucial to giving her the basis of becoming an inclusive teacher, starting her off on the right footing for her teaching career. It was also crucial that the courses were *coupled* with practicums and opportunities to learn from experienced teachers. To further her instructional practices and confidence, though, it depended on experiences outside of formal education opportunities.

Riley then detailed being an EA for about four months in the past year and then worked one-on-one with a high school student in a school community room. The latter experience was particularly influential to Riley's beliefs and instructional practices. Riley stated that her biggest take-away was "just learning to meet kids where they're at." For instance, the student was identified as having reading comprehension skills at a Grade 3 to 4 level, but after working closely with him, she found out his comprehension skill was closer to a Grade 9 level. She also had a lot of leeway to work with just one student, so "I could pretty much take it in any direction I wanted, and I was able to help him grow a lot." Therefore, the intensive teaching experience with the one student strengthened Riley's recognition of having to learn directly from working with the diverse learners themselves, made her reconsider her understanding of children's ability, built her skills in being flexible to meet a student's needs, and allowed her to experiment with different teaching strategies – consequently building her self-efficacy.

Riley also found that her teaching experiences overall, including those outside of a typical classroom, made her feel "extremely confident teaching in diverse classrooms." She taught martial arts for many years, which gave her the comfort to work with "volatile students", which Riley reasoned have lessened her fear to teach diverse learners compared to other teachers. She then added,

> Gaining experience as a teacher was really valuable. Just putting in the time and learning about kids and learning about myself as a teacher and what I can and can't handle. [… Also,] just generally the fact that I've dealt with so many students that are such a wide variety of behaviours and exceptionalities that I don't get as worried walking into a classroom anymore because I've seen such a wide variety and dealt with such a wide variety.

Therefore, accumulating teaching experiences across contexts gave Riley the exposure to students of a range of abilities and helped her gauge a sense of her capabilities to work with diverse learners, increasing her confidence to teach in classrooms.

Similar to the previous interviews, Riley did not neglect to mention how her personal life experiences formed the basis to her beliefs. This included having children of

her own and seeing "how they learn and grow over this long period of time", learning from family members with children with ASD, and reflecting on her experience as a student growing up – from "someone who failed math in high school (because of anxiety) to someone who is teaching math in college." She said,

> It gives me an opportunity to recognize that sometimes when kids are misbehaving or kids aren't doing what they're supposed to be doing that, it's not necessarily a reflection on them as learners, but more a reflection of them in the situation they're in at the current moment. So I guess it just gives me the opportunity to consider that there's other things affecting the issue, it's not just the child. Maybe the child is overwhelmed, or maybe the child's frustrated. or maybe whatever we're doing at that particular moment is not working for them because of whatever issues they face. That's been helpful and it's been, definitely given me a higher degree of empathy.

These life experiences elicited her beliefs in students' potential (they could be achieving more than they may be able to demonstrate now) and her perceived responsibilities as a teacher (how she provided instruction matter), impacting the way she understood and interacted with her students.

Finally, Riley mentioned the importance of several people. She shared having an extremely supportive colleague in the community room and "people that were willing to teach me the best ways to handle everything." She added that sometimes it took having people she could call and just rant about her day. Riley also talked about two important mentors: her practicum professor who supported her through tough students when she first started teaching, and a high school teacher she met in the past year whom she could have discussions about meeting the students where they are at and how to build a social-emotional connection with children who were under family stress. Consistent with what Riley described in the previous interviews, her mentors appeared to not only teach her practical knowledge but also contributed to how she built her belief system. From the new mentor, Riley specifically learned about the importance of building connection with the children they worked with. Riley also made use of online professional development

groups to make friends in the same field and for bouncing off ideas when she felt stuck, as well as online search engines including Google and the ERIC database to increase her knowledge.

Overall, at the third interview, Riley referred to her **teacher education program as providing her with the basis** to becoming an inclusive teacher. Yet, **accumulating teaching experiences** was the biggest contributor to her beliefs, confidence, and instructional practices. Her **personal life experiences** added to her **beliefs about how children learn and her responsibilities as a teacher**, while **other colleagues and mentors** promoted the development of her beliefs and continued learning.

4.3.4   Riley: Interview 4

In the last interview, Riley revisited most of her previously mentioned experiences with more in-depth reflections – including her teacher education program, her EA and one-on-one teaching experience after graduation, and her personal life experiences.

Starting with her teacher education program, she recalled taking four to five Special Education courses that covered a broad range of disabilities, "what they looked like, what it means for learning, and how to include them in a classroom, we did a lot of that." Additionally, Riley talked about her practicum experience in an alternative/ behavioural classroom, where she observed students with high learning needs but also showed violent and self-harm behaviours. Thinking back, she commented on ineffective and effective components of her teacher education program:

> I found that [my teacher education program] did prepare me in what to expect in that, students can be unpredictable and that sort of thing, but I don't think it really prepared me for the level and intensity that some student experience exceptionalities. I specifically remember watching a video of a boy with Down Syndrome integrating into a classroom for the first time and it was really warm and sweet and that's just not the reality of the situation that I had with diverse

learners in this particular program anyway. So, it was a little rosier in the
classroom than it was in reality."

Therefore, Riley acknowledged that there was a gap between what was taught and the
reality of diverse classrooms – the teacher education program did not prepare her *enough*
to be a competent and confident inclusive teacher.

On the contrary, she indicated, "honestly, that training really has infiltrated every
aspect of my teaching." She has been teaching math in college where many of her
students were ESL or have diverse learning needs without accommodations in place, so
she has been using a range of strategies she has learned from her teacher education
program to support these students. For example, she said,

> Things that go back to the universal design for learning, like teaching the whole
> class to highlight key terms in the math question, allowing student choice with an
> assignment, or putting formulas up on the board at the start of a lesson and
> leaving them there. […] And I will put the main points on the board specifically
> for students that may have an exceptionality like ASD or ADHD, where they need
> something to refer to and still give out notes, explicitly teach learning strategies
> like keywords.

Here, Riley highlighted how she continued to implement knowledge from her teacher
education program because those strategies became commonsensical and habitual
practices to her. She further commented, "those sorts of [strategies], I think in the past
year, have really shown me that what we're doing is working, so that's increased my
confidence for sure."

Based on teaching experiences she has accumulated up to this point, Riley shared
other ideas she deemed crucial to teaching in diverse classrooms. This included physical
supports like EAs in the room and a lower student-teacher ratio, and "the teacher, their
beliefs in inclusivity and their willingness to follow IEP plans and to differentiate their
instruction to fit different learners." While she commented the teacher education program
was insufficient in preparing her for the reality of a classroom, her program has certainly

infiltrated her inclusive practices – from the strategies she continued to employ to meet the needs of diverse learners to how she valued the inclusive philosophy in classrooms.

Moving on, Riley remembered her first year of teaching after graduation, where she became an EA for half a year, followed by working with a high school student one-on-one for another half a year. She gained exposure to different student populations overall, but the experience with the one student really deepened her understanding of how to meet the learning needs of individuals in that school year. Riley created the program for this student using student-led learning, meaning she would let the student decide what areas they were going to work on, and she would look for a curriculum that matched his interests or what he wanted to do. She added this student had ADHD, so she incorporated rewards, frequent breaks, and techniques that allowed him to lead the learning. From this experience, Riley has continued to value student choice while incorporating UDL as much as she can in her classrooms. In summary, Riley said,

> Essentially, jumping into special education right away with both feet was really helpful for me. And I did that really purposefully because I knew it was going to be a challenge, so I wanted to experience it and gain experience right away and then, of course, working as an EA was also a really powerful experience because you're working directly one-on-one with students with exceptionalities, learning about them, working with them every day.

Following, Riley addressed her personal life experiences again as a strong contributor to her beliefs and how she interacted with her students. Riley recollected doing poorly in high school due to her anxiety and family situation. She stated that from failing math class to becoming a math teacher, the "experience was really powerful in showing me that student performance is not always a predictor of understanding or ability. Sometimes student performance is literally just based on circumstances of the student or something that we don't know about." As a teacher, Riley has become mindful of when a student was struggling, offered second chances, encouraged students to advocate for themselves, stayed flexible in due dates and the curriculum, and "I think mostly, I just don't take behaviours of students personal." Overall, Riley's personal

experience as a student – having *invisible* struggles – continued to impact how she perceived her students (their performances might not reflect their capabilities) and her responsibilities as a teacher (how she tried to accommodate different students to the best of her abilities).

Adding to her personal experiences was raising her son who was diagnosed with anxiety and ASD in the past year, which has "really changed how I view students and children – [and] people in general." She described it as "a really fast learning curve about what autism looks like, what that means, what that can present as, [and] how to help it." Riley detailed that her son was struggling with violent outbursts at school prior to being diagnosed and working with an in-home counsellor to address his anxiety. Riley learned that "the best way to help a student is to stop the behaviour before it happens and not hold behaviours that they can't control over them as something they've done poorly"; She also started letting his son take the lead with parameters. Riley transferred these skills into her classrooms and they changed her perception of "bad behaviours". She stated,

> When I'm working with a student that's having an outburst, or having a meltdown, I don't take it personally and I don't think that student is bad. I think that student's lost control. That [re]framing has definitely been helpful because it helps the student come out of the meltdown quicker and it helps us move on from it a lot faster.

Riley further shared taking part in a social skills group for children with ASD she found effective. In the group, the parents got to observe two instructors interacting with five children with ASD while a third instructor discussed what they were seeing, why it was happening and how to support it. The group followed with direct strategies, like how to teach children to label their feelings or level of anxiety, for the parents to work on with the children at home. This example shed light on the needs for formal education to include components of direct practice and getting feedback from experienced instructors. Riley elaborated that the workshops have given her extra tools or words she was lacking or reaffirmed ideas that she felt she knew. For example,

I definitely felt a lot of pressure from educators when students were acting poorly,
to punish those students, or put them in time-out, or something or take away
recess. And I'm really hesitant to do that because I find that a lot of the times that
the behaviours have nothing to do with what the student is choosing to do and
everything to do with the fact that their brain's not working. So those workshops
really reinforced for me that I'm doing the right thing regardless of what some
other educators who may or may not have more experience than I do are telling
me to do.

Overall, the experience of being a parent to a child with diverse needs changed how Riley
perceived the conditions. It prompted Riley to learn more about ASD and anxiety through
workshops, which added to how she then supported with students with behavioural
concerns in her classroom and confidence to act more in accordance with her own beliefs
when teaching in diverse classrooms.

Riley also continued to develop her skills through a workshop on how mental
health issues could impact students' learning in the classroom and pursuing a master's
degree in Educational Psychology, which gave her a deeper and richer understanding of
different learning needs. In her own time, she continued to read about how students learn
in diverse classrooms, specifically on inclusivity and positive reinforcement.

In the last interview, many of Riley's previous experiences were brought up again
with notable new insights. This included the impact of her **teacher education program**
on her instructional practices and confidence but also acknowledging the **difference
between theory and practice**; the effect of intense exposure to and working with diverse
learners through her **accumulated teaching experiences**; and the influence of her
personal life on her beliefs and the additional learning related to her son that has led to
an increase in confidence and adjustment to teaching strategies.

4.3.5   Summary of Riley's Development

Riley had a unique career path and came to new insights at every one of her
interviews. First, her specialization in the **teacher education program** – Special

Education – has critically influenced her knowledge of diversity and opened the doors to her experiencing teaching a population with more specific learning needs. She had **a mentor who strongly valued inclusion**, which continued to influence her practices. She also jumped right into **working one-on-one or in small groups with students with disabilities** as opposed to being in inclusive classrooms, which gave her more knowledge about and comfort working with students with diverse needs, as well as the appreciation that **everyone is unique and has different learning needs**. In some ways, the experience of working with students with disabilities actually paved the way for her to work in inclusive classrooms with more ease. She also highlighted that although the teacher education program made things *rosier* than they are in real life, the learning and **inclusive philosophy have been engrained in her practice**.

Her personal experience of growing up with anxiety, the experience of not being supported or accommodated as a learner, and later **becoming a mother to a child with ASD and anxiety** were also impactful. Her own challenges gave her the insight that **how an individual performs at school is not necessary indicative of their capabilities**. This means the student could be struggling with what happens beyond the classroom, including mental health or family circumstances and the student could thrive with the right support. Her experience with her son further prompted her to seek out more strategies and knowledge, which ended up benefitting her as a teacher as she was able to **transfer some skills and build confidence** in the process. These personal experiences deeply influenced how Riley chose to interact with and perceived her students – which also aligned with effective inclusive practices.

4.4   Ellie

4.4.1   Ellie: Interview 1

In the first interview, Ellie started with describing her personal experience as a student in elementary school. She acknowledged that, "growing up, some of my own teachers had some level of comfort in being able to include diverse learners in the classroom", but students were usually pulled out of the classroom "as opposed to keeping as many learners as possible for whatever length of time possible in the [same]

classroom." This meant although she observed some teachers practicing inclusion in the classroom, the concept and philosophy of inclusive education were not strongly promoted when she was a student in school.

As Ellie was an "advanced learner" (there was no formal gifted program at her school), she had the unique experience of being a learner with diverse needs and she talked about how different instructional methods worked for her at the time. She retold her sixth-grade experience and commented that the advanced math program was likely ineffective: "At the time it was just, 'here's a package of difficult math – we think you can do it, the six of you can go and work on this when you finish your work' kind of thing." After reflecting on this experience, she said,

> It's made me more mindful of the idea that just giving unnecessary extra work doesn't motivate learners. It doesn't really challenge them, even if we think we're doing it. It's made me really see more the value in some of the things I've seen where – for example, like what I've learned in some workshops – providing more open-ended questions so that students can come at that question from more ways and can potentially provide more answers without feeling like they're just being burdened with extra work.

Ellie also recalled an experience that was more fitting to her learning needs at the time instead:

> I do remember in elementary school being given opportunities to be a bit more creative with how I was able to show what I learned, or show my learning and I felt like I got the most out of those experiences. I think that really helped me see how valuable that can be for students and how if we are willing to be a bit more flexible as teachers and give kids the space to do things in a way that makes sense to them, that you can get a lot more powerful learning out of them. And kids take ownership of what they're learning, a lot more mentally and a lot more enthusiastically, if they're given the chance to do that.

By reflecting on her student experience, Ellie identified (a) ineffective instructional components she experienced (e.g., getting more work did not motivate/challenge her) and how she would alter those strategies with the formal education she received and (b) effective instructional practices (e.g., giving students the opportunities to demonstrate their knowledge in creative ways). These experiences overall had an impact on her beliefs about how children learn best in classrooms as well as how she viewed her role and responsibilities as a teacher – including having to be flexible and empowering students in the learning process.

Ellie further admitted that she had a different view on people's ability to learn until she had more exposure and experience with diverse learners, particularly through being an EA. "At one point, I had the belief that we all sort of learn in a similar way, but that year as an on-call EA taught me to see that [children] really do learn in a lot of different ways," she said. "So, it helped me to shift that more inflexible thinking into something that was more flexible and acknowledged the greater range of kids out there." From her seven years of volunteering at a youth custody centre, she shared that spending time with children who might be seen to be on the fringes also made her realize that while children share a lot of the same needs, they might manifest in different ways. For example, needing different instruction, a space to do what they need to do, different amount or types of encouragement, etc.

Then, Ellie talked about the influences of her experience within the teacher education program on how she currently instructed in diverse classrooms. This included learning from people, such as her mentors and cohort in the program, but more importantly, the opportunities to collaborate and exchange ideas with these individuals. From her practicums, she found that learning what her mentor teachers were doing in the classroom to include diverse learners informed her practices and having the opportunity to discuss challenges in including different learners was also helpful. Moreover, Ellie explained having a cohesive group of colleagues in her teacher education program. They collaborated and engaged in a lot of group reflections to share ideas, suggestions and experiences and Ellie felt inspired by her cohort. "I really found that the things they had to say, their ideas, gave me a lot of strength and a lot of motivation to really be able to try

to include diverse learners," she stated. While mentors provided a source of expertise she could rely on, colleagues additionally supplemented Ellie with courage and a sense of self-efficacy to work with diverse learners.

Ellie also factored in the importance of the courses from her teacher education program and later, PD opportunities from work. She highlighted the theories and concepts that contributed to her instructional practices and beliefs, such as Stuart Shanker's work on social-emotional learning. She recalled the idea that "students aren't able really to so a lot of learning unless their emotional needs are met" – and she thought this was even more so for learners with diverse needs, strongly impacting what they were able to accomplish in the classroom. Ellie called it "a holistic sense of learning," where "if we're helping students to meet their own emotional and other needs, then they're able to be in a space where they can actually take in information and work with it and learn from it."

When talking about her teacher education program, Ellie shed lights on components of the courses that were helpful and how they could be improved. For instance, she learned about UDL in one of her courses and it became a source of strategies for her, but she wished the class had explored it more. She explained,

> 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 just practice implementing different strategies and getting feedback on that. I think it would need to be a mix of both, enough 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 not just implement it, but then get feedback on it. […] I feel like in some ways that was a piece that was missing for us, was the feedback and the chance to have somebody say like, "here's where I feel like you have demonstrated what you need to for meeting the learners' diverse needs, but here's where you can grow and here's some ideas for how to maybe do that."

An example of formal education she found helpful was attending math workshops as a part of her PD, where the instructors "really made some content real for [her]." The participants were given opportunities to pretend to be students, which "made a huge difference in being able to get a sense for what the experience might be like for my own students and how I might be able to adapt things to better meet their needs."

These examples highlighted the missing bridge between theory and practice. Although Ellie benefited from learning the theories and held those learning to heart, it was difficult for her to know how to implement the ideas and how she could improve when working in the field. This was further demonstrated by how Ellie described her teaching experience and the challenges she encountered once she became a novice teacher. She said,

> Just my experience so far through teaching, after having gotten my degree, has really opened my eyes to just how diverse classrooms can be. And the challenges around managing all of that at one time and properly providing instruction that meets diverse needs. You might try sometimes but really, sometimes it's a little bit tough to 'keep all the wheels on the bus.

According to Ellie, her confidence has also decreased from spending time in the classroom because she felt "minimal success in actually implementing some of the things that [she got] excited about in terms of strategies for teaching diverse learners."

Inevitably, these barriers or discrepancies between learning and reality have added to Ellie's emotional experience as a novice teacher. Specifically, Ellie felt "a lot of fear in making mistakes", "fear of not being good enough at it," and "not successfully meeting student needs." Yet, Ellie remained hopeful – she stated that some of the formal education (from both her teacher education program and PD workshops) did make her feel that she had some tools at her disposal. She said, "the more time that I reflect on [my formal education] and the more time I spend consciously trying to make use of it, yes, it has helped me to be at least a little bit more confident."

Interestingly, Ellie also shared how media and technology played a role in increasing her confidence, as well as her beliefs about how children learn and her roles and responsibilities as a teacher. "Spending some time on websites and learning about, especially about things like UDL" was particularly crucial in helping her solidify and strengthen her learning, which consequently increased her confidence. Moreover, "the media has actually played a bit of a role in my beliefs around how kids learn and some of that is in articles I've read, but also the different videos and different things that you see online." She elaborated and said, "whether we want to admit it or not, [they] do impact us and sort of shape how we see learners, and how we see their capacity and [the] different ways that we might meet their needs."

At this first interview, part of Ellie's beliefs and instructional practices were influenced by her **personal experiences** prior to entering her teacher education program. She **relied heavily on her education and professional training after graduation**, which contributed to some beliefs, built the basis to her instructional practices, and made her feel somewhat confident. However, Ellie also recognized there was **a disconnect between theory and reality** and this gap impacted her self-efficacy, as she encountered more challenges in the classroom but experienced minimal success in handling the situations using the strategies she was taught.

4.4.2   Ellie: Interview 2

At the second interview, Ellie emphasized being a substitute teacher was an influential experience, as it gave her the opportunities to work in a variety of classrooms for short periods of time. Her knowledge to teach in diverse classrooms grew as she observed how other teachers "interact with diverse learners and the supports they are putting in place" (including adaptations or accommodations made to lesson plans for students with disabilities), taught using the lesson plans that the teacher have laid out for her to use with diverse learners, and directly asked teachers "questions about the supports or the challenges that they are giving their learners."

She was able to link these experiences back to her learning from PD and her teacher education program, particularly trying to apply the concept of UDL as often as

she could. For example, she shared a method of assessment that was implemented by a teacher she recently observed:

> The teacher had made [a test] that she very purposely did not call a test, [but called] *show what you know*. And the purpose was that they could basically show whatever it was, wherever they were at, whatever information they had learned, they could show it on this single sheet of paper that was double-sided and not too overwhelming. It had a lot of visuals on it and much less writing than you might see on a regular test. I really found that a lot more students were able to actually access the information and respond to the test as authentically as possible for where they were at. […] So again, that's something that I can take away in my toolbox of things to keep in mind.

Learning from experienced teachers was valuable – but then Ellie went on to highlight the importance of working with the diverse learners themselves. First, the most important experience that has influenced her instruction was "the experience of building relationships with students from that first moment [she] enter the room." According to Ellie, "I have had the greatest success with diverse learners when I have put the effort into building that relationship." In contrast, "if I haven't done it, if for some reason I'm off that day and I missed that, that's when I don't have the success and I find my students don't seem to have as much success either." She remembered teaching in a Grade 6 classroom and the teachers had let her know to connect with two specific students with diverse needs as early on as possible so they could feel safe. This contributed to Ellie's belief that "all children learn when they feel safe and supported", especially for children with disabilities.

She further built her beliefs in how children learn through observing and listening to the students. For example, Ellie observed that activities involving a hands-on component were more accessible to diverse learners. She also valued the students telling her what they need to learn, and she stated, "I feel like I'm slowly being confident in being able to trust myself and trust the students to know what they need." As a result of

these interactions and experiencing successes, Ellie's sense of self-efficacy in teaching diverse learners strengthened.

The experience of being in many classrooms as a substitute teacher additionally helped Ellie build her confidence overall, especially with encouragement from other teachers and positive feedback from students. Yet, at the same time, Ellie still had this "nagging feeling that I don't know enough" and "my knowledge and my experiences and understanding could be insufficient if I were to be a full-time classroom teacher", which was partly why she chose to remain a substitute teacher.

Notably, Ellie presented as reflective and someone who valued personal development. She described development in her own personal mindset in terms of understanding her role as a teacher. For instance, learning how to be flexible in her teaching: "I find that rigid thinking gets me nowhere and gets the students nowhere and times that I've been flexible, students have seemed to have greater success." Also, using "person-first language has really grounded me […], the experience of using person-first language has helped me to remember that students aren't their exceptionalities and that there's more to them than that." She kept a notebook with ideas and insights from workshops and connecting with other teachers, which allowed her to reflect and reportedly helped increase her confidence. However, she still had a lot of questions on her mind waiting to be addressed:

> I feel like I still have a lot of questions around supporting diverse learners. For example, I'm curious about just the way I can engage in differentiation. How do I properly report student's learning especially when the program has been adapted or modified? How best to instruct EAs and support those EAs in the room? How much support to give different students, what about those students who are nonverbal or on completely modified programs? What are the best practices for individual education plans? How to support other specific exceptionalities, so like autism or specific learning disorders?

During this second interview, Ellie viewed her experience as a substitute teacher as crucial. This included building her toolbox of strategies from **observing experienced**

teachers and **learning directly from working with the students themselves**. She noticed the most successes when she put effort into to **building a relationship with her students**. While confidence increased overall, Ellie still had some self-doubts in her competencies to be an autonomous classroom teacher, with outstanding questions related to how to implement effective inclusive practices.

4.4.3   Ellie: Interview 3

Ellie identified a range of experiences that informed her instructional practices and beliefs in her third interview. This included "reading on my own time, talking with colleagues, paying attention to my own students' strengths, their challenges and their needs" and "workshops with math experts like Carol Fullerton and others, where I've had a chance to hear about different strategies, different systems to potentially use in a classroom, just different ways of thinking about diverse learning needs."

It was particularly notable that Ellie continued to highly value her formal education at this time of her career – but again, recognizing the challenges to the practical application of theories. Ellie maintained her practice of keeping a notebook of key learning from her teacher education program and PD that she felt might be useful to her in the future. She shared that "retuning to [her notebook] as much as I can does seem to make a big difference, in terms of actually implementing and using some of those strategies that I learned about." However, while she recognized UDL as a great concept and has been "able to occasionally implement pieces of that in my practice, the reality also being that talking about it is so much easier than actually doing it." According to Ellie, many of her colleagues shared similar thoughts and feelings about implementing UDL. She added, "I think they would work lovely if we could actually devote what needs to be devoted to them, time and energy and money, all of that stuff" – which highlighted some of the barriers to implementing inclusive strategies.

A new challenge Ellie has encountered as a full-time, Kindergarten/Grade 1 teacher was having to spend more time and energy in managing behaviours and teaching social-emotional skills in the classroom. Her class included a mix of students who have intensive behaviour designations, academic difficulties, giftedness, and children who

were impacted by trauma and/or difficult family circumstances. She shared using a trauma-informed practice as best as she could, stating that "it's almost more important that I help them to be able to function and to regulate and to be calm and all of these things before any of the other ways of differentiating my teaching would actually matter." As much as Ellie understood how trauma and life circumstances could impede her students' ability to learn, she perceived this focus on *social-emotional needs* as taking time away from her to meet the *learning needs* of diverse learners. She said, for instance,

> I'm constantly aware that my most proficient students right now aren't getting the challenge that they need, and my struggling ones aren't getting the support that they need. I would love to be able to provide more differentiation and give them what they deserve, but that does require a great deal of time and effort and in-the-moment management.

In alignment with Ellie's previous interview, she highlighted her belief in building relationships with students as a major determining factor in how successful the strategies she implemented would be. This insight derived from her own experience of developing rapport with students in the classrooms, hearing colleagues talk about their experience in building relationships, and listening to friends and family talk about their connections with their teachers. Yet, as Ellie's school worked on implementing a mandatory assessment system for all Kindergarten students, Ellie found that she had less time and energy to build relationships with her students. She identified not being able to "build the depth of relationships that [she] would have hoped to be able to build" has actually negatively impacted her confidence and ability to teach in a diverse classroom. Therefore, changes being implemented on a systematic level at the school could add stress to teachers and take away time and energy from the teachers to focus on instructing and managing the classroom.

With new challenges, Ellie developed several new skills. For example, Ellie indicated trial and error based on her current classroom experience has enriched her toolbox of instructional practices. She has tried to include strategies that "seem to benefit the majority of the students" regardless of their capabilities, such as movements, hands-

on learning, and music. Since many of her students required individual instruction and attention, Ellie also implemented systems that allowed other students to be independent – like bin rotations and math games – so she could connect with the students with more specialized needs.

Another crucial skill that Ellie built was "finding ways to advocate for myself as a teacher and my classroom and my students individually". She went to the principal and indicated the need for more support in the classroom, otherwise all the attention went to the individuals with high needs. Ellie also reached out to other personnel for support, such as connecting with the youth care worker and resource worker regularly to discuss "how best to support [specific students in the classroom with designations], what's working, what's not working, what do we need to change, what do we need to try and that has made a big difference." Further, it was not just a matter of developing knowledge and strategies together, but it helped "having people, feeling like people also understand what's going on and not feeling quite as isolated in the struggle." For instance, "conversations with colleagues who have been very encouraging, who offer suggestions, or who have acknowledged my efforts" continued to boost her confidence.

Creating students' IEP and the discussions with colleagues in the process additionally contributed to her beliefs of how children learn:

Reflecting on the students' specific needs and then how best to meet them in writing these individualized education plans, has really helped to shape my own sense of how children might be able to learn – how these particular kiddos might be able to best learn in a diverse classroom.

Then, Ellie pointed out how reality differed from what she had imagined when it came to designing the IEPs. "In some senses, it's a much more simplistic document than I envisioned it might be," she said, "but at the same time, there would be no way for me to practically implement more complex IEPs [since] I've got three of them already going on in the same classroom."

In terms of confidence, Ellie described her sense of "being able to make things work with what I've got in that moment" has increased but she was also "surviving [her] first contract at this point". Again, it related to having a *reality check* and how the real-life classroom differed from theoretical concepts and how she was not able to *fulfill* her perceived responsibilities as a teacher. She shared,

> If I had a classroom full of students who could regulate on their own and weren't dealing with being torn away from their families and all of the other things that are going on in their lives, maybe I would feel more confident about actually implementing some of the things that I've learned about and that I believe would make a difference. But I guess I feel like now I'm more aware than ever that I'm not meeting their needs and I'm never going to be able to meet all of them no matter how hard I try, even though it sounds like an excuse, but it's just the reality that I'm facing. And I recognize it isn't a reason to quit trying and that all of the students deserve my best effort, [but] the reality being that with all of the different needs that they have, I'm never actually going to be able to meet them all. […] When you're in a workshop, 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 then I think, "gosh, this is just not… 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.

Ellie, however, remained positive and said that even though there was not a lot of confidence about her ability to do anything, she was confident that she could attempt to "put my best foot forward and do the best I can."

In some ways, the conversations reflected how Ellie had a strong belief in the theoretical concepts she learned through formal education (PD and teacher education program) and wished to make the most out of them, but the reality of how difficult it was to implement the ideas made it disheartening for Ellie. She began to recognize that even

with her best effort, she might not be able to accommodate all students in her classroom. Ellie stated,

> I wish I could spend more time reflecting on those experiences with students right now and what I can see that they need, or challenges that I see that they're having that I know I need to address, but, there's just so much time and energy and everything that gets dedicated to just managing what's going on in the moment and trying to set up socio-emotional learning opportunities, to be able to help them regulate.

If there was one thing that could help, Ellie believed it would be having a full-time EA to provide more supervision and to help co-regulate the classroom, which meant she would be able to better provide the opportunities that each student deserved.

In the third interview, Ellie discussed more thoroughly the **difficulty in applying theoretical concepts and ideas in the real-world classroom**. She presented as an avid learner and had a will to become an effective inclusive teacher – but the **lack of time, energy, and resources, as well as unexpected challenges** like having to focus on students' social-emotional needs before learning needs in the classroom – presented as barriers to implement what she had learned.

4.4.4   Ellie: Interview 4

Ellie again discussed the influence of her formal education at her last interview. While she still described the district-wide PD opportunities as beneficial, her recollection and impression of her teacher education program has changed. She found the theoretical ideas from her teacher education program less impactful on her instructional practices because she has accumulated more meaningful teaching experiences. She recalled a particular course was *insufficient* and *limited* in realizing the experiences of certain people. For example, her professor had claimed that they would not be teaching students who were homeless but some people in her cohort were teaching "student living in a vehicle" at the time. Ellie commented,

It was just not the kind of educational experience that we were hoping to have in terms of learning about meeting students' needs. I get that it's probably difficult to deliver a course like that, but having been to some other workshops and things since then that have been more useful, I think it would have been possible to have something that was more widely beneficial.

Ellie elaborated on other theoretical concepts she has learned in her teacher education program and what she thought of them at this stage of her career, after attempting to implement them over the past few years. For example, Ellie learned about UDL in university and believed it was a great concept. Sometimes it could be successfully applied and put into practice, but she commented she was not sure if "it always accounts for some of the other needs in the room, like the other challenges that students face, [which] often make it challenging to properly implement UDL." Another idea was *having multiple access points for any given lesson*. Again, Ellie thought it was valuable but tricky to implement, especially for early primary students. The most success she has had was creating literacy and numeracy bins, so she could tailor some of the tasks to what a specific student needed. Ellie added,

When I have been successful in practicing UDL, I do see that all students have benefitted and have been able to successfully engage with the material at hand, [but] I don't feel like that happens very often, truthfully. […] I've yet to be incredibly successful at making it happen and I just see there being sometimes an ideal around it, that doesn't quite match with the realities of the classroom that you're teaching in.

Overall, Ellie still believed in the value of some of these concepts she had learned from her teacher education program around inclusive strategies and has experienced some successes with them. Yet, for the most part, Ellie have accepted that the theories were easier said than done – she became much more skeptical of the feasibility of implementing these concepts across her teaching practices.

Although Ellie became a much more seasoned teacher at this point, she found her confidence "shifts and changes." She continued to make use of "reflection or

introspection about what it is that I'm doing or not doing or wish I was doing" to think about her instructional practices, but these reflections also appeared to impact her sense of self-efficacy.

> I definitely don't feel that I'm as confident as my students deserve. I, in some ways, say feel slightly more confident than I did coming straight out of university. Only in that I have a little bit more experience now, having worked as a substitute teacher and having a year and a little bit in the classroom, which is not a lot, but it's something. But at the same time, really starting to realize that some of the ideals that are put out there just don't necessarily match with the reality of the rooms that we're in.

On top of recognizing the discrepancies between theory and reality, her continued learning also decreased her confidence:

> I feel like, the more I know, the more that I learn through professional development or talking to other teachers, in some ways, the less successful I feel in that I haven't been implementing those things already. And while I can implement some of them, I'm not necessarily able to do all of those things.

While she identified talking to other teachers could occasionally negatively influence her self-perception of success, her colleagues often provided a crucial source of knowledge and confidence as well. Specifically, Ellie described having "collaboration time" at her school, where the teachers got together regularly to work on various projects and to discuss how to meet the needs of students with specific needs. She found it beneficial to have the chance to talk to colleagues who have spent a great deal of time with diverse learners, especially since several teachers were "quite gifted at being able to meet their students' needs in rather creative ways." Also, feeling support and "sometimes being buoyed by other teachers, like having those kind of conversations where we talk through the strategies that we're trying and having some co-workers […] appreciating the idea that I've attempted to implement or whatever" – which has helped to build her confidence.

Another strategy that Ellie continued to believe in was "talking directly with students about what they need or what they know that they need," but noted it was not as effective with younger students. Her other instructional practices came from "teaching students who struggle." For example, Ellie described having several students who had difficulty retaining knowledge about the alphabet, so "trying to figure out how to navigate that, often with the help of other teachers, has been valuable." These experiences then contributed to her current level of confidence – sometimes for the better, sometimes for the worse:

> Watching some students succeed, or manage to successfully master certain tasks or certain learning outcomes, that would make [my confidence] increase, definitely. Also, though, the students that I have failed. A lot of those students that 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 labelled 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.

In terms of other experiences that influenced her instructional practices, Ellie revisited the idea of her personal experience as a student. She said, "I do remember in school like being kind of disengaged if the topic wasn't interesting to me, but definitely more engaged and more willing to put the work in and explore something if it was meaningful to me." Therefore, Ellie concluded that "one really important component or means to maximizing students' engagement in whatever we're doing, is to provide activities that they're actually interested in or topics or tasks or whatever that are directly relevant or interesting to the students."

Finally, she highlighted how the lack of resources and funding has interfered with her instructional practices. Ellie said,

> In terms of something that's outside of my control, that's influenced the instruction I'm using would be, truthfully, not having sufficient educational assistants support to meet students' needs. […] And that's not the fault of my

school per se, but there just not being enough funding and the way the funding models work to provide students with that one-on-one support they really need, which is where I see the biggest growth, is having someone who can sit down with a student or maybe two students and work through some of the challenges that they're having.

This added to Ellie's challenges of becoming the effective inclusive teacher that she had hoped to achieve for her students.

Overall, Ellie's **perception of the practicality of implementing inclusive strategies** she learned from her teacher education program in the real-life classrooms has shifted. She continued to value those concepts but placed **more emphasis on what she learned from colleagues, working with students, and some workshops**. The description of her personal experience as a student in elementary school also returned in this interview, which appeared to be deeply rooted in influencing how Ellie viewed **children's ability** and her **core beliefs in instructional practices**. In this interview, Ellie highlighted that **the more she learned and know, the less competent she felt** as she raised the expectations she had of herself to be an efficacious inclusive teacher.

4.4.5   Summary of Ellie's Development

Ellie developed **a strong belief in inclusive philosophy through her teacher education program**. She was eager to apply the theories and concepts in her own practices – such as UDL and having multiple access points in her lessons – but **had limited knowledge of how to implement the ideas when she just graduated** from her teacher education program. To address this gap between theory and reality, Ellie relied on three components: (a) absorbing strategies that aligned with the inclusive philosophy through **observing other teachers**; (b) **learning from the diverse students themselves**, sometimes through forming relationships and sometimes through conversing and observing them; and (c) **diligently making notes** of what she has learned, comparing what worked and what did not and continuing to **reflect on her practices**. Even though Ellie expressed feeling unsure of whether implementing inclusive practices was *feasible* at the last interview – she came a long way in developing her inclusive practices and

some of the **inclusive values may be more integrated into her work than she acknowledged**. Ellie might have also felt more defeated because she set the bar extremely high for **fulfilling her envisioned roles and responsibilities as an inclusive teacher**; it would take recognition of her limits to lower her standards.

Ellie's unique experience of **being an advanced learner** played a role in her instructional practices and beliefs in inclusion as well. She believed in meeting students' interests to maximize their engagement, which was mentioned at the first and the last interviews.

4.5   Russell

4.5.1   Russell: Interview 1

Russell finished his teacher education program about three months before his first interview. He shared having a teaching contract at the time but did not specify his position. When asked about what contributed to his teaching practices at the time, Russell said, "I don't do extensive reading on the learning process or anything like that", discrediting the influence of research or formal education on his practices. Instead, Russell had a unique process of acquiring teaching strategies that he thought worked best in a classroom through three components: observations of other teachers, conversations with experienced teachers, and the hands-on experience of teaching in the classroom.

The first and foremost experience that Russell pointed out as important was observing other teachers – "the practices that they use or the lack of practices that they use – those make an impression." Through observations, Russell not only learned teaching strategies but more importantly, he identified the teachers he wanted to learn from and had additional conversations with them. Russell said, "[having] conversations with experienced teachers who I respect, whose methods I've watched and observed, and I understand," and learning about strategies they find to work or not work based on their experiences. He added learning from "an instructor from the education program because she was particularly good at what she did," and "speaking with EAs and advice from EAs" were also crucial to the development of his teaching strategies, but "not so much the conversations with colleagues." Therefore, observing how other teachers instruct was

Russell's way of discovering or exploring his teaching style; he then continued to learn from those who used strategies he identified with. Russell specifically placed an interesting emphasis on distinguishing between the *experienced teachers he respected* as opposed to just *colleagues*, where conversations with the latter was perceived as less meaningful to him.

Then, from the pool of strategies he has learned from the experienced teachers and the EAs, Russell extracted what he could implement and generalize to support most students in his classrooms. He shared,

> [I would take] one strategy that can be built into an overall structure rather than a one-off. So instead of just making a modification for this particular experiment or this particular activity, it's try setting up your lesson in this way so that it always follows this format and that's going to accommodate or that's going to help out this group of people. And once that's a habit and it serves everyone then it's in place and it doesn't have to be thought of. You almost just need it to be automated.

This process helped Russell develop the basis of his teaching style and practices quickly as a beginning teacher with limited experience in the classroom.

With a foundation in place, Russell would then test out the different strategies. He said, "when you deliver your own lesson and you think you've done it the best way, and then you go back and assess in some way, whether it was immediate or later." Russell observed how his students attended to the lessons to determine whether his practice was working or pushing past the students' limits. "I ask them to do a particular task and then if I ask [them to do more,] eventually there's a breaking point and you know," he said, "it manifests itself differently in everybody but [like] fidgeting and them getting antsy and then blowing up, or being distracted." Therefore, Russell evaluated his instructional practices through observing his students' responses. Sometime Russell chose to ask his students for direct feedback, spending time "conversing with these students in the form of assessment, like, 'Are you understanding this part?'" to determine whether his instruction was effective.

These accumulating, trial and error experiences increased Russell's confidence slightly, but what limited his confidence from increasing further was not having time to prepare a lesson. He explained,

> It's a long process to prepare a lesson, never mind trying to account for two out of thirty students in a class, who are going to experience the material differently or need to have it presented differently. When you're basically scraping to get by and just get things produced for everyone, for anyone.

Therefore, Russell's approach in teaching a diverse class was to *meet the needs of as many students as he could*:

> It's basically a utilitarian approach, the greatest number and unfortunately the smaller number rarely get that kind of attention. So apart from adopting practices that serve everyone and including those few, such as keeping an agenda on the board every day which is something I do. Apart from those things that are built in and inherent in any lesson the special modifications for individual programs are really difficult. […] If it doesn't serve the rest of the class, it has less likelihood of being adopted in my opinion.

Overall, Russell took **an approach that could *maximize* the number of students he supported**. He would **observe and learn from teachers he respected** and then **test out the strategies** to benefit as many students as he could. On the one hand, this could be viewed as Russell not taking an inclusive approach in his instructional practices. On the other hand, it may be an indicator that it was **challenging for Russell to become an inclusive educator at the start of his teaching career**. Specially, Russell was likely **struggling to have the resources and to feel competent enough** to teach a class, let alone support all the students. With his limited capacities, Russell could only choose to maximize what he could do for his class.

4.5.2   Russell: Interview 2

Russell was teaching on call (TOC) and was supply teaching daily at the time of his second interview. Russell described several factors that have contributed to his

beliefs, confidence, and teaching practices, but his statement that "just time and experience – time to think about it and experience living it and time to reflect on that" encapsulated what was the most meaningful to him at this point in his career.

Russell started with describing how he "learned from [his] own mistakes or successes". He elaborated by saying that it was the direct experiences of working with and trying an approach with a student with specific learning needs, whether "it has gone well or has not gone well at all," that influenced what he would do in the future. For example, "I've tried a few methods where I imposed a punishment or a warning and then immediately regret it or later regret it [when there is] a different way that I could have approached the situation."

Russell further valued building relationships with his students. He shared when he was teaching on call, one strategy he often resorted to was simply by greeting all the students, saying hello or good morning and "I know there's some people that have definitely felt very included because of that." This provided a connection for Russell to converse with his students and then reflect on their dialogues to deduce teaching strategies that would work for him and his students. "I occasionally will have conversations with my students and even students that aren't mine about their learning, about the activities that they do and what they find is effective," he added, "and trying to separate what is just fun from what is actually working in terms of how they learn."

To summarize, Russell's instructional practices derived from accumulating experiences in the classrooms so he could talk to his students and use trial and errors to determine what worked and what did not. In his own words,

> Just standing in the classroom, interacting with students, watching what they understand and what they struggle with and observing how much or how little time I have to engage one-on-one or even in small groups with my students. So I'm trying to identify changes I can make to my teaching style that will free up more of my time that I can have smaller conversations like that.

This was also, according to Russell, the biggest contributor to his current level of confidence. He said,

> I imagine [my confidence] increased simply because my understanding of what to expect and what to ask of students. My knowledge of that has increased a lot through this last year of experience. I have a much better idea of kind of what a baseline is and how much time I will have dedicate to activities and what I can expect the students to produce with certain constraints on time and information, or it depends on the level of the course.

In this interview, Russell expressed being very accepting of his status as a novice teacher. This allowed him to readily seek support and learn from personnel with their expertise and to continue his education through different opportunities. Russell shared that some conversations with colleagues played a role, but more importantly, "conversations with other more experienced teachers often in, not necessarily a staff room, but a setting away from students when we're just talking casually" added to his instructional practices, knowledge, and confidence. He would also bring specific situations he has encountered in the classroom to ask the experienced teachers on what they think the student might be experiencing and what they would do. He stated this was "I'm a novice teacher going to more experienced teachers for their advice."

Russell also stayed connected with his mentor teacher from his practicum, whom he described as wonderful and has continued to inspire him. Occasionally, he visited his mentor teacher in the classroom to "watch him teach and have conversations with him about his methods and that certainly influences what I'm willing to try." Further, Russell named his administration team as "a big source of advice in terms of what approaches I try" because they were experienced in working "almost exclusively with negative behaviour" and had a lot of knowledge in giving "fair discipline". Further, Russell's wife worked in inclusion in sports, so they engaged in lots of conversations at home regarding working with diverse learners, which Russell indicated "has definitely influenced the way I think and approach diversity in my classroom."

Finally, Russell highlighted learning from speakers at PDs and his own continued learning through other courses. "We've had guest speakers on anxiety and our own counselling staff has made presentations on gender diversity and inclusion, things like that. That has influenced my approaches and my thinking on the topics," Russell shared. He was additionally taking a course in Indigenous learning, where the readings and conversations have been challenging some of the ways he thought about how people learn and what they need to learn. It appeared that gaining knowledge of diversity not only in terms of ability but in other areas (such as gender and culture) has inspired Russell to reflect on his teaching style and his understanding of diverse learners more broadly.

In the second interview, Russell took information and knowledge from multiple sources to inform his practice. He used **trial and errors** in some instances, but his approach in learning continued to revolve around **observing and conversing with different people** and then **reflecting on how he could improve**. His increased experience in **working with diverse learners** and various **PD opportunities** elicited some new thoughts on how he viewed diverse students' learning and his role and responsibilities as a teacher in diverse classrooms.

4.5.3   Russell: Interview 3

At the third interview, Russell had a part-time teaching contract at an independent learning centre. He provided one-on-one support in math to a class of 12 students aged 16 to 19, where each student was progressing through the lessons at their own pace. Russell shared he enjoyed this one-on-one approach with his students; it was less predictable but also meant he had less preparation work. He only had to adjust to what the student was working on that day to come up with some practice, and then sit down and work with each student on their task. This shed light on how Russell was previously feeling overwhelmed by the responsibilities of being a classroom teacher, when he had to handle an entire class of learners with diverse abilities.

Like in the previous interview, Russell talked about the range of hands-on teaching experiences as what influenced him the most. For instance, he explained that in his TOC experience,

> I've been in a lot of different classrooms with a lot of different students. And I don't always know exactly their needs, right? I have a general approach that works sometimes when dealing with unmotivated students or behavioural issues or varying needs, when there's no EA or other person who knows their history and it's just up to me to improvise. And there's definitely a shorter timeline that I'm working on as TOC because usually I'm just there for that period that day, so I've got to work with more short-term strategies.

Particularly, Russell shared he would do so by identifying his goals for the day, what he needed the student to do or not do, and his methods of achieving those goals. Therefore, the exposure to a range of diverse learners has given Russell more knowledge and understanding of how to work with students with different needs, making him feel more competent overall to teach in a diverse classroom.

To figure out what worked, Russell continued to use trial and error, which sometimes meant he would get into situations where things did not work as imagined. Also, having "conversations with other teachers and […] just running a scenario by them and getting their advice" was useful. As a teacher TOC, Russell indicated he relied heavily on the EAs and integration support teachers (ISTs, assigned to individuals with disabilities), who had more knowledge than himself about the students he had to work with for the day. Russell said,

> These teachers tend to know the students' needs really well and having a short conversation with them about what worked and what doesn't work to elicit the desired behaviours for participation or things like that in class. They have a pretty good idea of what the motivators are for that particular student and what kind of break they need, what to expect in their engagement and productivity [that's specific to that student, not just strategies in general… they have the] expertise around the student specifically.

Here, Russell showed an increased understanding of how each student was unique with different learning needs, and how there were different ways of accommodating each child.

Russell continued to talk about learning from the students themselves in various contexts and situations. For instance, Russell was fond of having conversations with his students about how certain lessons were delivered, how they liked a certain type of activity he presented, or how they learned about certain things. This helped him assess if a strategy worked directly from the students' feedback. He also learned more about diverse learners through observations, such as watching how engaged or distracted they were at completing various classroom tasks, how they interacted in social situations, what they enjoyed doing (such as video games or on their phone), or the "match-making process" during group work. He said, specifically, "in situations where students make their own groups, watching how that can be an anxiety-inducing experience for some kids – it has affected my belief in how children learn." Therefore, Russell began paying attention to the influence of social-emotional factors on students' learning, rather than solely considering the effectiveness of his instructional strategies.

In terms of personal experiences, Russell has been taking online courses and as he had lots of negative experiences lately as a learner, the experience has shaped what he believed. For example, he found himself "not reading the instruction and just scanning for bold face. Or not really caring about what the timeline is, just wanting to know when the deadline is." This reminder of how he processed instruction as a student subsequently influenced how Russell would present information to his students.

In this interview, Russell has also come to value the inclusive philosophy in diverse classrooms more explicitly. He gained his knowledge about inclusion from two primary sources – PDs and his wife. Regarding PD, he said,

> I recently went to a professional development event on inclusive sports education, it's all about adapting our definitions of different tasks. So, if it's a jumping exercise, does the jump need to be lifting your feet off the ground or can a jump just mean an explosive action? Because if there's someone who is not in the

position to physically jump off the ground in the traditional sense, then they can still have a variant of a jump that enables them to participate. So, redefining some of those things.

As with the previous interview, Russell continued to engage in conversations with his wife, who worked in inclusion activities in sports on occasions:

We do talk, obviously, about our days and what we do at work, so I do sometimes have conversations with her about what those inclusion activities look like. I don't teach P.E. (Physical Education) but in the same way as the professional development that I attended, sometimes that stuff translates over and [they] change the way I think about planning activities and expectations.

Outside of these two sources, Russell added, "it comes up at occasional staff meetings about some forms of inclusion but there hasn't been a lot of development there." Russell ended the interview by sharing experiences he did not consider helpful at this stage of his career: materials from teacher education program, support from school staff, readings, and volunteering in the past.

In the third interview, Russell continued to rely primarily on **accumulating experiences** in working with and observing students in the classrooms and **learning from teachers or staff who have more expertise** than him. He actively engaged in lots of **reflection and continued professional development**, where the latter added to his **inclusion beliefs** and elicited some **changes to his instructional practices** to become more inclusive.

4.5.4   Russell: Interview 4

In the last interview, Russell did not specify his teaching position. Consistent with his previous interviews, Russell identified accumulating experiences and learning from people he worked with as two critical components to how he developed his inclusive practices. He said,

It's got to be the in the classroom living through things, making mistakes and then you know the biggest things is learning by experience. […] Just having taught now in diverse classrooms and including lots of different needs, just seeing what I can usually respond to and which ones they shut down and which they excel in. In some students, [you learn] the type of things that will cause them to engage a lot and usually [be] academically successful and motivated, versus the ones where they're going to draw back and not be involved or, depending on what they're dealing with, become agitated or disinterested or restless and things like that. [So], a lot of experience comes into learning how far to push, to challenge them, but not to frustrate them to the point where they're going to totally withdraw and choose to behave some other way that has nothing to do with what you're going for.

Russell relied a lot on working with other staff to improve his instructional practices. He worked closely with his EAs and resource teachers for ideas on how to improve his strategies or about how specific individuals were learning. For example, Russell would ask his EAs after class for ideas on whether they are providing the appropriate support (e.g., is where they are sitting a problem so they cannot concentrate with who is around them?) or whether his pace of teaching met the students' learning needs (did he spend too much time on certain activities or was it pushing to keep the students focused?), and then discuss how to adjust his lessons. Russell also consulted the resource teachers, whom he referred to as "another adult set of eyes to have that input." He added,

Sometimes they've seen students in other classes throughout the day, so they know something that I don't. […] They've got a little bit more information, so it helps me in the day-to-day and it helps me adjust my expectations and cater to and to try to match those needs of the students.

Russell shared that on occasions, talking with other teachers about their practices gave him ideas for his instructional practices as well. He also talked to other teachers to learn more about specific individuals. For instance, he sometimes talked to his colleagues

about "how they've dealt with a specific student, or a particular type of scenario, saying, 'hey, what do you do when this happens? Did you ever have a student who's like [that?] How do you deal with them?" He valued documentations created by other teachers in adding to how he could support his students, he said,

> I think going through the learner profiles that are put together for students with designations by the core teachers and recognizing just taking into account the recommendations that are put on those. So, if the student has a slow processing time, I know that when I talk with that student, I'm going to ask the question and I'm going to wait longer than I normally would for a response, because this student is thinking. And he's going to respond but it's not going to happen at the usual pace that is typical. I guess I adjust my expectations sometimes in terms of what I think students would or should get done.

In terms of inclusive beliefs, Russell continued to learn from his wife through about sports and inclusion. He recalled his wife sharing her insights around the language being used to describe diverse learners, such as "autistic person versus person with autism". He realized these were "really subtle differences that are important," but "unless we're educated in that area, we're not really aware of those subtleties." Regarding PD opportunities, Russell expressed that he unfortunately did not attend any that focused on diversity in the past year.

A new idea that Russell shared and emphasized was *how to find a work-life balance*, which tied into his current confidence level. Russell felt that his confidence has increased slightly because "I know that I can do it". As an example, Russell shared he was teaching a class where more than half the class had an IEP and "way too much to manage". He believed it was "more a question of classroom composition than it is of teaching techniques," but more importantly, he added,

> I've demonstrated to myself that I had a really challenging class and I made it through. I got through it, and I tried out different things and there were a lot of failures along the way, but we made it through and tried to make the experience meaningful for some of the kids with diverse needs.

At the same time, Russell acknowledged that it required a lot of time to meet the needs of everyone and he pondered on how much should he do or sacrifice his own wellbeing to accomplish that. He said,

I'm certain that I'm not doing the best job at serving all of the students – and that ties in with my struggle for work-life balance. It takes a lot of time and mental effort to make lessons universal. And I suppose because that the processes aren't automated for me. It takes extra time and extra effort and mental capacity to come up with a lesson plan or an idea and then look at it and think, is this universally designed? What could I change about that? And if it's past midnight, I don't want to put that time in. I want to go to bed. So that's how I think it's changed a little bit, maybe my confidence has gone up a bit because I've shown to myself I can make it through a class like that but I also… I don't feel like I've demonstrated that I've done an excellent job.

Russell has gained a better understanding of inclusion and developed some ideas and strategies over his past years of teaching. He was overall more confident in his abilities in being an inclusive educator, but implementing inclusive strategies remained effortful. He was perhaps experiencing some guilt as well, for feeling he was not doing the *best* that he could with the knowledge he now had to support his students. This represented Russell's beliefs about his responsibilities as an inclusive teacher, considering how much he could realistically achieve. Yet, Russell also recognized that other barriers exist, such as how the classroom was structured, an issue that was part of the bigger school system rather than skills he could improve on to encourage the implementation of inclusion.

Finding work-life balance was a major topic for Russell in the final interview. Russell described having some disappointment in knowing he was not supporting every child fully, highlighting how he now valued inclusion but also recognized he was doing the best that he could. In the classroom, Russell continued to use **trial and errors** and **collaborating with EAs and teachers** to improve his instructional practices. Outside of

the classroom, his wife remained influential in how Russell understood inclusive practices and **his role as an inclusive instructor**.

4.5.5   Summary of Russell's Development

Russell demonstrated **tremendous growth in terms of his inclusive beliefs and practices** over the four years. He started as someone with limited knowledge and confidence in being an inclusive educator, to someone who strived to be doing more for each of his students. This derived from **observing and talking to each diverse learner** he worked with, **collaborating with different teachers and staff** in diverse classrooms and **learning from professionals** who have knowledge in inclusion such as his wife and from PD opportunities. Although not explicitly discussed in the interviews, his motivation to implement inclusive strategies flourished with the understanding and **belief that each student was unique and required different support or strategies to succeed**. Additionally, his confidence increased through **experiencing successes *and* failures** in diverse classrooms.

For Russell, though, his **teacher education program and research did not contribute** to his beliefs, self-efficacy, and instructional practices at all. Russell was very much *learning on the job* when it came to learning to be an inclusive instructor – meaning he was a few years "behind" participants who benefitted from their teacher education program and perhaps why he was still struggling and feeling insufficient at the final interview. This also related to his emphasis on having to **find a balance** to maintain his own wellbeing while also supporting his students to the best of his ability.

4.6 Colette

4.6.1   Colette: Interview 1

In the first interview, Colette had graduated from her teacher education program and just been hired as a literacy and numeracy support teacher to work with the Indigenous population.

Colette first discussed the influence of her personal student experience in preschool and elementary school on her perception of inclusion in classrooms. She shared

that, when she attended preschool, inclusion was not widely promoted and children with disabilities went to a *special child development centre*. Colette's mother decided to place her in the special child development centre for one year and in a regular school for another year. She said, "because I'd been in a preschool with [children with disabilities], I was more aware of them in the elementary school. I noticed how they were integrated and a part of our school. It was a very inclusive elementary school." On top of the exposure to diverse learners as a young child, she was a diverse learner herself. She recalled going to a different school once a week as a part of the gifted program and she had mixed feelings about the experience:

> I felt like it was good that I had the opportunity, but I didn't really like being separated from everyone. The other kids made fun of me and said it was for kids that were, I don't know, different, or… I can't remember what they used, but they weren't kind to me for being separated out to that program.

This personal experience of being separated and labeled as different by her peers has formed the basis to how Colette viewed inclusion and integration, and perhaps made her "a bit more aware of using an inclusive classroom approach in my own teaching."

Relatedly, her beliefs on how children learn came from reflecting and "noticing how [she] learned as a student" as well as observing people around her in her personal life, which gave her ideas on instructional practices she would like to implement in the classroom. In particular,

> I noticed when people are engaged in hands-on activities or things that spark curiosity, [they] seem to learn better. I noticed that I need a lot of time outside and I need a lot of fresh air and exercise to keep me focused and I find that that's the same for kids. I've worked with young children as a nanny and as a caregiver of my own kids and I just find that kids are a lot more turned on and alert when they're outside and so I feel like having that outdoor time is also really important to how they can learn indoors afterwards.

Apart from adding to her beliefs and instruction, Colette credited her other life experiences – including her previous career and parenting – for increasing her confidence as a beginning teacher. Colette was a small business owner as a crop consultant, which required her to "[liaise] with lots of different people in different fields" and it built her comfort in connecting with people. Therefore, if she were to encounter difficulties, she felt that she would be confident in asking for support from her administration or other teachers or seek for the right resources for support, instead of trying to do it all on her own. Through the experience of being a parent, Colette felt she was able to know and understand a lot more about children's needs. Further, she felt confident speaking with her students' parents about parenting and how they would "co-parent the child together." Overall, these two experiences together gave her the confidence to build rapport with others.

Colette then spoke to the influence of her teacher education program. Their program only provided one course in the summer on special education and inclusive classrooms, but she felt it gave her a good idea of how she could teach an inclusive classroom, meeting the needs of those on the "ends of the spectrum" as well as those who were "in the middle". Colette recalled learning about Stuart Shanker's zones of regulation, that "kids need to be in that mellow zone to learn, and that all ties into their need for exercise, enough social time and enough time on their own so they can and [let us teach] them how to self-regulate." She added it was also about how calm the teacher was because children co-regulate with adults who were around them: "If you are calm, helping them with emotional language and problem-solve when they're having a difficult time, then it can help them get into the right mindset and [a] calm mind so that they are able to learn better." Colette reasoned that letting students spend more time outside, a strategy she previously mentioned, would make it easier for children to self-regulate. Therefore, Colette connected her learning from the courses to her personal reflection, further strengthening her beliefs about how children learn and the strategies she would like to implement in her classrooms.

Moreover, the people she met through her teacher education program were critical. Colette described her professors as the ones who "taught [her] about how kids

learn" and provided a sense of safety and support for her as she moved forward in her career. Colette further found it benefitting to collaborate with her peers in the program, stating that "I found that we learned a lot more from each other, maybe [more] than we even did from our professors." She explained,

> The information that our professors gave us sparked conversation, but the information really sunk in and made more of an impact on us when we were able to work through it in a group or discuss it or present it to each other. It was a lot more effective, so that social aspect of learning is really important.

In recognition of the importance of collaboration among teachers, Colette helped one of her professors start an online and in-person forum that provided a place for educators to exchange and build knowledge together. According to Colette, her professor was "hyper-aware of inclusiveness because she has a daughter who had anxiety and trouble making it to school." The community was thus built using an inclusive approach, such as providing in-person meetings for those who were more comfortable with face-to-face interactions but also an online Twitter feed for those who could not physically attend due to different circumstances. As a result of working with this professor, Colette became more intentional in applying inclusive principles in her practices and "more aware of how not everybody feels comfortable coming to school, and so sometimes you need to use approaches that include everyone, but maybe not necessarily in that traditional way." In preparation for teaching Indigenous students, she reflected on how to show her students support:

> [I recognized that] not all Indigenous families have had good experiences at school. […] I want them to be aware that I understand that it's not always easy to make it to school and there might be different reasons they don't and that no matter what the situation, every time they do come to school, they are welcomed, and I try and accommodate them as best as possible.

Colette valued learning from her mentor teacher, EAs, and the students themselves at her practicums as well. In her first practicum, Colette practiced planning lessons for students with varying levels of ability under the guidance of her mentor

teacher. She "tried to offer as much support as I could within the class and then also extra time at lunch period or recess" for students who struggled. For a student who was gifted, she accommodated by giving him more challenging problems or getting him to help people. She added, "I found that if he wasn't challenged, he acted out. So, I talked to him about how I could best meet his needs so that he wouldn't act out and disrupt the rest of the class from being bored." In her most recent practicum, Colette taught in a Grade 2/3 split class with several children with learning disabilities and a girl with Down syndrome. She highlighted the importance of having a mentor teacher who valued inclusion, which further encouraged her to consider inclusive practices in her lessons. Colette also appreciated working with an experienced EA as a team:

> She would let me help some of the kids that she'd been designated to help and then she would go off and work with a different group. Or she would help the girl with Down syndrome, sometimes pull her out of the class when she'd had enough time in class. I felt like we were a good team and able to work together to support the students, instead of just assigning different students for her to [oversee] and me not dealing with them at all.

From this practicum experience, "seeing that I can make lessons work for everyone really helped to improve my confidence," Colette added.

Despite feeling she has made a lot of gains from her practicums, Colette still had doubts about teaching a diverse class of younger grades. Her uncertainties came from conversing with another young teacher who taught an outdoor Kindergarten classroom and shared that parents placed their children who were developmentally behind her class. Colette concluded, if she were to teach in a "full range, intensely diverse classroom", such as a Kindergarten class before students get their designation or a high needs classroom without a lot of support, "I think I might find it a bit stressful, so that's where I'm not as confident."

In the first interview, Colette's **personal life experiences as a student, a parent, and in other careers** laid the foundation to how she approached inclusive classrooms, how she believed children learn best, and how she would handle difficult situations as she

began teaching. Colette **valued making connections and learning from people**, which was portrayed in how she described her **teacher education program courses and practicum experience**. While Colette was **overall confident in her abilities and comfortable seeking help**, she showed concerns at the idea of teaching a young grade of diverse learners when support and resources may be lacking.

4.6.2   Colette: Interview 2

Since the last interview, Colette worked as a literacy support teacher in Indigenous Education for half a year and has been *co-teaching* for another half a year in two Grade 1/2 French Immersion classrooms three days a week. At her school, co-teaching meant there was a primary mentor teacher who taught the class most days of the week (three to four days) and a secondary supporting teacher who filled in the remaining days of the week. Colette was a supporting teacher who taught once a week in one classroom and two days a week in another classroom.

Colette compared how her experience with and exposure to diverse learners differed across contexts and described what she had gained from each experience. Starting with her practicum experience, she remembered that her mentor teacher encouraged her to "have some one-on-one time with the students who had learning difficulties and the student who had Down syndrome." She added it was nice that her mentor teacher "wasn't just focused on having the teaching assistant always helping those students but getting the teaching assistant to help the rest of the class." This practicum gave Colette the opportunity to work with diverse learners under guidance and support. In the past year, Colette taught in Indigenous Education where there were a few children with fetal alcohol syndrome, so she "got to observe how they interacted with the class and what kind of supports were helpful to them."

Her most recent experience teaching in French Immersion, though, was what really enriched her learning – through working with and observing the students, testing out her instructional practices, and learning from the colleagues at her school. She explained there was limited diversity in French Immersion, but she had the opportunities to observe a student with speech challenges and others who were gifted with learning

disabilities; she has also been trying to "reach them all through my instruction." Additionally, Colette had the opportunity to implement a strategy she was fond of, which was "getting everybody outside into the forest every morning." According to Colette,

> I really like being outside and it helps me start the day calmer too when I have time in the forest, and then I just find that it's just a good place for people to bond. I've had really good bonding experiences with people in the forest and outside and so I thought it was a good place for my students too. […] I feel like it levels the playing field and lets everybody kind of get their frustrations out, and learn to play well together and then we can go on with our day from there.

Colette has received positive feedback for this strategy, sharing that "the mom of the boy with speech challenges says that he has his best days when he starts the day in the forest."

While she experienced some successes in the strategies she employed, Colette was still eager to develop more effective skills. She has been pondering on how to reach some of the Grade 1 boys in her class, particularly one who required a lot of stimulation and had a hard time concentrating. "I'm trying to figure out how to meet his needs while also keeping the classroom calm for the ones who need it, just through observation," she shared. Knowing her class had learners who required more stimulus but also those who needed a calmer and quieter environment, Colette added she would do more readings to increase her knowledge on "how to have all those needs met at the same time."

Overall, Colette described her first year instructing in French Immersion as positive and made her "somewhat confident teaching in diverse classrooms." This largely depended on her school team. First, this included her principal, who would go to her class in the mornings and "take the rest of the class for the first five minutes of the day, so I can have a check-in with the one student who has a hard time at school." Second, since Colette shared teaching responsibilities with two other mentor teachers, it gave her the opportunities to collaborate with and learn from them. "I can regularly check in with them about how to meet the needs of all the students and be able to discuss the students that I am having challenges with, or that I'm wanting to challenge," she said, "and they are a really good resource because they know their students well too." Third, Colette

added the learning support teacher would help her problem-solve and direct her to the needed resources when she experienced challenges. Finally, Colette shared she could always bring up a student at their regular school-based team meetings, where they have "the whole panel of people supporting us and giving us ideas for that student – which include a psychologist, a school counsellor, our learning support teacher, and the principal." Having the support of a strong, knowledgeable team has given Colette the comfort to seek guidance and accept challenges.

While Colette mentioned her teacher education program as influential to her instructional practices and beliefs, she did not elaborate on them. Another experience that Colette found to have contributed to her confidence was PD in her school district. For example, she participated in a book club on mathematical mindsets based on Jo Boaler's method, and she related to the ideas about reaching all children, helping them build a growth mindset and making sure they all thrive in math. She indicated feeling "a lot of support from her school distract" because there are lots of workshops available to support her.

Overall, Colette briefly mentioned the influence of her **teacher education program** and her **previous teaching experiences** as adding to her experience with diverse learners. Yet, the primary experience that played a critical role to Colette's instructional practices and confidence was **her teaching position at the time** – which allowed her to **try out strategies** that aligned with her beliefs about how students learn and to work at a school with **colleagues who were readily available to support and collaborate with her**.

4.6.3   Colette: Interview 3

In the third interview, Colette mentioned many of her experiences have contributed to her instructional practices and beliefs: what she learned about students' needs in her teacher education program, "being able to [liaise] with EAs to help support students with diverse needs" at her practicum, teaching students as a literacy support teacher, observations she made as a classroom teacher, and what she learned through her

PD days at her school board. However, Colette highlighted two particularly influential experiences – her current teaching experience and her personal student experience.

Colette continued to teach at the French Immersion school and she talked about how various components has influenced her confidence. "After the experiences of last year, I felt a lot more confident being a classroom teacher this September. I now know how to read students better and can judge how much I can ask of them throughout the day," she said. On top of interacting with her students, like in the previous interview, it was important for her to be teaching in a safe, supportive school environment:

> Because I've been a year at that school, I know that my learning support teacher, my principal and my EAs 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 […] I feel like we have a good level of trust at our school and a lot of positive energy too. I've heard of some schools where people aren't as supportive and I'm glad that I'm in a school that does provide a lot of support for their teachers and staff.

Colette commented, though, there were limitations about working at a French Immersion school that made her feel she has not had "enough experience to be very confident." She explained,

> I feel like we don't have the same diversity of learners that you would have in either an English school or a dual-track school. So, I feel like it's a little bit of an isolated situation, where the students at our school, there are some gifted students. But the ones who struggle, there's fewer of them and they don't have significant disabilities because they wouldn't be in French Immersion otherwise.

Overall, Colette's confidence at this stage of her career derived from accumulating experiences in the classroom and having a supportive school team, but she lacked confidence in working with a range of diverse abilities due to limited exposure.

Meanwhile, Colette's beliefs about inclusion and how diverse children learn and the way she instructed came primarily from her student experience and personal reflection. As she shared in the first interview, she went to a preschool for student with disabilities "because they mixed in some kids who didn't have special needs with those who did have special needs when it was segregated in [the 80s]." In addition, "going through the regular school system and learning about other kids and not that anyone was close to me, just observing other kids around me" also influenced her. Colette went on to share her opinion about inclusion:

> I'm glad that we try to integrate students as much as possible. I don't think that it was necessarily the right choice to have kids with diverse needs and abilities segregated when I was a kid. I feel like we're going in a positive direction and I feel like there's even now more support for students with diverse needs in French Immersion, where 10 years ago, they might have just asked students to leave the program who maybe didn't have enough family support, or were from a lower income and they struggled and didn't feel like the school could support them. I feel like we're working hard to support all students to stay in the program if it's the right fit for them, so I'm happy about that too.

In summary, Colette mentioned how her **previous teaching experiences** have all contributed to her inclusive practices but particularly highlighted how her **current teaching experience gave her the confidence** to teach in diverse classrooms. The confidence came from **accumulating experiences** in the classroom as well as having **a supportive school team** that she felt increasingly comfortable reaching out to for support. However, Colette still had little confidence in herself to teach a range of diverse learners due to **limited exposure**. **Her beliefs about inclusion** and how she chose to instruct in diverse classrooms rooted in her student experience as a child, **having had**

exposure to inclusion at a young age and **recognizing it as the better approach for all students**.

4.6.4   Colette: Interview 4

It was Colette's first year teaching four days a week as the primary teacher in a Kindergarten/Grade 1 French Immersion class, which she considered to be her "first own classroom" at the fourth interview. Like in the previous interviews, Colette mentioned her practicum experience and conferences have influenced her instructional practices – including "a really good [conference] about French Immersion and some of it was about reaching all learners in French Immersion." Otherwise, the experience that Colette discussed in detail was her current teaching experience.

First, she talked the importance of accumulating experiences in the classroom. According to Colette, what influenced the way she thought about how children learn in diverse classrooms was "mostly through observation and trying to teach to everyone's energy level and interests." For example, she has learned to change an activity before her students became fatigued or lost interest, so they were getting the most out of their learning. She added her new insight on *finding a right balance* in supporting her students without burning herself out. Colette said,

> There's a lot of pressure to get a lot done every day and there's a lot of different activities going on. I find that if I feel stressed about trying to tick a lot of things off the list then the kids, my students, end up lashing out and having a hard day because it's frustrating for everyone when you try to set your sights too high. But if you try and find a balance and get the right amount of things done in the day, and give them lots of support and sometimes where they can be self-directed as well, then it feels like a more successful day for everyone because they're not feeling pushed and hurried.

In fact, this spoke to her new perception of her responsibilities as a teacher. She recognized that her role was not limited to how she supported her students but also how she carried herself in the classroom; her own emotions could impact the class and the

students' learning. In other words, she was responsible for regulating and creating the *right* learning environment for her students.

Another concept highlighted was having to build relationships with students and families. Colette encountered a Grade 1 student who struggled with schoolwork and making friends, and "was getting a lot of negative attention." Through working closely with the child, she recognized the child's mother struggled with mental health issues and reasoned that he was getting a lot of negative attention at home. She tried connecting with him and giving him lots of positive reinforcement but also connecting with his mother in a positive way. By the end of the year, he was better able to form friend groups and could be proud of his academic ability to some extent. She explained these ideas came from reading Gordon Neufeld's book, which reinforced the idea that "attachment [is] so important for helping kids [who] are struggling because they have to feel attached before anything can happen most of the time."

In addition, Colette credited her unique experience of *co-teaching*, where her mentor teachers gave her strategies and confidence to support struggling students in the class:

> With this one boy who struggled, co-teaching with a very experienced teacher who didn't let anything faze her, having that teacher as a partner not stressing out about anything and taking everything in stride really helped to bolster my confidence. If I had been on my own and I was the only one worried about this one student who was struggling, then I think it would have been a lot harder. But because she was there and she knew different strategies to use and wasn't really fazed by it, that really helped me as well. And the same thing in the other classroom I was co-teaching in, there was another student who may be on the autism spectrum but isn't diagnosed yet and has really big meltdowns and for him. Same thing, the other teacher had strategies in place that she shared with me and I could use those.

Thus, it was particularly beneficial that Colette practiced under close guidance at the very beginning of her teaching career. She added that her mentor teachers had some ways of

teaching that were "more old-fashioned and still work, and some of them are a bit outdated and need to be phased out to recognize all the strengths of the students and make sure that they feel honoured and part of the class." However, as she became autonomous, she was able to reflect on all the strategies and adopted what suited her teaching style, considering her values and personal research.

Colette then elaborated on having a supportive school team, as with her previous interviews. She mentioned several personnel who helped her better understand how to work with diverse learners. This included a supportive and devoted EA "who really try to see the strengths in the children that struggle in our French Immersion programs." There was a child and youth care worker who taught the class "lessons about how to handle frustration and problems in class, [which] also helped me to learn about different strategies that students could use." Additionally, Colette noted how her principal has been very supportive and flexible. In her Grade 1/2 class, she often had a student crying under the table during her lesson because they were frustrated. During these times, the principal would help manage the class while she worked with the struggling student. Colette added that it helped to increase her confidence "because I knew that I wasn't being judged or wouldn't be penalized if my lessons didn't go perfectly and somebody ended up having a hard time – because that's just the reality of that class."

Overall, her current school and the people she worked with played in a critical role in giving her strategies, boosting her confidence, but more importantly, making her feel supported and comfortable to teach. While Colette felt more confident, she added,

> Because I work in a straight French Immersion school which has less diversity than a typical school, there is very few children with autism or high levels of special needs, so I don't feel super confident about moving to a school that would have really high needs because I don't have the experience. Although I'm sure I would have support at a school like that.

Finally, Colette named another person who continued to influence her work – one of her professors in her teacher education program. She recently encountered a difficult situation and recalled the teachings of her professor:

I was sitting down with my teaching partner last week, trying to make notes on my students in preparation for student-led conferences, which the students lead but the parents often like to check in with teachers still to see how the students are doing and, I don't know, I was feeling really tired. Partly because of my concussion (she sustained an injury from biking a month prior) and my teaching partner was feeling overwhelmed. And the list that we made of things to communicate to the parents, I found afterwards, I woke up in the night thinking how upsetting that it was so much negative things to say about these kids. And I realized that it basically all had to be thrown out and started afresh because like the professor that I had [in my teacher education program] said, she would always talk about how important those words of encouragement and like seeing kids' gifts was because that can help them grow in their journey. And I guess that's also the Indigenous Education approach too, and I did have some experience with Indigenous Education in my first year of teaching. The idea is, and for any good teacher, to see children's gifts and name them and recognize them and help them to build them.

In this last interview, Colette heavily discussed her **current teaching experience**, highlighting **the school team** and people she worked with as contributors to her beliefs, instructional practices, and confidence. She also recalled **beliefs of her professor** and it made her reflect on her teaching approach. Through reflecting on her **accumulated experiences and learning**, Colette showed how some beliefs have been reenforced in her instructional practices. Yet, Colette continued to lack confidence in teaching at other schools with more diversity because of **limited exposure** at her current school.

4.6.5   Summary of Colette's Development

Colette's experience **growing up in an inclusive environment** and her existing **beliefs about inclusion** have been crucial to how Colette **perceived her role as an inclusive educator**. Although not discussed thoroughly and not at every interview, Colette appeared to have always valued inclusion of all learners and rarely questioned what it meant. She was also more aware of how the French Immersion school she taught at had **a limited representation of diversity**. This affected her sense of confidence when

considering teaching at other schools, which may present with a wider range of diverse needs, but it did not defer her from trying her best to gain knowledge in working with diverse learners.

For Colette, **each year of her beginning teaching career was a meaningful building block** to her. At every interview, Colette focused on describing what she had learned that year – she occasionally talked about the role of her **teacher education program and PD**, but her strategies mostly came from **working with experienced people**. Her confidence also grew steadily through **accumulating experience** working with students in the classroom **under the guidance of a supportive school team, where responsibilities were scaffolded** to Colette. By the last interview, Colette built autonomy and self-efficacy. She could then reflect on all her previous experiences, identifying ideas and strategies she valued as a teacher and implementing them accordingly – such as **building relationships** with her students and families, **finding a balance** for herself and the students in the classroom, and adopting **teaching strategies that emphasize encouragement and fostering her students' strengths**.

4.7   Edna

4.7.1   Edna: Interview 1

At the first interview, Edna was in the second year of her teacher education program. She indicated she has taken the mandatory exceptionalities course and completed several practicums for her teacher education program but found that these experiences did not have much of an impact on her inclusive practices. First, Edna highlighted her professor for the exceptionalities course was a mismatch for the cohort: she was very knowledgeable but a teacher at an elementary learning centre (for students with severe disabilities), while everyone in the class was to be teaching at secondary schools. Further, Edna commented that "I really wanted to know how to write an IPP (individualized personalized program), what goes into an IPP, what are team meetings, how are adaptations used, how do I actually work with this in the classroom." Therefore, the exceptionalities class did not quite meet Edna's expectations.

Reflecting on her practicum experiences, Edna commented she just felt stressed about getting thrown into the classes and having to teach with little to no support. In fact, she found that her mentor teacher, who had 15 years of experience teaching French Immersion, was struggling just as much as her. She recalled her mentor teacher "readily admitted that as a French Immersion teacher, […] she was not used to dealing with IPP or EAL (English as an Additional Language) students. She didn't really know what to do and wasn't given a lot of guidance." While Edna described her mentor teacher as supportive, she did not gain much knowledge from her in terms of how to work with diverse learners.

In another practicum where Edna taught a Grade 9 class with two-thirds of the class being EAL learners and seven students with an IPP, Edna felt just as confused and helpless because her mentor teachers did not give her practical strategies to sufficiently support the diverse learners. According to Edna,

> I was expected to provide an individualized program for each of them, which in the end consisted of, "here's your binder of work that's more related to a Grade 6 level." […] I said to my [mentor] teacher, "this student isn't actually doing any work." [And she responded,] "well, he's sitting in the group talking to people and that's part of his IPP, so don't worry about it." It was incredibly stressful […] and there were days when I just didn't really know what to do.

In another instance, Edna shared she wrote six versions of the same test because of all the adaptations that were required for the class. When Edna asked her mentor teacher on how to approach the situation, she recalled:

> "Lowest common denominator," she just said. That's why she went to doing the binder approach, where she just had binders of works that were more at an elementary level and she would just photocopy it for her IPP students and say, "try and do the regular work that everyone else is doing and if you can't, you're allowed to go and do your binder."

This left Edna questioning how teachers should address or meet the needs of a class with multiple students who have IPPs and diverse learning needs. She commented, "I'm not really sure, it doesn't really sound like the best approach to me, [… and] I can say coming out of it, I still don't understand the program for IPP students."

In contrast, Edna talked about how her experiences prior to starting the teacher education program have impacted her beliefs on children's ability. She taught swimming lessons for over 15 years, where she had to integrate children into regular swimming classes or do private lessons. She said, "one of the things that kept me going in practicum was that I knew that everybody *can* learn but sometimes it takes a little bit longer […] and you're not going to see immediate success." She had similar experiences from tutoring a young adult on life skills and foundational academic skills at a sheltered workshop. Edna further stated this was a difficult concept for her cohort to grasp because they have yet to experience success from spending time to work with diverse learners. Considering practicum and volunteering experiences together, Edna expressed feeling very discouraged about the current school system. "Our students are much able, but they need the resources, and they need people to be able to sit with them one-on-one, help them, work with them and to understand that things are going to take longer," she said, "but it doesn't mean that they are not capable of learning."

From her practicum, Edna also found the workload *unmanageable* and the expectations for teachers *unrealistic*. She remembered a specific student who had an IPP but never caused trouble placed in a classroom with very high behavioural needs. Edna was given access to his cumulative electronic record, which captured his progress from when his IPP started and a helpful document in learning what strategies have been employed or work best in supporting him. Yet, in reality, neither her nor her mentor teacher had the time to read it; her mentor teacher admitted she relied on listening to other teachers about what worked instead. Edna also described her job as always "running around the room putting out fires" and felt sorry that she could not give this student more attention. She said,

And you feel really hopeless and helpless in that kind of situation. I had said to my [practicum] teacher afterwards and she said some days are just like that and [the student]'s used to it. And I'm just like, "why should any kid be used to it?" That is absolutely inexcusable, like here's a kid who definitely needs a one-to-one EPA (educational program assistant) to help him, at least even read work to him and maybe scribe for him and that's not even offered to him. And he's a kid that had a lot of potential [… but] I couldn't always have time to unlock that for them. I know it's in there, there's potential in every single one of my students and I want to help them succeed but I'm only one person at the end of the day. […] If this practicum taught me anything, [it was] the cold-hearted reality of being a teacher in a very mixed classroom.

Based in her experiences, Edna concluded, "I feel very confident about going into the classroom, I just don't feel confident in meeting all my students' needs." She felt unconfident because of the time pressure, the many different learning needs, and different levels of programming. Unfortunately, talking to her cohort, Edna has learned that these situations are typical – including a high absentee rate of EAL students because they cannot be sufficiently supported, having many students with learning needs but without an IPP, and not having enough EPAs in the classroom.

In the first interview, Edna was confident about her abilities to work with diverse learners because of her **experiences before attending her teacher education program**. She also developed **strong beliefs about children's ability** from her volunteering experiences. However, she felt **a lack of confidence when it came to sufficiently supporting all students** in her classroom, especially in accordance with her inclusive values. She identified it as **issues on a bigger systematic level**, where there has been a lack of adequate formal education and that even the experienced teachers and other schools were struggling.

4.7.2   Edna: Interview 2

Edna has been teaching science full-time in both English and French at a junior high school located in the rural area at the second interview. She started the interview by

saying this year has been stressful, confusing, and frustrating as she learned to navigate an inclusive classroom as a first-year teacher with minimal support.

Edna described many of her challenges in the new position. One of her first tasks was to select the adaptations for each student who required support in her science class. She struggled due to her limited understanding of which strategy would fit a student's needs. Although the vice principal picked out the adaptations for her students in the end, she felt that a lot of the strategies were not applicable to her science class. Additionally, while none of her students in the class had an IPP, she observed that several children were "performing way below grade level"; but she was also unsure because she lacked the knowledge and confidence in making that judgment. She often wondered,

> Is it just a lack of motivation to get the work done? Is it a genuine learning need? What is it that's going on? It's very difficult for me to tell and I don't necessarily have the tools to be able to tell. And I'm being told, "no, this is fine, you just have to work through it."

Moreover, Edna shared she has been fighting to get some of her students on IPPs. She recognized these children would be "extremely capable" with the appropriate support, but it has been difficult for her to advocate for these students. As a first-year teacher, Edna's comments were often dismissed and not taken seriously by her school. She was instead met with comments such as "try a little harder", "you can't understand what a student needs for an IPP", and "you just don't know what you're talking about, go back and make your lesson plan." Without the IPPs, Edna was not supposed to modify the curriculum for her students – but at the same time, she has been told to give these students modified work. This may have been an issue due to having limited resources at a school with a high ratio of high-needs students, and the experience frustrated Edna. The school's approach did not feel right in her gut, but the lack of guidance and support made it confusing for Edna to judge whether she was correct or what she should do.

Another problem that added to Edna's annoyance was that science was "seen as not being as important as English and math". Edna talked about a student with severe developmental disability who had adaptations and EPA support in his English and math

classes – but could not use the same resources in her class because they were not listed on his IPP for science. Edna struggled to balance supporting this student, attending to other students with learning needs, and monitoring the whole class for safety reasons (as they engage in science experiments). Moreover, since science was often overlooked and seen as a "high school teacher's problem", students who struggled with science often remained unidentified at younger grades. As a result, these students lacked a science vocabulary and could not describe the concepts they were learning.

Fortunately, Edna has met other teachers who were willing to collaborate. This included the literacy support teacher, who tried to align her work with what Edna was teaching in science class, making sure the students practiced the spelling of science words. Edna also frequently conversed and worked with an English teacher to support their students together. According to Edna, they have a student who enjoyed science but was unengaged in English class, so the English teacher graded the student's written science work and counted it towards his English mark. Edna added, "the one thing I am sad [about] at my school is I don't have another science teacher that I can talk to" because it would have been helpful to have someone to discuss ideas on how to make adaptations specifically in science. Other than collaborating with colleagues for strategies, Edna derived some methods from observing and experimenting. For example, she made the standing desk in her class face out to the window because "I figure if you're at a standing desk you need a little more stimulation." She also gave her students the liberty of standing up or sitting by the window in her class and many students benefited from getting to choose where they looked while learning.

Despite having some strategies from accumulating experiences, Edna still struggled with implementing inclusive practices in her classroom. She remembered taking a class in her teacher education program that gave her "a laundry list" of different types of learning disabilities, but what she wanted to learn were practical knowledge – which were never addressed. She asked,

What's a graphic organizer? How do I use this? How do I find stage readings? What is different reading level? […] Where should I expect [a student at a Grade

5 reading level] to be and where do I find those resources for students who are not at that level? […] What are some of the technologies I wish we had learned about? Like, what's Google read and write? How can I use that? How can I bring it into the classroom to the best advantage? How could I integrate that into a science class? […] That's not something I was ever taught [in my teacher education program] and I wish I'd known because I'm struggling with that now.

Edna was also interested in other learning opportunities in hopes of strengthening her skills but had little luck. She attended a PD workshop on trauma that offered limited practical information. Edna was additionally disappointed that the school board only offered professional learning communities (PLCs) in the areas of English and math. She added, "I've never had anyone come in and talk to me about what's the board's big vision of inclusive education" – which was formal education she wished she would have received when she first started teaching. In contrast, Edna shared the helpful experience of being matched with a mentor in *Inspires*, a national organization for Indigenous teachers. She remembered the mentor as someone she could talk to about what happened at school for guidance and suggestions. Overall, Edna suggested having more PD offered through the school board for beginning teachers and one-on-one mentoring would be beneficial.

In terms of confidence, Edna commented it has decreased a little compared to when she first graduated from her teacher education program. This was because she has now experienced reality without the "rose-coloured glasses" and there was no longer someone to "look over your shoulder and [say] you're not doing the right thing or try this resource here." Further, she recalled that she would get to teach what she was comfortable with at her practicums, but as a teacher, "you're moving into stuff that you're not necessarily comfortable with, so I'm having to find things for the students to do, learn how to do them, get it organized and then worry about all these adapts." It was a much bigger commitment, having to invest time in preparing these lessons.

To conclude, Edna expressed feeling despair with the school system overall. She said, "I see students who are falling through the cracks all the time […… but] there's only

so much I can do as a teacher." She recollected conversations with other teachers, who told her to just "focus on the smart ones" because when the struggling students "are going to fail anyways, so don't waste a lot of time." She was told to "don't fight the system" because it would only exhaust her, and she could risk losing her job. For Edna, these were all dissatisfying to hear but she also came to understand them as the reality she lived in. She said,

> You're taught in [teacher education programs] that everyone is going to get the best opportunity and the best advantages. [What the other teachers had said is] hard to hear but it's realistic. I don't want to sound jaded because I want all my students to do well, I just don't always think that they're being served well by the system and it makes me frustrated because I'm part of that system. At the end of the day, I have a limited number of hours in a classroom and right now as a first-year teacher, my prep goes into what are we doing tomorrow, what are we doing the next couple days. I come home at night and I'm exhausted and I'm planning for the next day, or I'm correcting work and I know that's what it's going to be like in the first couple years.

In this interview, Edna expressed a lot of **dissatisfying emotions** – feeling frustrated, annoyed, confused, and stressed. It rooted from being a part of a **school system** where the values did not align with hers, as she **believed in every child's potential** and the need to provide them with support, so she **struggled with finding a way to balance these incompatible views**. Her confidence decreased slightly due to the **lack of support and being unable to gain more knowledge of practical inclusive strategies**.

4.7.3   Edna: Interview 3

At the third interview, Edna was teaching science full-time in Grades 7 and 8 classes. She continued to experience challenges she had in the previous year, particularly with having students who were below grade level but not receiving the support they needed. "I've been having a real battle with the administration, and I've lost because I have several students who are on IPPs for English and math and are not on IPPs for

science," Edna said. She highlighted there were two specific students who were just passing the class because she "has been told [she] can't fail students." She has been giving them a lot of accommodations, such as "heavily adapted" work, opportunities to work one-on-one with learning centre teachers, and getting excused from assignments. While these supports were still insufficient, Edna believed "they would really succeed" with an IPP in place. This was because when the class was doing a hands-on project, one of these students excelled and "made an amazing device but yet couldn't explain to me how it worked." She added, "if he was on an IPP, I could say it's good enough he made the device, he demonstrates the knowledge of fluids in a technological system. But I have to evaluate him using the same outcomes as everybody else."

Edna felt very frustrated with the situation. She said,

Honestly, it's destroying the relationship that I have with these two students because legitimately they are failing my class. […] You realize how awful for some kids the system is and how much we're failing them. I can look at the two students who come to mind right away and I can honestly say, "I'm failing you… I'm doing the best I can, but I don't think the system is being very fair to you because you should be on an IPP."

Edna added she worried about how these students would do in high school since they attended a school with poor reputation, experienced minimal success, lacked confidence in their competencies, had limited skills in tracking or completing their homework, and "aren't good advocates for themselves." Based on what Edna described, she believed in her students' potential, but the school system was doing them a disservice by not providing the support they needed to succeed. While Edna's perspective on the problem was similar to what she expressed in the previous year, in this interview, Edna has shown a lot of growth in understanding the accommodations she could provide to her diverse learners and became a stronger advocate for her students.

This year, adding to the demands and stress, was having to work with parents. Edna said there was a parent who was "ready to take my head off because 'I'm mean to her son and how can I expect him to do all this work?'" She shortened the test and wrote

out step-by-step instruction on how to complete the questions, but "the student sat and circled random numbers in the question and wrote, 'I don't know and I don't care.'" With another parent, she refused to accept that her son had a learning disability when he could not complete any work and would nap through Edna's class. Edna also struggled with supporting a student with ASD and exhibited aggressive behaviours. There was limited support at school, but the parents were also not very responsive and ignored calls. She added, "we're not even sure what happened, but he was put into a group home by his parents, and […] we're still expected to provide programming for him, so it's another way that divides my time." Therefore, Edna appeared to struggle with working with parents of students who had very high needs.

Edna highlighted the lack of trained EPA support was another concern at her school. She explained some of her students required one-on-one support at all times. While the experienced EPAs were critical in supporting Edna through the day, a new EPA sometimes presented as "a hinderance". For example, Edna had to give the new EPA direct instruction to stay with the student who exhibited aggressive behaviour and monitor whether EPA was doing the task.

Another challenge happened on a larger scale, where her province has been trying to improve inclusive education by having teachers dedicate time to meet with students with learning needs individually – but at the expense of cutting down teachers' preparation time. "The theory is, we're going to help make education better by teachers spending more time with difficult or needy students," she explained, "[but] I'm like, this is not helping because it makes me more stressed out. I have less time to get the big stuff that I need to get done and it doesn't make the teachers more cheerful." In fact, Edna reported knowing two teachers who quitted and did not make it through their first year of teaching because they did not have enough preparation time. She added the idea was ineffective also because students ended up missing lessons for getting pulled out of class to meet the teachers.

Edna felt her confidence has decreased because of all these overwhelming responsibilities and barriers to implementing inclusive practices. "There is a lot going on

and to be honest, I'll be brutally frank, my inclusive kids, they don't get all of me because I just don't have time," she said. Edna also shared, "going into education, you have no idea what it's actually going to be like to have your own class". Listing out some of the responsibilities, Edna stated teachers must take charge of a whole class of students who might not be motivated or have sufficient support to understand the lessons, liaise with parents, deal with unexpected demands from administrations, complete paperwork, grade assignments, plan lessons, etc. For Edna, she needed more preparation time because she enjoyed hands-on activities, so she required "time to actually try out the labs myself and see, 'Do they work? Is this going to be easy or hard enough for my students? Will my one struggling class struggle really badly with it?" It required even more time and commitment to plan lessons given the wide range of needs in her class, having to adapt materials to make sure she met where all her students were at. It frustrated Edna that she was not doing the best for her students because of the disappointing school system, but Edna also wondered even if she had more time, "how much better could I be for [my students] without giving up all my life as well."

In this interview, though, Edna discussed new strategies she has employed to meet her students' learning needs. For instance, she has been using a trial and error approach, "just trying to differentiate as much as you can, trying different activities, trying to be hands-on, and trying to do the same thing in a million different ways that maybe something will stick." Since the science textbook was beyond her students' reading level, she instead used a website where her students could look for science-related articles based on their reading level and interests. Edna additionally downloaded resources on a website called *Teachers Pay Teachers*, particularly from a Canadian teacher who created science curriculum packages with simple reading passages.

Further, Edna has gained a lot of strengths and support from collaborating with other teachers. Edna talked about sharing similar perspectives as another science teacher; they had frequent discussions, such as about how science is not being recognized as a core subject and the large gaps in students' knowledge in science when they get to high school. Edna also worked closely with the math teacher, who has encountered challenges working with the same students in Edna's science class. Together, they tried different

formats of teaching and exchanged ideas on how the strategies worked. Edna described the math teacher as someone who was open to trying new things, often looking for activities she found fun to use with her class; this encouraged Edna to also use a hands-on approach and to have more fun with her students during lessons. Edna said, "I think we support and motivate each other."

In summary, Edna's difficulties came from a mix of different factors: **the school system, a high ratio of students with disabilities, having minimal understanding from parents, and the lack of resources, time, and support**. It frustrated Edna that she has not been able to support her students to her full capacity, but she also wondered how much more she could do to help. Despite facing many barriers, Edna has learned to make the most of what she had – relying **on online resources, collaborating with other teachers,** and **trying out different strategies** with her students in the classroom.

4.7.4   Edna: Interview 4

At the last interview, Edna has moved to teaching at one of the largest high schools in her city, with over 1500 students. She described her experience as eye-opening but also having to "start all over again" because the larger school dealt with inclusion and diverse learners very differently. First, she found the new school to be much more organized and knowledgeable when it came to understanding what learning level their students were at. There was less reluctance to put students on IPPs and a lot more students received the support they needed, which were some of the nicest changes to Edna.

She was also teaching new courses – Grade 10 science and Grade 11 biology. Edna stated this year has been "a very steep learning curve" not only because of teaching different grade levels but also the differences in her students' capabilities. She described her Grade 11 students to be "working at a very basic level" – colouring and making labels for a poster with various system of the human body. In this class, she had two students with very different needs, but she found herself "neglecting them at times because they both have very capable EPAs." Working with her Grade 10 academic classes was much more stressful because they were "moving at a tremendous rate that is even difficult for

[her] to keep up, with the regular curriculum [she has] never taught before." Edna would love to do more hands-on learning but there was no time for experiments, given the fast pace of the course.

While there was much more support in place for the students compared to her previous school, Edna found that she was still struggling to support all of her students. At the beginning of the school year, all the teachers got together to write IPP goals – something that Edna has never done. She had "no idea where to even begin", and it was the hardest thing because she has never even met the students and did not know their abilities. While other teachers offered a lot of guidance and shared goals they had written in the past, Edna found that it just boiled down to using a binder of worksheets for students with IPP – which she imagined to be frustrating for her students because the worksheets did not actually meet their learning needs. She said, it's "sort of the idea [that] just give them some more worksheets [and] they'll be fine. And I don't like that because that's not helping them."

As another example, Edna shared she was asked by her vice principal to create a binder of work for her at-risk students, who missed two months of class, so they could pass the course. Again, she expressed feeling very frustrated, "over-stretched and tired". Preparing adequate lessons for her academic classes already took up most of her time and she felt the time should be spent creating more interesting lesson plans for her three students on IPPs instead. She said, "I don't know if I'm serving those three students very well or how they can be served." From Edna's previous interviews, it was evident that she strongly believed in putting her students on IPPs would make the difference for her students in their learning. Perhaps it disappointed Edna that, even with the IPPs, she still could not prioritize those students and meet their needs as she had envisioned.

Thinking about inclusion, Edna had some conflicting ideas. She stated, "I really still do believe that every student has a right to be in a classroom. I really do strongly believe in inclusion [… and] I see the benefits." For example, she has witnessed supportive friendships in her class between students with and without IPPs. She believed having students with disabilities "contributed a lot to my classroom in terms of making

my other students wait, be patient, be understanding, [and] working in a group." At the same time, Edna also saw students who were "largely ignored and looked at as an oddity", whose confidence took a hit because they struggled academically in an inclusive classroom, or other students getting frustrated when the teacher paused the lesson to attend to a student with specific needs. She questioned whether inclusive classrooms were truly meeting the needs of diverse learners and being fair to students with disabilities. She said,

> I just don't know how we can make [inclusion] work. […] I can't focus on my IPP students. Yes, it's the needs of many outweigh the needs of one, but that's not fair. Everyone deserves an equal opportunity to education including my IPP students. They shouldn't have to not get the same level of attention that I give to everybody else just because they can't learn as quickly, or as well. That's just not fair. […] I think that every kid has a right to and equal access to opportunity to education. It doesn't have to look the same for every kid, but they still should have that opportunity.

Edna found it especially disappointing that her province talked about making changes and being more inclusive, but nothing happened. Relatedly, when speaking about her confidence level, Edna said, "I do feel confident, but I feel discouraged. Because I don't think that I'm doing the best for [my students], but I also don't know how to make it better." Since Edna believed that a system change need to happen, she pondered on "where do I want to go from here."

In this final interview, Edna drew some big conclusion on her **disappointment in the school system and the implementation of inclusion**. She once believed that providing her students with IPPs would be the answer – but being at a school with IPP support made her realize that was still insufficient, especially since she **lacked the time to tailor her lessons according to the IPPs**. Her confidence was also impacted by being **unable to meet every student's needs**, but she perceived the problem to be with the school system rather than a lack of competency. Edna added she has witnessed **the**

benefits of inclusive classrooms but also **had doubts of it "working" if the system remained unchanged**.

4.7.5   Summary of Edna's Development

Edna shared some of the strongest opinions and perspectives in her interviews. Early in her career, Edna has already developed **strong beliefs about inclusion** that rooted in her previous exchanges with diverse learners. She **believed children were capable when given the needed support** and **every student deserved having access to education**, so she advocated for her students to be on IPPs. Along the journey, **other teachers have played a role** in influencing or corroborating these existing values of hers; she felt more hopeful and motivated when she met teachers with similar values. Further, Edna **rarely had doubts in her efficacy to teach in diverse classrooms**. She attributed all the challenges she encountered and her feelings of not being able to support every student to the larger, systematic problems.

Edna was **disappointed by the school system and its implementation of inclusive practices repeatedly**. At each interview, Edna expressed her frustration, annoyance, discouragement, and stress, but each year she held onto the idea that something could change and could improve her student's learning experience – it was just not available at her school or at the time. When she finally received the support and resources that she thought was necessary to support her students at the last interview, she was shocked that it did not meet her expectations and she was disappointed that she was still **unable to align her teaching practices to her beliefs about inclusion and her responsibilities as a teacher**. Edna consequently felt lost about her next steps in her teaching career.

4.8 Helen

4.8.1   Helen: Interview 1

At the first interview, Helen was in the second year of her teacher education program. She openly addressed her feelings of discomfort and lack of confidence teaching in diverse classrooms, despite already having over a decade of experience

working with people of a wide range of abilities from various settings (including volunteering in the community and supply teaching in classrooms) before entering the teacher education program.

Prior to her practicum, she felt she "wasn't really sure how to address [people with diverse needs] and how to approach them" because "the unknown" was scary. Helen identified the first key to building her comfort and confidence in working with the population was simply, exposure to the diverse learners themselves: "just being thrown into practicum and realizing, they're just people and they just want a smile and a greeting and be acknowledged." In the process, she also developed strategies and skills to teach in a diverse classroom:

> It's scary to have to experience, to get to know people with exceptionalities, [but] it makes you more comfortable and you learn… you learn tricks. Sometimes you learn from others, other staff members [or] colleagues that are with you. They pass on their wisdom. Sometimes we learn from just our own trial and errors.

Overall, the practicum experience provided Helen chances to interact with diverse learners and equipped Helen with a toolbox of practical strategies to work with diverse learners, which built her confidence in diverse classrooms.

Although practicum was helpful in building Helen's sense of competency and self-efficacy, she still found it difficult every time when she got "thrown into a new classroom with new little faces and new little characters." In these instances, she pointed to the importance of building relationships, trust, and getting to know the students she was working with. She described a specific experience where she worked with a boy in Grade 4 who refused to speak French in a French Immersion classroom. As the school year went on, Helen realized the student was embarrassed about his learning struggles. Instead of attending more to this child, she made herself available to everyone in the classroom – so the child was not singled out as the only student who required help but could also seek support when needed. "The relationship between myself as a teacher and he as [a] student grew in trust and his performance and his success developed," she then added, "just knowing the child helps to intervene in an appropriate way that works with

the child" and "it helps me be more confident." Although a significant amount of time might be required to develop a strong connection with each student and to find teaching strategies that met each person's learning needs, according to Helen, building rapport could start with something as simple as greeting and naming every child individually as they go into the classroom in the morning. She believed this action showed that she was happy to see every student and valued everyone as an individual, creating the basis to building a bond with each child.

Helen's experience with the Grade 4 student also portrayed her belief – that "everybody has potential". According to Helen, this rooted in her educational background, which consequently influenced how she approached instructing diverse learners:

> From my Special Education background, we worked with, in French, we called them *des uniques* and *des saufs* and the strengths and the limitations. And so we always said, well, you know somebody struggles in this area, maybe it was a physical challenge. Sometimes they are in a wheelchair, they can't walk so we are not going to play soccer using our feet necessarily – that's the limitation. So, what are the strengths and we focus on the strengths. How are we going to play soccer or how are we going to play a sport? So same within the classroom, you get to know your students and you say, well, what are the challenges or what are their difficulties that the student is experiencing and what are the strengths that you can choose to help [that child] succeed and achieve goals that we can work on together.

To Helen, everyone has potential because it was about playing to the strengths of each child when she taught, rather than assessing or measuring a student's ability by what they were limited by. Her belief about children's ability to learn thus informed her instructional practices. Moreover, Helen's belief was consolidated not only through her pool of experiences working with diverse learners in the community and classroom settings but also from day-to-day, personal experiences that accumulated over the years. For example, doing research, "whether it was for a university assignment or just reading

the odd article that I was reading at the doctor's office or the dentist's office, or parenting magazine, or really research that comes out regularly," has given her more knowledge related to diverse learners and contributed to her beliefs. Another important experience was being a parent. She said,

> My own children, they don't have exceptionalities per se [but] I have four very, very, very different children. [Some] may struggle in school with some things and I have one that is […] above grade level in language and math at school. You know the teachers are always trying to find things for her to keep her challenged and keep her interested. So, all these experiences combined have contributed to my beliefs and how I see children and how I see their potential and their possibilities.

During this first interview, Helen highlighted the importance of **exposure to diverse learners** and **forming relationships** in building her skills and confidence to teach in diverse classrooms. Meanwhile, **her beliefs in children's potential** derived from her **formal education**, **accumulating teaching experiences, and experiencing successes** with diverse learners in various settings and her personal experience – such as **being a parent** and **personal research**.

4.8.2   Helen: Interview 2

Helen was a LTO teacher who taught daily at the time of the second interview. She shared having gained a new appreciation for "the diversity of the world we live in" in the past year. She reflected on knowledge that was passed on to her through her teacher education program, stories she heard from colleagues, and personal encounters as a parent and a family member. For instance, Helen explained as a person who "was brought up in a traditional home [with] a mother and a father," it took her some time to recognize that not everyone has the same family structure. As Helen met more diverse individuals in her personal life, it opened her eyes and she realized that "this can happen in [her] classroom as well". These new insights consequently influenced her instructional practices and beliefs about her responsibilities as a teacher, as she learned to adapt

flexibility to the needs of each student facing different situations in and outside of the classroom.

Helen's background in Special Education continued to serve as a foundation to how she viewed inclusion. She said, "I believe in diverse classrooms and integrating everybody. It's good for stronger student[s] to have weaker students in the class. They help and they role model, [… and] it builds tolerance to have a diverse group of people together." Yet, with that being said, Helen then contrasted what she had learned from her education, the *theory*, to the lived experiences of herself and others, the *reality*:

> What has contributed to my beliefs, is my own teaching experience and then stories from my children and stories from my colleagues. I guess those contribute to my beliefs, contrary to philosophies or theories that maybe taught in core classes in [teacher education programs]. You know, this is how you should do things and then you kind of think about it and then you go in a real-life situation which is the classroom and you say, that's all good on paper and that might look really nice in theory, but in reality, my belief is strongly based on the experiences I live, you know? That I have lived in real life, you know? Not just the theory part but this is what really happens. It's easy to say this is what you do in this situation, but when you are in that situation, it's much different.

In fact, her experience teaching in a classroom with high needs students who displayed extreme, aggressive behaviours (e.g., having to evacuate the classroom because a child was throwing chairs) has led Helen to question what inclusion meant. She explained,

> I'm thinking that at what point do we become inclusive and tolerant. There has to be a line somewhere that says, okay, this child needs more help, and we need to help him before we put him back in a classroom because other children here are going home stressed out […] because they know there's a chair that's going to fly at some point during the day.

Teaching experience as such not only threatened the belief she had learned and developed about inclusion through formal education but also her sense of confidence as a teacher because she felt challenged (not knowing what to do) and powerless (things are not improving despite her effort) in the situation.

To help with her confidence, Helen once again relied on building relationships with the students and through something as simple as greetings. She said, "you see them in the hall, [and say,] 'good morning,' and you build all [these] nice positive relationships. So, when you have to deal with a negative situation or a more challenging situation, you already have a rapport." Moreover, "you're more confident to interact with the child or intervene if you need to do something because you have that rapport and relationship already built." This was especially important as an occasional teacher because she had limited time to develop a strong rapport with the students and there was no way of knowing which student she might become involved with.

Helen explained it could be a confidence booster to see a student's progress after putting in her hard work. She shared her encounter with a Kindergarten girl who was smart, full of knowledge, but struggled behaviourally and emotionally. Helping this child improve and succeed also relied heavily on being in a supportive environment and feeling she was part of a knowledgeable team to overcome obstacles together. According to Helen,

> Even though in this situation the parents are very unsupportive, very dishonest and very difficult to deal with, but having the support from the principal and my […] ECE (early childhood educator) and the other staff in the school and then this behavioural consultant [who] is very encouraging and motivating, […] that's really beneficial and you feel supported. […] And seeing the progress, because we've been so good at, you know, we've instilled the routine, we have structure, we have a set guideline in our classroom and this child has just come leaps and bounds. It's really, really encouraging to see this child's progress.

In the second interview, it was apparent that although **knowledge gained from formal education was still meaningful** to Helen, she emphasized how **her own lived**

experience and learning from the experiences of others have contributed more to her beliefs, confidence, and instructional practices. Considering that Helen taught in classrooms with students who required high levels of support, she also pondered on **what inclusion meant and how to act in the best interest of *all* children**. Helen additionally highlighted having **a supportive school team increased her confidence** to teach in diverse classrooms.

4.8.3   Helen: Interview 3

At the third interview, Helen was teaching full time in a Kindergarten classroom. She started the interview by talking about her unique experience of being a parent and a teacher (through two years of homeschooling) to her four children who had "very different talents and different abilities and different limitations." These two roles combined with her teaching experience in the classrooms to influence how she viewed diversity and how she taught.

As an example, Helen discussed her perspective on letting students stand while they worked in the classroom. She explained that students in Kindergarten learn in various ways – they sit on the floor, sit at a table, stand up, at a board, run on the spot – and realized how older children with diverse needs could benefit from getting the same flexibility. Since "sitting is just not something that they can handle very well. They are doing their work when they're standing, so why would I insist that [they] sit?" Her parenting experience added to this argument:

> My own son would always sit with like half a bum cheek on the chair and no more than that. No more than that. Like he was ready to dash off to the next thing that was going to show up. And that's where I realized, the kids really are different, even if they had the same upbringing. I have four kids, they [have] the same parents, same gene pool, same upbringing and they're so, so different.

Helen's beliefs about student diversity and their ability were thus reenforced by experiences of working with diverse learners across contexts.

Helen also detailed her experience and reflections on teaching in a low socioeconomic status neighbourhood with a high immigrant population. Her first observation was how students' ability to learn can be affected when their basic needs were not met. She said,

> You know that the child is not going to succeed because you can see their lunches and they're not eating well, they hardly have anything to eat. So the school and sometimes the teacher is just dropping snacks in the lunch box, because you know there's nothing much left in there, or there wasn't anything much to start with at the beginning of the day. That's not a special need, it's not so much a learning disability, but it affects their ability to learn.

This reflects how Helen understood there could be more happening in the child's life outside of the classroom influencing their performance and how she might adjust her ways of interacting with the students.

Another observation, but also a hurdle that Helen had to overcome in this teaching experience, was not being able to connect with parents who have different cultural values. For example, Helen shared she recognized a child might have a disability or required extra support, but when she tried to address her concerns with the mother, she learned that "in her culture, that's not something that's discussed ever. It's not accepted, and they just ignore it because there's no way their child will be tagged or identified as special needs." Helen found it hard to navigate this situation because using the inclusion philosophy, "you're always teaching everybody in your class and catering to everyone, but now you've lost mom and dad's support in this instance." Additionally, "you won't get an EA support for instance because there is no diagnosis made" – which prevented the child from getting the support needed.

Having conflicting views with parents not only meant Helen was unable to secure the appropriate accommodations for her students but also led to strong feelings of frustration and discouragement. This was especially difficult when Helen felt she had her student "figured out" and while she was trying her best to meet her student's needs, her effort was only met with resistance and rejection. Helen described her experience with

the family of a student who was highly sensitive to her surroundings and struggled with expressing her emotions safely. Although Helen and her ECE found it effective to provide the child with a safe space in the classroom to calm down, her parents viewed it as "treating her apart" and "not letting her be part of the group." Helen said,

> Her parents thought that this was not appropriate, that we shouldn't be treating her like that but you're really trying to help her and you know, this was helping her. […] But they didn't approve of that. They didn't think any of our comments were justified and any of our actions were justified. In fact, [our actions] were all wrong [and] we were terrible people.

Reflecting on her encounters with the various families who held different perspectives than herself, Helen said,

> So here you are trying to give all this time and attention to help out children and then at the end you're like, (sighs) what else can I try? Where do I need extra support, or where do you just say, well, I've done what I could and that's as far as I can go.

This showed Helen's perception of her responsibilities as a teacher and recognition of her limits, especially when support and resources were lacking. Helen concluded that these experiences of being misinterpreted took a heavy toll on her confidence.

Additionally, Helen discussed how the school itself could impact her confidence in these difficult situations. In the above examples, Helen's school team provided minimal help in facilitating a conversation with the parents and in supporting her stance. Helen then compared that to when she taught at a school in the past with much higher needs but also had much more support in place. She stated that having a principal and a vice principal with strong leadership skills, other colleagues who were professional, "supportive and giving lots of tips on how to handle different children", and the available resources to meet the students' needs made her feel reassured. It was especially comforting when these knowledgeable colleagues backed her up or acknowledged that she was in a difficult situation. Helen recalled her colleagues saying to her, "it's not you,

it's them." or "you're not doing it wrong, the child [just] needs something more." And to her, "it was nice to be able to hear that because sometimes, you feel like you're an adult, but it's nice to have a colleague [or] even your boss say [those words to you]." Therefore, school support extended beyond just providing practical support and acted as a source of emotional support for Helen.

Yet, because of these challenges, Helen became more creative and tried more strategies to help her students in the classroom, including the use of UDL as a part of her teaching practices. She said, "there are things I cannot have, but the rest I can do." For instance, "pairing them up with a really strong student," or "giving that student extra one-on-one time. They're not reading at home for whatever reason, so maybe I'll read with them at recess, or, maybe not at recess, but give them the extra attention at school." In another instance, Helen explained they might be reading something as a group in class, "but I know it's to get this person. It's to explain something to this person without really pointing them out." Helen identified these strategies came from "just being in the classroom, seeing the kids and seeing their needs" and observing and exchanging ideas with other teachers about strategies they have tried and might be helpful.

When asked about whether formal education (including PD opportunities) played a role in shaping her instruction, Helen stated, "we can read a lot of things, but until we live it, we don't really know it." To Helen, accumulating experiences and having to face difficult situations was where she learned most – "that's when you're getting all your experiences and that's when you're growing." Although formal education played a minimal role in Helen's instruction at this point of her career, she mentioned that PD sometimes "spark[ed] an interesting thought" and could contribute to her beliefs moving forward.

Finally, an interesting question that Helen continued to ponder on was *what is the good amount of support that should be given to a child, without sacrificing the needs of other children*. She said,

A few generations ago you wouldn't even question it, you wouldn't teach differently at all, you would just [say], "this is how we do it" and "too bad, so

sad," if you can't do it. And now we're going to the other extreme completely and making different things for everybody.

This demonstrates how some concepts were more deeply rooted than realized. For Helen, she learned through her teacher education program about the importance of inclusion, but values she grew up with were potentially challenging the new ideas in the back of her mind.

Overall, Helen viewed **hands-on and accumulated experience**, especially dealing with difficult situations, as much more meaningful to how she would navigate a diverse classroom and what she believed in. While confidence was primarily influenced by **interacting with diverse learners and their families**, **the presence or absence of school support** could be critical to how confident she felt about teaching in a diverse classroom. Helen also questioned what inclusion should be in terms of meeting *every student's needs* – **her perception of inclusion was perhaps influenced by her upbringing**.

4.8.4   Helen: Interview 4

In the final interview, Helen reiterated how her accumulated experiences as a teacher and as a parent had contributed to her instruction and beliefs. Teaching at several schools located in neighbourhoods where "the needs are much higher, in terms of what the children are eating and wearing, but also their family life and the hardships that the children have been living", Helen combined these observations with her parenting experience to understand how family circumstances could impact a child's learning and presentation at school. For example, she said, "if the child comes to school and their hair isn't brushed, I say, 'yeah, my kid's hair wasn't brushed either (laughs).' Whereas before I had kids, I might've said, 'what a terrible parent sending their kid without their hair brushed.'" Helen stated these personal reflections have influenced how she perceived and interacted with her students and their family. As Helen grew in her understanding of diverse family situations and learned to relate to caregivers based on her own experience as a parent, she gained comfort in navigating differences with parents through being nonjudgmental.

Helen also restated that being the mother of four children was crucial to how she viewed children's ability and diversity. Since her four children with the same parents could be so different, "that too has helped me see that the children in my class are all so different – they don't even have the same parents, so they are so much more different." Moreover, being a parent meant access to more resources, such as reading books to support her own parenting, which gave her more opportunities to reflect and widen her perspective. As a parent, Helen read a book by Cynthia Ulrich Tobias that she still referred to for ideas:

> It was such a great eye-opener on realizing that children were so different, that they learn so differently, and they behave so differently. And the carrot that you are going to hold in front of their nose to motivate them will be so different from one child to another. That was such a good eye-opener then, years ago and I still think about it now as I'm teaching – like what works for one student isn't going to work for another student.

These beliefs about potential and diversity have transformed the way Helen taught and what she saw as effective practices in a classroom of diverse learners.

Unlike the previous interviews, Helen acknowledged the role of formal education on how she taught in this interview. This included what she learned in her teacher education program, the studies or research she had done for her courses, resources from PDs, and her ABA course, which "has changed my perception of behaviour and then also how I'm going to deal with it when I want to improve the behaviour [or] when I want to stop a behaviour that's harmful or inappropriate." Moreover, Helen talked about as she engaged in PD recently, "there were a lot of things that were coming back to me from my undergrad." She recalled learning to use the PECS (picture exchange communication system) with nonverbal students from her undergraduate placement 20 years ago and putting the knowledge to use again with her current student. Therefore, some of Helen's previous formal education were being recognized as useful at this stage of her career.

Although formal education admittedly contributed to Helen's knowledge of effective instructional practices, its impact on her beliefs and understanding about

inclusion was now minimal. Helen recalled in her teacher education program, "we were really, really, really big on inclusiveness and inclusion, and everybody should be at school, and it was so beneficial for the strong students as well as the weak students to be mixed up in one big pot." They also learned that "the research says we should integrate people into society, we should integrate people into our schools." Helen stated, while "it's all good in theory", as she experienced the reality of teaching in much more complex and diverse classrooms, she found it extremely difficult to teach "a melting pot of students" with mixed abilities. "There's a limit to the integration or how integration is done. I don't think we can just throw everybody in the same melting pot, which is the classroom that we know – everyone in the same class," she said, "I think we can provide better services and better instruction to the children in specialized classrooms."

Particularly, Helen had students in her class with very high needs and felt they were doing these children a disservice by not supporting them with specialized programs. She remembered in her practicum, the school had a specialized class of five to six students with one-on-one EA and nurse support, and these students got integrated into the regular classrooms on occasions "so they were part of our community [and] they're not hidden away, but at the same time, they were in a classroom where they could have access to the special care that they needed." Helen added believing that her students would benefit from having a lot more instruction and guidance, and "would develop faster and better in a small group of children with three adults, rather than in my big, big class of 24 children, two adults, and the children with really terrible behaviours that we have to also manage."

Adding to Helen's train of thought was *where the limit lies for inclusion,* as she continued to teach in a classroom with students who displayed extremely aggressive behaviours. She said,

> I'm thinking, how long do we tolerate this? Why are we not sending these children [displaying aggressive behaviour] home and say, […] 'It's not safe for the 23 other children in the class. It's not fair to them'? If I was a student in that class I

would be really, really terrified. If I was a parent of one of those children, I'd be horrified that this is happening.

Helen shared with her current situation, she was told to wear "some padding because this child bites, so make sure you have padding on your arms" – which did not sit well with her. She indicated, "I'm a teacher, I'm not a punching bag […] and I shouldn't be accepting this kind of violence towards my body." Therefore, Helen was feeling conflicted by how much other students and herself should be accommodating to the needs of one student with high needs. She further identified the limits to her role as a teacher,

> I'm a teacher and I feel like I don't have much power, I just have to do what my admin tells me to do. I feel very sorry for the other students in my class and I feel sorry for those children who obviously need – and I have voiced this – they need more help than I can provide in terms of classroom management or inclusiveness in the classroom. They need professional help, from a social worker or psychologist. There's a very deeply troubled child here and they need more than I can provide as a classroom teacher at this point.

Although the current situation has affected Helen's confidence in the system, she felt that she has gained confidence in herself over the past year through building practical skills and competencies. This included learning from accumulating teaching experiences with diverse learners, developing new skills and strategies during PDs, and observing her colleagues. She shared she would watch her colleagues when she walked by a classroom or during her preparation time "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." The support of colleagues was crucial in helping Helen stay confident as well. "There are definitely days when I'm at my wit's end and I feel like a terrible educator," she said, "you want to offer everything you can to the children, you believe that they are capable of so much more, but there are definitely days, where you are like, I don't know. Like I feel defeated." On these difficult days, hearing words of affirmation and encouragement from her colleagues and mentor would "really boosts

[her] up" because "it's nice that someone else noticed enough to know that it's okay."
Helen also mentioned providing the same type of emotional support to fellow teachers.

In the fourth interview, Helen reflected on what she had learned in the past has
come to influence **how she taught and perceived children's abilities and differences**.
Helen had the unique experience of teaching in high-needs neighbourhoods with differing
levels of resources and support, which contributed to her current **perception of inclusion**.
Supportive colleagues along the way continued to be important in boosting her
confidence and skills. Helen also developed a strong sense of what **her responsibilities
and limits were as a teacher**, acknowledging she was doing the best she could without
sacrificing her own health and values.

4.8.5   Summary of Helen's Development

Several factors interacted to make Helen's navigation of her beginning teacher
career unique from other participants: her Special Education background, having her own
children, teaching in a high-needs neighbourhood, and values she developed growing up
in a period where inclusion was not strongly promoted.

Through her education, Helen has *learned* about the importance of inclusion. For
instance, she believed **everyone is unique and has potential** and it is about playing to
the individual's strengths – which has been largely corroborated by her experience of
parenting four very different children. This value played a crucial role in helping
Helen **recognize and acknowledge diversity in the classroom**, which continued to
influence Helen from the start to the last interview.

Conflict with the learned inclusive philosophy arose from the other two factors.
Helen expressed **feeling uneasy about working with people with disabilities** in the first
interview and later discussed how **the idea of inclusion was not even considered in
classrooms when she was young**. The lack of experience and exposure to people of
diverse needs has perhaps made it hard to convince Helen that inclusion could truly work
in classrooms. It also did not help that Helen **taught in schools with extreme needs and
circumstances**, making it even more difficult for Helen to see inclusive education as the

optimal system for all students. Therefore, Helen frequently pondered on **what it truly means, or whether it is possible, to act in the best interest of *all* children.**

Although there continued to be some struggles in finding a balance to understand inclusive education, Helen has come to value certain components in dealing with difficult circumstances. This included **building understanding and relationships** with students and their families, **addressing students' basic living needs**, **having a supportive staff team** to work out practical solutions together, **recognizing the limits to her responsibilities as a teacher,** and acknowledging how **formal education** has added her repertoire of strategies in working with diverse learners.

4.9   Analysis of Cross-Case Themes

After reviewing all the interviews from each participant, a spreadsheet was created to record the codes and prominent ideas that appeared repeatedly across all interviews. With Bazeley's (2013) *describe, compare, and relate* process in mind, the following questions were considered when organizing the codes and ideas into themes across all participants:

    (a) How did people talk about the idea? What were the specific characteristics of these codes or ideas? What were the boundaries for the codes?

    (b) Who talked about the idea and why? Was it related to the specific characteristics of the participant?

    (c) When was the idea brought up? Did it come up most frequently before they started teaching? Or in their first, second, or last year of teaching?

    (d) How were the codes or ideas related? What could help to make sense of why some ideas could be seen as relevant or talked about frequently together?

Since another purpose of the study was to examine the development of inclusive practices, how the themes developed for each participant was also considered in this analysis of the themes. For each theme, a table was then created and included below to present who mentioned ideas related to the theme while considering:

    (e) Was an idea persistent and existed throughout the interviews?

    (f) Did an idea change? What changed their mind?

While some ideas intertwined with each other, there were overall nine themes that derived out of this cross-case analysis: "getting thrown in" to experiment with strategies; gap between theory and reality – what worked or did not work in formal education; what is inclusion?; beliefs in children's ability and exposure to diverse learners; responsibilities as teachers and recognizing limits; building relationships with students and caregivers; a supportive and knowledgeable team; diversity and other components that affect learning; and books, media, and technology. Each theme will be described below.

4.9.1   Theme 1: "Getting Thrown In" To Experiment with Strategies

The first theme that came up in almost every participant's interview (seven out of eight) was – you just need to be thrown into a real-life classroom to learn and to know what it is like (see Table 1). The participants might have said it was important to "just get thrown into it", experience first-hand what it was like to be in a diverse classroom or accumulate work experience in the classroom.

In the first interview, *getting thrown in* was likely describing their practicum experience or their first experiences in a diverse classroom. It was often associated with the idea of the experience being eye-opening and giving them exposure to diverse learners (like for Jessie, Riley, Ellie, and Helen). Edna and Helen, though, added that being thrown in at the start of their teaching career was stressful and still very difficult, especially when they lacked sufficient guidance or support. In contrast, when the theme was brought up in the later interviews (e.g., Interview 4), participants often stated in retrospect, although it was challenging to "jump right in with both feet", it was rewarding, allowed them to gain experience right away, and one of the best ways to learn to become a teacher (mentioned by Jessie, Riley, and Russell).

Some ideas associated with this theme were also that getting thrown in meant the participant got to learn on the job (Bonnie and Jessie) and use trial and error to experiment and observe which strategies worked (mentioned by all participants). The idea of trial and error was not consistently presented by each participant and did not appear to be mentioned more often at a time of interview than at others, but it was

brought up by all participants at one point throughout the four years of interviews. This experimenting with teaching strategies often led to one of the following two outcomes – successes, which boosted the participants' confidence and sometimes brought a sense of joy (Jessie, Riley, Ellie, Russell, Colette, and Helen) – or failure, which resulted in feeling defeat for Bonnie and Ellie but encouraged Russell to learn from the mistakes and improve.

Table 1: "Getting thrown in" to experiment with strategies.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Transferred skills from coaching to teaching in classrooms Experimented with lesson planning and different strategies	Best way to learn is to just be thrown into it	Different having her own class, experienced defeat made confidence fluctuate	Transferred skills from coaching to teaching Learned on the job: integrated students with disabilities into lessons – challenging but rewarding
Jessie	Just get thrown in to experience reality: learned firsthand, opened her eyes to how diverse a classroom could get Exposure to diverse learners increased confidence	Learned strategies directly from teaching Experienced successes with students increased confidence – a sense of joy	Learned on the spot to deal with unexpected situations and adapting to learners, increased confidence Observation and trial and error	Being in the classroom is the only way that teaches you how to be a teacher Interacted with more diverse learners, trial and errors, increased confidence
Riley	Experience of being in diverse classrooms, exposure to diverse learners and trial and error, built confidence	Worked as EA in diverse classroom, just the experience was valuable	Just having worked in the classroom, dealt with a variety of disabilities, increased confidence	Jumped into Spec Ed right away with both feet – challenging but gained experience right away
Ellie	Just being in the classroom opened her eyes Minimal success decreased confidence		Trial and error to come up with strategies	Accumulated experience in classroom, trial and error and success increased confidence
Russell	Trial and error and observation	Need experience living it and time to think about it Learned strategies from success and making mistakes	Got thrown into the class short-term, built knowledge of diverse needs and increased confidence Trial and error	Need to live through things, made mistakes and been through challenges, more confident
Colette	Saw lessons she planned worked for everyone, improved confidence	Exposure to diverse learners in practicum and on the job	Learned to read students better Limited exposure to	Observed students to predict what they need

		Tried out strategies	diversity also limited confidence	Limited exposure to diversity limited confidence
Edna	Stressed about getting thrown into classes without guidance and support	Observation and trial and error	Trial and error	
Helen	Just being thrown into practicum, exposure to diverse learners helped, but is still difficult in a new class Trial and error	Saw progress from putting in the work, increased confidence	Just being in the classroom, observed students and matched strategies to their needs	Accumulated teaching experiences with diverse learners, built strategies

4.9.2   Theme 2: Gap Between Theory and Reality – What Worked or Did Not Work in Formal Education

The first theme was often associated with a second theme, that reality was much more different from what the participants had learned from textbooks. The idea that reality differed from theory was specifically mentioned by five of the eight participants throughout the four years of interviews (see Table 2). For example, Riley and Edna stated the teacher education program made their concept of the inclusive classrooms *rosier than reality*. Jessie stated that teacher education program was much easier than reality, while Helen shared her program was not meaningful, as inclusive classrooms looked good in theory but very different in reality. For Jessie and Ellie, their confidence was shaken at first (in Interview 1 and 2) when they recognized the gap they had between theoretical knowledge and practical knowledge after experiencing the reality of teaching in a diverse classroom. They thought they were equipped with tools from their teacher education program, only to realize they did not have enough in their toolboxes to handle the real-life challenges of a classroom. This realization, or getting hit by reality, was also mentioned by Edna in her first two interviews.

A relevant idea that participants highlighted because of the gap between theory and reality was gaps in their knowledge. Bonnie, Ellie, and Edna similarly explained that they were missing the knowledge in nuances which were overlooked in their teacher education program. Another way of putting it was that the teacher education program might have taught the beliefs and concepts of inclusive philosophy but did not teach the

how – such as how to use assistive technologies, how to fill out paperwork, or how to write an IEP/IPP with fitting strategies for the student.

There were also several participants with interesting developmental changes within this theme. For example, both Riley and Colette described their experience with the teacher education program minimally during the first three interviews, but at the last interview, came to recognize that the values and training from their teacher education program have already infiltrated their inclusive practices. Meanwhile, Helen did not see the value in her teacher education program until her final interview as well – but she only viewed her teacher education program as having influenced her instructional practices and not beliefs. In contrast, Ellie was initially adamant about the importance of formal education and continued to reflect on her learning, keeping a notebook of everything she had learned. Yet, towards the later interviews, Ellie became increasingly discouraged about her formal education, feeling like the more she learned, the more she realized she could not put her formal education to practice, the more defeated she felt.

As a group, some participants in the first interview believed that the teacher education program gave them some foundations to starting their teaching career. Yet, as much as the teacher education program attempted to prepare them, it was insufficient to just teach them theories. Bonnie and Riley stated that formal education *needs* to be paired up with practical experiences – be it practicums, discussing real-life cases, or role-play during class or workshops – and even better if they received immediate feedback and ideas for improving after practices. In later interviews (Interview 3 and 4), Ellie, Russell, and Helen also commented that training beyond graduation could sometimes spark some interesting thoughts for them to further reflect on and improve their practices.

Table 2: Gap between theory and reality - what worked or did not work in formal education.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	One course and one workshop on teaching diverse learners, helpful when someone in the field gave tips	Not knowing how to use assistive technologies Training after graduation, real-life	Not knowing nuances (e.g., paperwork), not learned in class, decreased self-efficacy	Formal education alone was insufficient, needed practical experience to experiment

		examples helped	Training after graduation, knowledge of nuances was helpful	Training after graduation, real-life cases helped
Jessie	Classes on Spec Ed and mental health provided basic tactics Teacher education program attempted to prepare you as much as they could, but reality was different	Confidence was shaken when struggled to deal with challenges in real-life classroom; being book smart versus street smart		Wished for more PD on instructing diverse learners Teacher education program was easy and differed from real life
Riley		Books gave ideas, but need to know each child to tailor instruction PD in math and literacy, no instruction on disabilities	Importance of courses being coupled with practicum; courses taught beliefs but not as powerful as practical experiences	Teacher education program was rosier than reality, BUT learning infiltrated her teaching practices Training beyond graduation affirmed practices and increased confidence, helpful to have practice and direct feedback
Ellie	Teacher education program provided some tools Need formal education with theory, practice and feedback Gap between theoretical and practical knowledge decreased confidence	Many questions about nuances (e.g., best practices for IEP, supporting nonverbal students) Valued workshops and personal development, reflected on learning	Get excited about ideas at workshops, but not possible to implement in reality Workshops stimulated ways of thinking about diverse learning needs Notebook to reflect on learning	Teacher education program courses were insufficient and unrealistic; workshops far more practical The more she learned, the more defeated she felt for not being able to implement strategies
Russell	Research and teacher education program not helpful	PD and courses beyond graduation challenged beliefs	Teacher education program and readings were not helpful PD inspired changes to practices	
Colette	Found course on inclusive education very beneficial, an idea of what the classroom would look like			Recalled learning and values from a professor in the teacher education program
Edna	professor's knowledge mismatched what she wanted to learn	Lacked practical knowledge, e.g., implement adaptations	Went into education without knowing all the responsibilities involved	Not knowing how to write IPP goals

	Not taught practical knowledge, e.g., write IPP or adapt programs Learned about reality of classroom through practicum	Wanted mentoring and formal education on inclusion at school board Experienced reality without rose-coloured glasses		
Helen		Learned about inclusive philosophies in teacher education program, looked good in theory, but beliefs based on lived experiences	Formal education was not meaningful, needed to live it PD sparked interesting thoughts, contributed to beliefs	Teacher education program, PDs and ABA course contributed to instructional practices but not beliefs

4.9.3   Theme 3: What is Inclusion?

The next theme was the question of what inclusion is and means, or the participants' beliefs about inclusive education (see Table 3). In the first two interviews, participants talked about inclusive philosophy they have learned from their teacher education program. For example, Edna shared she was taught that everyone deserves and was going to get their best opportunity in diverse classrooms; Helen talked about believing in integrating everyone into the classroom because of her Special Education program background. Riley and Colette commented that these inclusive beliefs were strongly influenced by their professors and mentor teachers in their teacher education program. Other participants (Bonnie, Jessie, Riley, Ellie, and Helen) have mentioned learning about instructional concepts, such as UDL, DI, having multiple access points, and scaffolding from their teacher education program. For Jessie and Ellie, these ideas were even consistently mentioned throughout the four years of interviews.

However, there was a wide range of variety in how the participants' inclusive practices developed. The younger individuals – including Bonnie, Jessie, and Riley – became more proficient at implementing inclusive strategies as time passed, especially after seeing the benefits of inclusion or found that inclusive instruction have simply became a standard part of their practices. Colette did not discuss her instructional practices in the interviews but highlighted she continued to believe in integrating students into classrooms and recognized her school's effort in doing so.

Russell took a unique path to becoming an inclusive instructor. In the first interview, he shared using a utilitarian approach to *meeting the needs of as many students as possible* because that was the most effective strategy. He also found his teacher education program and readings unhelpful or did not mention these ideas when asked what has contributed to his inclusive practices. What inspired him were his wife, who worked in inclusive sports, and training beyond graduation (PD and courses), which sparked his interest in Interview 3 and then shifted his approach to *making his lessons universal for everyone* in Interview 4.

Contrarily, Ellie, Edna, and Helen started with a firm belief in inclusion, but struggled to see how inclusion could work in reality. It was notable that these participants taught at schools with extremely high needs – often a class with a large portion of students who were struggling in their learning or teaching students with disabilities that required one-on-one support. They seemed to have started questioning whether inclusion was the right approach for all students because the school system they taught in had trouble following the inclusion model, thus their skepticism about whether inclusive education could truly be implemented.

Another interesting idea in this theme was related to participants' experience growing up in inclusion/segregated classrooms. Ellie and Colette were two participants who highlighted the influence of being a gifted/advanced learner as a child themselves and what they thought about getting pulled out from the classroom and/or not having their learning needs met. Factoring in the component of the participants' age, Helen, the oldest participant in this study, specifically pointed out that she grew up during a time where inclusion was not valued and "properly implemented" in classrooms. She also ended up having the most trouble believing in inclusion despite her Special Education background with a strong emphasis on integrating everyone into the classroom. Meanwhile, Bonnie, the youngest participant of this study, talked about the generational differences in understanding students with diverse learning needs when she compared herself with more experienced coaches at her figure skating program.

Table 3: What is inclusion?

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Applied DI Believed in inclusion because of teacher education program, on the fence after talking to parent of child in segregated life skills class – whatever works best for the student Generational differences with more experienced/traditional coach in understanding students with disabilities	Saw benefits of life skills classes Taught an inclusive class, recognized importance of creating a welcoming environment for all and students without disabilities learning empathy and patience; equity not equality		Truly integrated students from the essential skills class into her regular classroom
Jessie	Applied UDL	Applied UDL, DI, tiered approach Experienced an inclusive classroom where students were inclusive; valued modelling inclusion	Applied scaffolding, created a collaborative environment for students	Applied DI
Riley	Instructor/mentor influenced beliefs about inclusivity – playing to students' strengths, DI			Applied UDL, DI, strategies to fit learners' needs Implemented inclusive strategies subconsciously, believed in inclusivity
Ellie	Applied UDL Grew up with teachers who included diverse learners Advanced learner herself, pulled out of classrooms, experiences of when it worked versus not	Applied UDL	Wanted to implement inclusive strategies (UDL) but hard to implement in real life Used mix of strategies, some to benefit all and some to keep independent learners busy so she could work with higher needs students	Saw value in UDL and having multiple access points when successful – but very rare, more like an ideal, not sure if inclusive practices work
Russell	Utilitarian approach, common denominator – found strategies that could be built into a structure to meet the needs of as many students as possible	Experimented with making students feel included, such as greeting them No mentioning of teacher education program	Valued inclusion, ideas from PD and wife; ideas from inclusive sports translated over to his expectations of students and lesson planning	Inclusive ideas from wife; wanted to meet everyone's needs, made lessons universal Limited resources made inclusion harder

	Research and teacher education program not helpful		Teacher education program and readings were unhelpful	to achieve No mentioning of teacher education program
Colette	Went to preschool with children with disabilities; gifted, labeled as different – prompted value in integration Professor and mentor teachers values inclusion, encouraged practice, more awareness to welcome everyone		Went to preschool with students with disabilities Thought integrating students as much as possible was important, witnessing French immersion schools trying to support all students to stay in the program	
Edna	Unsure but did not think non-inclusive strategies were the best approach Not confident in meeting all students' needs due to lack of time and resources	Disagreed with school, IPP not implemented properly Taught in the teacher education program that everyone is going to get the best opportunity, BUT very different in reality	Province tried to improve inclusive education at the expense of cutting down teachers' preparation time	New school was much more inclusive, more support and IPPs in place Believed every student has a right to be in the classroom, seen benefits of inclusion; BUT conflicted, not sure if inclusion was truly fair and met needs of students, believed a system change is required
Helen		Spec Ed background, believed in integrating everyone BUT questioned what inclusion meant – how much to tolerate, challenged and powerless, how to act in the best interest of all children	Applied UDL Give how much support to one child without sacrificing others Would not teach differently a few generations ago, when she was a child	Inclusion was good in theory, but the reality of teaching is much more complex; there are limits to integration Thought children with severe disabilities were better off in specialized classes

4.9.4   Theme 4: Beliefs in Children's Ability and Exposure to Diverse Learners

Although not everyone agreed with inclusion being *the* right approach for all students, all the participants shared the same belief in children's ability, which made up the fourth theme. Essentially, the participants agreed *every child is unique, every child*

can learn and has the potential when they are given the support they need (see Table 4). This belief was overall stable for all participants – usually consistently mentioned in three or all four of the interviews. Sometimes these beliefs were not described explicitly but could be inferred from other ideas. For example, Russell mentioned trusting his students to know what strategies worked best for them, which implied he had faith in the student's abilities and knowledge of their own strengths and needs.

This belief derived from a combination of experiences. In terms of personal life experiences, participants who were parents (including Riley and Helen) indicated that raising their own children, who differed greatly from each other in terms of personalities and learning needs, added to their understanding that each child was unique and needed different strategies to thrive. A few other participants stated that their learning experience as a child – such as reflecting on their own learning style (Jessie), growing up with anxiety (Riley), and being a gifted child (Ellie) – has helped them understand children's ability.

For some, this belief derived from working directly with diverse learners and recognizing their capabilities when supported – sometimes within the classroom context (e.g., Riley and Ellie), and sometimes from exposure to diverse learners outside of the classroom (e.g., Bonnie and Edna). Bonnie specifically shared that exposure to diverse learners *prior* to becoming a teacher helped to *normalize* how she saw her students with disabilities: they were just like other students who could thrive in their own ways. Helen shared similar thoughts from exposure to diverse learners in the classroom, building comfort from realizing learners with disabilities were no different than others and just wanted to learn and build relationships. Jessie and Riley suggested that exposure to diverse learners through family and friends built their knowledge about diverse needs as well.

Collectively, these experiences and the belief in children's potential affected the beginning teachers' implementation of instruction, such as employing differentiated instruction and motivating them to find out what each child needed.

Table 4: Beliefs in children's ability and exposure to diverse learners

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Worked with people with a range of disabilities, no one way of teaching and no two students were the same	All students can learn but may need different supports	Every child can learn and every child is different	Exposure normalized her view of diverse learners, saw them as just another student
Jessie	Reflected on own learning style Exposure to family friends with disabilities	Every student is unique, trial and error to figure out what works	All students are unique	Every child is unique and students at all levels of abilities can learn
Riley	Not all children need the same thing and cannot expect the same thing from every child Parenting gave her understanding of diversity	Children are capable, need to have faith in their abilities, realized student's potentials from working with them closely Personal experience (anxiety)	Looked beyond IEP to determine where the child's ability was at Personal experience (anxiety, family) added to how she viewed children's potential	Beliefs influenced by personal experience (anxiety, family)
Ellie	Personal experience, needed challenges as an advanced learner; let students take ownership of what they learn Realized students don't learn the same way after working as an EA	Observed and listened to students about what they need and trusted them Students are not their disabilities	Each student has their best way of learning	Personal experience, what motivated her to learn
Russell		Students know what work for them	Each student has own needs, requiring different motivators	Different student profiles, needing more time does not mean they cannot get things done
Colette	Children learn best when engaged and focused	Children learn best when calm and ready		All children have their strengths
Edna	Everybody can learn but sometimes longer for some; they are able but need resources and support	Children are capable when given the needed support	Children are capable when given the needed support	Some children not learning as quickly but could do it with right support in place
Helen	Everybody has potential, learned to focus on strengths from the Spec Ed program		Children have very different abilities, from parenting	Children are all very different; what works for one student is not necessarily going to work for another

| | Exposure to diverse learners in the classroom; realized "they are just people"

Seeing differences from research and parenting | | | |
|---|---|---|---|---|

4.9.5   Theme 5: Responsibilities as Teachers and Recognizing Limits

Another theme related to beliefs was participants' beliefs about their responsibilities and roles as teachers. Since participants believed in each child having potential and requiring tools that fit their learning needs, the beginning teachers sometimes added that it was *their* responsibilities and role to be providing such support to their students and *meeting every child's needs* (see Table 5). This was the most mentioned idea when talking about teachers' responsibilities, found in all participants' interviews. Some participants (e.g., Riley, Colette, Edna) shared this belief in a relatively consistent manner, discussing the idea from the first interview and continued to mention it in most of the remaining interviews. Others, including Jessie, Russell, and Helen, brought up the belief in one of the latter interviews. Specifically for Russell, the development of this belief aligned with his development of belief in inclusion. This belief on teacher's role was sometimes linked to personal experiences growing up, such as having met teachers who were supportive and caring (e.g., Jessie), or the opposite and not feeling like their learning and emotional needs were met by their teachers as a child (e.g., Riley).

For some participants, such as Ellie, Edna and Helen, their perceived role to meet all students' needs extended into the discussion of not having enough resources, time, and support from their school. This perspective was especially consistent for Edna, which was mentioned from the first to the last interview, whereas the idea came into play for Ellie and Helen in the last two interviews. As noted in Theme 3, Ellie, Edna, and Helen were also the beginning teachers who taught at schools with very high needs. They highlighted their ability to fulfill their role as teachers was impeded by the lack of resources, which included (a) not having EA or ECE support in the classrooms or not having access to

fitting materials for their students; (b) the lack of time, such as time to make different lesson plans for the entire class and individuals with IEPs/IPPs; and (c) the lack of support, especially when the school's or parents' values did not align with their own inclusion values. These disappointments were linked to feeling overwhelmed, defeated, or powerlessness and a decrease in confidence.

Further to meeting students' needs, Russell, Colette and Helen talked about recognizing their limits and having to find a work-life balance in the last two interviews. While in the earlier interviews, these individuals felt bad for not being able to provide their students with the perfect learning plans or the most appropriate support, they later came to accept that they needed to take care of their own needs (e.g., sleep and health) and make the most of what they could, given the limits to time and resources. In contrary, Ellie and Edna felt discouraged and less competent in the last interview as they continued to set high expectations of themselves or of the school system in meeting the needs of *all* students.

In terms of other beliefs about a teachers' responsibilities, Jessie showed some impressive developments as she progressed through the four interviews. She started with a general idea of the role of teachers based on her childhood experience in Interview 1, acknowledged her role in modelling inclusivity to students in Interview 2, and then extended into building a safe environment for her students to support not only their learning but also their emotional needs in the last two interviews. On the contrary, participants like Colette had a relatively stable belief in her role to provide an emotionally regulated space for students to learn; this was also linked to her beliefs of what children needed to thrive.

Table 5: Responsibilities as teachers and recognizing limits.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Provide support that truly meets the needs of the child		Find out how students learn and how to support that	
Jessie	Met supportive teachers when she was a child	Modelling inclusivity	Reflected on how to make a course relevant for her students	Create supportive environment for students to approach her, meet their needs beyond the classroom

			Trust that she has done her best when most of her class did well Support students beyond academics	Supportive teachers she met as a child Make a difference to students' lives
Riley	Be accommodating to students' different needs		Meet students where they are at; how she instructs the students matter	Differentiate instruction to fit different learners, accommodate students to the best of her ability
Ellie	Be flexible, give students a space to learn in a way that makes sense to them	Make a safe and supportive space for learning	Advocate for self and students Lack of time and energy to implement strategies and build relationships, cannot meet all needs despite best effort	Not as confident as my students deserve Lack of resources and funding
Russell	Limited time to prepare lessons when scraping to get by	Find the best strategies that are effective for students and fit his teaching style	Inclusive ideas, reflected on his expectations and lesson plans	Cater and match needs of students with disabilities Work-life balance, how much to sacrifice his time to meet the needs of all students
Colette	Co-regulate, provide emotional language and problem-solving for children, put them into the right mindset for learning Create a welcoming environment, accommodate as best as possible, meet students where they are at	Meet needs of different students (e.g., more stimulation versus calm) at the same time Reach all children, build a growth mindset, make sure they all thrive	Support all students	Find a balance in supporting all her students without burning herself out; her emotions could affect the class or learning environment Recognize strengths of students, make sure they feel honoured and part of the class
Edna	Too much to manage, children were not getting the support they needed but could also only do so much to help all students succeed	Lack of resources and support; school system problem, could only do so much as a teacher	Advocate for students, meet all students' needs Overwhelming responsibilities, barriers to implement inclusion – how much could I do without sacrificing my life?	Not enough time to meet needs of students with disabilities
Helen			Tried to meet students' needs but met with resistance –	Limited power to support the class or to protect herself,

			when could I say I've done the best that I could and give up?	disappointed in the school and the system Recognized limits as a teacher, some children need professional help beyond her

4.9.6   Building Relationships with Students and Caregivers

Another theme that was mentioned by almost every participant in this study (except Colette) at one point was the importance of building relationships with their students (see Table 6). Interestingly, there was little regularity of when this idea was mentioned. Bonnie was the only person who discussed the need to build relationships with her students throughout all four years of the interview, primarily linked to her longstanding experience of coaching Special Olympics and valuing getting to know her athletes off the skating rink in order to know how to teach them on ice. Other participants mentioned the idea more sparingly. In the first two interviews, it was more often tied to the idea that since the participants did not have a lot of strategies in teaching diverse learners yet, they relied on building a relationship to get to know their students better and to find out how to support individuals they worked with. Or, as a teacher who was not teaching regularly yet, simple actions such as greeting the students each morning helped build a small connection (e.g., Russell and Helen). Russell particularly relied on connecting with his students for direct feedback to determine whether his strategies were effective. Overall, building a good rapport with their students often led to successful outcomes, which increased the participants' satisfaction, motivation, and confidence in teaching.

A second type of relationship that Bonnie, Colette, Edna, and Helen attended to was their relationship with the caregivers (see Table 6). For Bonnie, Edna, and Helen, this was a topic they brought up in the last two interviews. They talked about how *not* having the caregivers' support led to hinderance to the student's success or conflicts that ultimately decreased their confidence in teaching. In contrast, once the participants gained the caregivers' trust, their teaching went much smoother. Colette and Helen added how being a parent themselves has helped them understand the perspective of their

students' parents. Bonnie used the approach of making sure the caregivers knew they were *on the same team to support the child* to build a connection.

Table 6: Building relationships with students and caregivers.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Get to know the students, including outside of the classroom, help to tailor instruction and increased confidence	Get to know the students to address their needs	Make a connection, especially for those with complex needs Have parents on your side	Come up with strategies from getting to know the student Build relationships with parents, get their understanding
Jessie	Build personal connections increased confidence		Support students on a personal level, guide them through difficult situations through conversations	Build relationships, use conversations to guide practices
Riley		Build relationship, get to know students one-on-one		
Ellie		Put effort into building relationships with student, making them feel safe and supported, give most successes Positive feedback from students	Relationships as the determining factor in how successful a strategy is	
Russell	Ask students for direct feedback	Make simple connections (greetings) Talk to students to deduce strategies that work best; valued and tried to maximize engaging with students, increased confidence	Learn from students' feedback	
Colette	Confidence in speaking with parents about parenting	Positive feedback from parents		Build attachment with students and relationships with parents, positive outcomes
Edna			Failing her students also hurt their relationships Conflicts with parents, differing views despite effort in providing support	

| Helen | Build relationships and trust, knowing the students helped to know best way to work with them, increased confidence

Start with greetings, naming every child | Build relationships through small interactions, especially as an occasional teacher | Importance of having parent's support; when parents not on board, no diagnosis and no EA | Use her parental experience to understand and relate to parents |

4.9.7   Theme 7: A Supportive and Knowledgeable Team

Building relationships was not only crucial with students and caregivers but also with colleagues. Theme 7 highlighted the importance of other teachers, principals, ECEs, EAs/EPAs, child and youth workers, etc. in influencing beginning teachers' inclusive practices. This theme appeared in the interviews of all the participants.

The school team served two primary functions. First, they offered practical knowledge on how to work with diverse learners. All participants mentioned learning instructional practices and sometimes developing values from observing and talking to other colleagues (see Table 7). Although everyone took a slightly different path in understanding their relationships with other teachers, developmental changes were noted for some participants. Of note, Colette showed a unique development. She practiced under the guidance of a mentor teacher until she was autonomous; this scaffolded strategy allowed her to develop strategies and confidence more steadily.

For other participants, when they were in their first interview (at the end of their teacher education program), they relied more on observing mentor teachers or EAs for instructional ideas, sometimes with mentioning of conversations to increase their knowledge. For example, Bonnie, Jessie, and Riley used the more passive approach of observing their mentor teachers and EAs to learn in the first interview. As they progressed into their first year of teaching (Interview 2), the beginning teachers began showing more discussions and collaboration with their colleagues, as well as seeing value in working with the school team to problem-solve in supporting individual students and was more willing to reach out to colleagues for help. These ideas were observed in the interviews of Bonnie, Ellie, Russell, and Helen. Contrarily, Edna felt helpless without a supportive school team backing her up, feeling at a loss about how to meet her students'

needs. At the final interview, participants continued to use a combination of the methods – observe, discuss, and collaborate with colleagues for strategies. Therefore, other knowledgeable teachers played slightly different roles at each interview but were an essential source of ideas overall.

A second function of connecting with other teachers was for emotional support. In the interviews, many participants indicated encountering challenging or discouraging situations. They relied on going to other teachers, who could better understand their struggles than people who were not in the field, for comfort and words of encouragement. For Bonnie and Ellie, they preferred going to their cohort because they were better able to understand each other's difficulties as beginning teachers and they could ask each other questions without feeling judged or embarrassed. All other participants (except Russell) enjoyed receiving positive feedback and encouragement from colleagues or experienced teachers, which served as a source of confidence booster and motivation. This idea of emotional support could be mentioned at any point of the beginning teaching career: some people felt supported by their mentors from the start during their practicums (like Bonnie, Jessie, and Riley) while others gained confidence and support from colleagues after they started teaching (like Colette, Edna, and Helen). Ellie was the only participant who mentioned the idea of emotional support in all four interviews.

Table 7: A supportive and knowledgeable team.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Associate teacher gave confidence with words of reassurance Observe EAs	Observe EAs, teachers and how classrooms are set up to add to her instructional practices Support in challenging situations; group chat with people in her cohort to ask questions	Observe teachers and their strategies Reach out to school team for support, know it does not reflect negatively on her Connect with cohort to problem-solve and comfort, learn from role model and mentor	Praise from colleagues gave confidence
Jessie	Gained confidence from teachers' positive feedback			In retrospect, observed associate teachers to facilitate trial and error

	Observe and learn strategies			
Riley	Instructor/mentor gave guidance and emotional support during challenges Observe associate teachers demonstrate different techniques		Colleagues and mentors gave emotional support and ideas	
Ellie	Learn from mentors and cohort, exchange ideas and motivation	Observe, ask questions, guided teaching Encouragement from teachers	Support from principal; youth care worker resource workers to discuss how to support specific students Feel supported to have others understand what was going on; confidence increased when effort is acknowledged	Learn from colleagues on how to meet students' needs; gained confidence when colleagues expressed appreciation for her strategies
Russell	Observe teachers – what they used or not used Conversations with experienced teachers, instructor, EAs for instructional practices	Conversation with colleagues, admin and wife for ideas Observe mentor, go to experienced teachers for advice and ideas	Ran scenarios by other teachers for advice Relied on EAs and ISTs for knowledge on the student	Observe and work with EAs, get ideas from them on how to improve his practices Colleagues for instructional ideas, how to work with students with specific needs
Colette	In difficult situation, could go to admins or other teachers for resources, or professors and practicum supervisors for support Work with EA as a team to support students Collaborate with peers and converse with other teachers	Principal provide practical support Discuss with mentor teacher on meeting needs of their students School team with psychologist, school counsellor and learning support teacher, confidence to take on new challenges	Trust and support with the school team	Practiced under guidance, learned lots of strategies and then reflected on them and took what fitted her teaching
Edna	Mentor teachers struggled and did not use inclusive philosophy themselves, unhelpful	Lack of support, being dismissed and not given more practical ideas on how to meet student's needs Collaborated with	Experienced EPAs are helpful, untrained EPAs are hinderance Teachers who share same perspectives, exchanged ideas and worked together,	Supportive EPAs Vice principal's request added to workload

		like-minded teachers	motivate each other	
Helen	Learn strategies from colleagues, they pass on wisdom	Work with team to overcome obstacles to support a student	Supportive school, principals who were good leaders and colleagues who gave her tips, made her confident and reassured

Observe and converse with teachers for strategies | Observe colleagues for ideas and tips

Colleagues boosting her confidence |

4.9.8   Theme 8: Diversity and Other Components that Affect Learning

Although the current study focused on understanding diversity in the sense of ability, some participants discussed how their knowledge of other diversities – such as religion, culture, socioeconomic status, and sexuality – has also broadened their view about individual differences (see Table 8). Like with diversity in abilities, Bonnie, Jessie, and Helen gained knowledge of other diversities from exposure to and interacting with people of different backgrounds. Russell learned about diversities through attending PD workshops and trainings. These different diversities were also noted to affect how the beginning teacher built their relationships with the students and/or their caregivers.

Another factor that some beginning teachers have paid attention to was the child's social-emotional needs and mental health – and everyone came to value this component through different ways. For Jessie, Riley, and Colette, it was extracted from their personal experiences growing up and having been impacted by these factors as a student. Bonnie, Helen, and Russell recognized its influence on students' learning through observations of diverse learners and exposure to diversity. Ellie recognized its importance from the start because of formal education and the concept was later corroborated and strengthened through working in diverse classrooms.

The value remained relatively stable once developed, even if not mentioned at every single interview. For example, Riley's emphasis on the impact of factors happening outside of the classroom (such as mental health concerns) on learning was mentioned throughout all four interviews. Similarly, Bonnie's and Jessie's understanding of how

factors outside of learning (including social relationships and family factors) could affect students' learning was discussed in the first and the last interview. Ellie's knowledge about social-emotional learning and creating a safe environment for students built on each other, as she gained more experience working with students of diverse needs. For Colette, the importance of creating an emotion-regulated learning environment was present from the start and continued to be mentioned at the last interview.

Table 8: Diversity and other components that affect learning.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie	Learning about how diverse learners socialize and their everyday life aspired the way she interacts with them		SES affect learning and relationships	Learning about how diverse learners are in their daily lives
Jessie	Exposure to cultural diversity inspired her to be more open-minded and accepting of individual differences Family history, understood impact of external factors on students		Support students with things outside of the classroom	Family history, students can be affected by external factors Students' emotional wellbeing and mental health
Riley	Grew up with anxiety, what happens outside of the classroom could affect a child's learning	Mental health (anxiety) could affect learning	Social-emotional learning, student could struggle outside of classroom; students' performance is not reflective of capabilities	Mental health affecting learning, accomplishment not reflective of knowledge or ability
Ellie	Social emotional learning, learned from her student education program – students can only learn when emotional needs are met	Learning environment needs to feel safe for learning to happen	Trauma/difficult family circumstances impede ability to learn, need to help students function and regulate before they can learn	
Russell		Learned about anxiety/mental health, gender diversity and Indigenous learning, challenged thinking about what students	Observed anxiety and social interactions, how those affect learning	

		need to learn		
Colette	Fresh air and exercise to help focus Anxiety, negative experience with schools in the past could impact learning	Need to let frustrations out before learning		Emotion regulation can impact learning
Edna				
Helen		Understanding of diversity in general increased flexibility	Need to have basic needs met before they are ready to learn Culture affecting communication with parents	Family hardships could affect child's learning and presentation at school

4.9.9   Theme 9: Books, Media, and Technology

Finally, books, media, and technology have played a role in various teachers' development of inclusive practices (except Russell; see Table 9). This included reading books or magazines related to diverse learners and beliefs (Riley, Colette, Helen); viewing of videos that added to someone's beliefs or knowledge about diverse learners and inclusion (Ellie); employing assistive technologies, apps, and online tools to support students (Jessie, Edna); using online materials, resources, or search engines to expand one's toolbox of instructional practices (Riley, Ellie, Edna); and engaging in online communities with other teachers to exchange ideas and support (Bonnie, Riley, Colette). There was no consistent pattern in when and why these ideas were brought up in the interviews and the ideas were mentioned scarcely.

Table 9: Books, media, and technology.

	Interview 1	Interview 2	Interview 3	Interview 4
Bonnie		Saw picture online that added to her understanding of equity versus equality	Twitter to share ideas and build networks	
Jessie			Google classroom to assess and receive feedback	
Riley	Read books to understand ODD		Online communities, Google and ERIC database	

Ellie	Learned about UDL online, solidified her learning; online videos shape beliefs			
Russell				
Colette	Developed an online/in-person forum (Twitter) for educators to collaborate			Gordon Neufeld's book on attachment
Edna			Online resources, websites with articles sorted by reading level, *Teachers Pay Teachers*	
Helen	Parenting magazines, article read at doctor's office			Cynthia Ulrich Tobias' book on children differences

Chapter 5

5   Discussion, Implications, and Future Directions

The goal of this study was to explore the development of beginning teachers' inclusive practices, gathering qualitative data from the participants' perspectives using in-depth interviews. Inclusive practices were considered using Sharma's (2018) 3H framework, which included the apprenticeships of (a) the heart, such as accepting the inclusive philosophy and holding beliefs about one's responsibilities as an inclusive educator, (b) the head, meaning having the cognitive knowledge and the confidence in one's ability (self-efficacy) to teach in inclusive classrooms, and (c) the hands, one's implementation of inclusive instructional practices to meet the needs of diverse learners in inclusive classrooms.

To examine the *development* of the three apprenticeships, a longitudinal case study approach was employed to investigate the experience of individuals nearing the end of their teacher education program and the first three years following graduation. Eight Canadian beginning teachers were invited to share their thoughts through interviews – answering what experiences have contributed to their beliefs, self-efficacy, and instructional practices – for four consecutive years. Important ideas of each participant were presented and summarized as individual cases in the previous results section. The interview transcripts were also coded and analyzed, with nine prominent themes identified:

1. "Getting thrown in" to experiment with strategies
2. Gap between theory and reality – what worked or did not work in formal education
3. What is inclusion?
4. Beliefs in children's ability and exposure to diverse learners
5. Responsibilities as teachers and recognizing limits
6. Building relationships with students and caregivers
7. A supportive and knowledge team
8. Diversity and other components that affect learning

9. Books, media, and technology

Several questions were considered to help address the primary research question: What are experiences that contributed to the beginning teachers' inclusive practices? What are beginning teachers saying about inclusive education? How were beginning teachers prepared for practicing inclusion in classrooms? How have the beginning teachers' inclusive practices change as they progressed through their early teaching career?

The following discussion will address these questions regarding each of the three apprenticeships – beliefs, knowledge/self-efficacy, and instructional practices, by correlating them to the nine described themes. Note that a theme may be relevant to multiple apprenticeships. A summary of the overarching developmental patterns will also be provided below based on reflecting on the eight presented case studies collectively. Questions related to implications and future research directions will be embedded in the following discussion and summarized at the end.

5.1   Themes Related to the Heart: Beliefs

Sharma's (2018) idea of the heart refers to the beginning teachers' belief system that supports how they decide in dilemmas. In inclusive education, this includes beliefs about and attitudes towards inclusion, attitudes towards people with disabilities, beliefs about children's ability to learn, and beliefs about their perceived roles and responsibilities as a teacher. These beliefs can be influenced by factors such as the courses, practicums, professors, and fellow teacher candidates in the teacher education program (Avramidis & Norwich, 2002; Delorey, 2020; Lautenbach & Heyder, 2019; Niemeyer & Proctor, 2002; Sharma & Sokal, 2015; Sokal & Sharma, 2013), previous encounters with people with disabilities (Avramidis & Norwich, 2002; Burke & Sutherland, 2004; Delorey, 2020; Parasuram, 2006; Sermier Dessemonte et al., 2014; Weber & Greiner, 2019), personal factors like age and gender (Avramidis & Norwich, 2002), environmental factors such as resources and school supports (Avramidis & Norwich, 2002; Delorey, 2020), and beliefs about abilities interacting with beliefs about roles and responsibilities as a teacher (e.g., Glenn, 2018; Jordan & Stanovich, 2003).

Participants in the current study primarily highlighted three areas of beliefs in their interviews.

5.1.1   The Heart: What is Inclusion?

Beliefs about inclusion derived from a few sources. Many participants learned about the inclusive philosophy as a part of their teacher education program. When participants viewed a respected professor or mentor teacher to hold inclusive beliefs, they tended to also value inclusion and tried to implement inclusion in their classrooms. Further, some participants were observed to implement inclusive strategies steadily after witnessing the benefits of inclusive classrooms, where both students with and without disabilities made positive gains. It is thus important to have consistency in practicum experiences across teacher education programs, ensuring that all mentor teachers promote inclusive values in their classroom practices to inspire the beginning teachers and allowing beginning teachers to experience the possibility of implementing inclusion.

Beliefs about inclusion were also noted to root deeply, tracing back to a participant's personal experience as a student when they attended (or did not attend) an inclusive school. The experience of being segregated themselves prompted some participants to value inclusion more. For others, the lack of exposure to inclusion and diverse learners made it harder to understand and believe that inclusion could work – despite what they were taught in their teacher education program, sometimes even after having expressed that they believed every child should be given equal opportunities to access education with the needed support. This is similar to the findings of Specht et al.'s study (2016), where participants were skeptical of the practical implementation of inclusion despite having positive attitudes towards inclusion and believed in children's rights to be included. This perhaps speaks to the limitation of a teacher education program in converting beginning teachers' pre-set notions and beliefs about inclusion, but also highlighting that it takes *experiencing a true inclusive classroom* to understand its feasibility. The good news is, younger generations of teachers have been increasingly exposed to more inclusive classrooms starting at a young age, meaning it has helped them develop a better understanding and beliefs in the inclusion system.

Participants who questioned whether inclusion was the right approach for all students, despite mentioning being a strong believer of inclusion at one point in their interviews, were also the older participants in this study. Some previous studies have found age to be a factor that contribute to teachers' development of beliefs related to inclusion (Avramidis & Norwich, 2002). However, the participants who questioned inclusion in this study also taught at schools with extremely high needs and found that their schools were struggling to follow the inclusion model. Sometimes they even observed experienced teachers who did not know how to meet the diverse needs of all learners or work with IEP/IPP documents, and sometimes the school program was structured in ways that prevented them from implementing inclusive strategies effectively. Therefore, it is hard to make further comments related to the role of age in the development of inclusive values based on the results of this study. Regardless, it is worthwhile to think about whether this generational difference in exposure to inclusive values and diverse learners from a young age have influenced how some beginning teachers view inclusion in their current practices.

5.1.2 The Heart: Beliefs in Children's Ability and Exposure to Diverse Learners

Beliefs about how children learn derived from exposure to and experience with diverse learners. They also originated from a range of experiences and contexts, such as working with children of a range of abilities in volunteering, coaching, or teaching experiences, having friends or family with diverse learning needs, parenting children who were described as very different from each other, and reflecting on personal experience and needs as a student growing up. These results corroborated with studies on the influence of exposure to diverse learners impacting attitudes towards people with diverse needs (Avramidis & Norwich, 2002; Burke & Sutherland, 2004; Delorey, 2020; Parasuram, 2006; Sermier Dessemonte et al., 2014; Weber & Greiner, 2019).

Since many of these experiences might have occurred before the participants enrolled in a teacher education program, most participants expressed believing in children's potential from the start of the study – and the belief remained throughout most interviews. Therefore, it was unclear whether teacher education program had an impact

on this belief. The development or confirmation of this belief also depended on personal reflection and experiences with diverse learners. In other words, the belief about children's ability is related to having a true understanding of how individuals are unique and different from each other, thus having different strengths and requiring different support to thrive.

5.1.3   The Heart: Responsibilities as Teachers and Recognizing Limits

The most common beliefs about one's roles and responsibilities as teachers actually derived out of their beliefs in children's ability, which is that the teachers should be trying their best to provide tools and support to meet their students' needs. This theme aligned with study on BLTQ (Jordan et al., 2005; Glenn, 2018), which examined the relationship between teachers' beliefs about students' ability and teachers' beliefs about their responsibilities in working with diverse learners.

Sometimes, meeting their students' needs extended beyond just accommodating their learning needs, especially as the beginning teachers progressed through their career. Several participants came to increasingly value their role in meeting the social-emotional needs of their students and improved their instructional practices accordingly. One participant also highlighted her belief in modelling inclusion to her students in a later interview. It appeared that as the beginning teachers got a better grasp of their "primary" responsibilities (meeting students' learning needs), they start to venture out into meeting students' needs on other levels (factors that could impede or affect learning) and in a way that increasingly matched their personal values (e.g., mental health needs, modeling emotion regulation, modelling inclusion).

5.1.4   The Heart: Diversity and Other Components that Affect Learning

In the interviews of some participants, knowledge of diversity in other contexts (such as culture and sexuality) also broadened their views and beliefs about diverse learners in general. For example, Helen mentioned her recognition that "not everyone has

the same family structure (e.g., a father and a mother)" has increased her appreciation for diversity and acknowledgement that everyone is unique.

Further, some participants shed light on the role of other components that could affect students' learning, such as mental health and cultural and social class diversities, which has been demonstrated in previous studies of other research areas (Allard & Santoro, 2008; Aragona-Young & Sawyer, 2018; Hachfeld et al., 2015; Kyles & Olafson, 2008; Leutwyler et al., 2014). These realizations appeared more unique to an individual's experience. For instance, participants like Riley and Colette paid more attention to mental health and emotional needs based on how these factors have affected them in their learning. Whereas for Helen, understanding how to navigate cultural differences became more relevant as she taught at schools with higher ethnic diversity. Therefore, no specific developmental component was observed in this theme.

5.2   Themes Related to the Head: Knowledge and Self-Efficacy

The head of the 3H framework, according to Sharma (2018), is the understanding of inclusive theories and self-perceived ability to implement those related knowledge – otherwise known as self-efficacy. Previous studies showed that teachers' self-efficacy could be influenced by formal education such as teacher education programs and professional development (Tournaki & Samuels, 2016; Tristani & Bassett-Gunter, 2020; Wray et al., 2022), experiences of successful inclusive teaching in classrooms (Malinen et al., 2013; Sermier Dessemonte et al., 2014; Weber & Greiner, 2019), prior contacts with people with disabilities (Charles et al., submitted; Loreman et al., 2013; Parasuram, 2006; Sermier Dessemonte et al., 2014; Sharma & Nuttal, 2016; Specht et al., 2016), and knowledge of local law or policy related to inclusive education (Chao et al., 2016; Loreman et al., 2013; Wray et al., 2022).

5.2.1   The Head: "Getting Thrown In" to Experiment with Strategies

The interviews of the beginning teachers have shown that confidence typically increased from experiencing successes with their students (discovering their strategies or lesson plans were effective) and decreased after experiencing failures or minimal success

with their strategies. These results are not surprising, considering they aligned with findings in previous research that examined the impact of experiencing successes on practicing inclusive instruction in diverse classrooms (Malinen et al., 2013; Sermier Dessemonte et al., 2014; Weber & Greiner, 2019).

The experience of failure could also apply to thinking about implementing inclusive education at a larger, school-based level, and how that affects the beginning teachers' confidence. Some participants expressed disappointment when the school they taught at was incompetent at using inclusive strategies or lacked the resources and time to support their inclusive practices. Although it has been described more as losing confidence and faith in the school system than in themselves, it still impacted the beginning teachers' motivation and self-efficacy to continue within the system to a certain extent (such as for Edna).

5.2.2   The Head: Gap Between Theory and Reality

Many participants acknowledged that the recognition of a gap between their theoretical and practical knowledge often decreased their confidence. Sometimes one could feel very prepared straight after graduating from their teacher education program, only to realize that the reality is *so* different, and their knowledge is insufficient in teaching a diverse classroom – so their confidence would drop significantly at the start of their teaching career. The experience often led to confusion and a sense of incompetence, especially since the demands at the beginning of their career were high. Mintz et al. (2020) described this as a *reality shock* that novice teachers first experience after graduating from their program, which reduced the teachers' perceived knowledge about effective inclusive strategies and self-efficacy about their ability to include diverse learners. Starting afresh in a new school or teaching new grade levels had a similar effect and could impact one's self-efficacy (notably for Edna).

Throughout the interviews, some participants have also highlighted that the more strategies they learned, the less confident they felt. This is because sometimes they were unable to implement the learned strategies, *or* they felt like they were still not meeting *all* their students' needs despite having obtained more knowledge of inclusive strategies.

5.2.3   The Head: Exposure to Diverse Learners

Exposure to diverse learners – through family, friends, and experience with diverse learners in the classroom – especially prior to becoming a teacher, appeared to play an important role in self-efficacy. For instance, Helen described feeling uncomfortable teaching diverse learners at the first interview because people with disabilities felt like an "unknown" to her. In contrast, participants like Bonnie and Edna, who have had years of experience coaching/tutoring with diverse learners prior to beginning their teacher education programs, have shown confidence in their ability to work with diverse learners even at the first interview because they had transferable skills. Therefore, previous experiences with diverse learners outside of the classroom helped them build knowledge about diverse learning needs and confidence in interacting with these students in inclusive classrooms. These findings closely aligned with evidence in many previous studies (Charles et al., submitted; Loreman et al., 2013; Parasuram, 2006; Sermier Dessemonte et al., 2014; Sharma & Nuttal, 2016; Specht et al., 2016).

Then, it might be important to think about whether *exposure to diverse learners outside of the classroom context* is a component that deserves more attention when developing a teacher education program. For instance, is it necessary to make this component mandatory or a "pre-requisite" for getting into a teacher education program? Are there ways of preparing preservice teachers with these experiences before they entered the program or during the program?

5.2.4   The Head: Responsibilities as a Teachers and Recognizing Limits

When discussing their perceived teachers' responsibilities, participants often highlighted they felt overwhelmed as new teachers because they did not have enough tools and time to meet the needs of all students, which decreased their confidence. This can perhaps be explained by a gap between the teacher's perceived expectations of themselves and what they could realistically achieve. The higher the expectations they had of themselves, the more they felt like they were unable to accomplish what they

"should" be doing for their students, the more likely the beginning teachers were left with feeling discouraged and incompetent.

In some cases, these feelings of disappointment and incompetency were partly related to the larger educational system. For example, Edna explained that to meet their provincial's goal of supporting diverse learners with one-on-one meetings, it took away teachers' time to prepare lessons for all the students in the class. It was an inclusive policy that felt impractical to Edna. Likewise, Ellie experienced having to implement a mandatory assessment system for all the Kindergarten students at her school, which took away time and energy for Ellie to build relationships in the classroom. Disappointments in the school system arose since the beginning teachers' expectations of how the school should accommodate for their students were not met; they then felt defeated and powerless in making any changes to the system. Some of them also no longer saw it as their responsibilities for not being fully supportive of the students but an issue with the school system. Therefore, it is important to also think about what the school system and inclusive policies should look like for educators to feel comfortable implementing inclusive strategies.

Once the participant recognized the limits to their roles and responsibilities as teachers and the need to have a work-life balance, however, they often described less frustrations and less feelings of low confidence. Looking at the last interview, some participants started discussing this idea (like Russell and Colette) while others were still contemplating on how much more they should be doing for their students (like Edna). This means that it might take a few years of teaching for teachers to recognize the importance of finding a balance for themselves – perhaps beyond what this study was able to track.

Teacher education programs should thus consider paying more attention to teaching preservice teachers how mental health and burnouts could impact their practices. Being effective inclusive educators and building competency should not be limited to just thinking about whether teachers have the practical knowledge to teach, but also whether they feel prepared and supported to do so. To Colette's point, teachers need to be

emotionally regulated in order to model that for their students and to create a safe environment for their students to learn. With more confidence in themselves and knowing their own emotional needs, teachers can also feel more comfortable attending to students' learning and social-emotional needs.

5.2.5   The Head: Building Relationships with Students and Caregivers

Relationships was another crucial component to knowledge and self-efficacy. Building relationships with students was a common strategy used by beginning teachers. Even without a lot of practical knowledge of inclusive practices overall, getting to know an individual student helped the participant gain ideas for tailoring their instruction. This approach was often successful, which increased the participants' sense of efficacy. Sometimes participants relied on communicating with their students for feedback to improve or develop new ideas, and sometimes students' comments and the progress they make served as a confidence boost. Therefore, forming rapport with students is something that most beginning teachers felt comfortable doing from the start and one of the fastest ways to develop teaching strategies and support their sense of competence.

Some participants in the later interviews also recognized the benefits of building relationship with the caregivers. In fact, it was often the experience of *not* having trust from their students' parents in the first place that made them realize the importance of investing time in these relationships. Further, not having caregiver support could present as a barrier for students to access resources. If the parent were reluctant to accept a diagnosis, it meant there was nothing the participant could really do to facilitate the development of an IEP to better support the student, and the teacher would be left feeling at a loss or defeated. It might also take a toll on the teachers' motivation when everything they did to support the student was met with complaints or a lack of appreciation from the parents. The importance of building relationships with caregivers were often overlooked in the beginning but valued in later interviews.

5.2.6   The Head: A Supportive and Knowledgeable Team

Finally, having a supportive school team was a big factor to confidence. All participants mentioned the importance of getting encouragement, motivation, reassurance, and comfort from their colleagues or fellow beginning teachers at one point in their interviews. These types of emotional support were what got the beginning teachers through challenges and experiences where their confidence decreased. Particularly, the beginning teachers explained the importance of having someone who could understand their struggles or acknowledge the amount of effort they put into solving the problem, regardless of the results. For Bonnie, it was particularly comforting to share problems or ideas with other beginning teachers because they were experiencing similar struggles. These supports were also not limited to in person but could be found through online communities. For instance, Bonnie mentioned she connected with an experienced teacher on Twitter that she felt comfortable going to for help. This highlighted the importance of building a space for beginning teachers to connect with each other and/or with more experienced teachers because they gain knowledge, support, and confidence from these networks.

At a higher level, it was also important to have principals and the school team who share the same inclusive values to make the beginning teacher feel supported and confident in implementing inclusive strategies. Some participants described how much of a struggle it was when the school did not provide that level of support, feeling overwhelmed and helpless without people backing them. This was especially important when the participants encountered very difficult situations, such as when parents disagreed with them. Whereas for participants who taught at schools with strong values in inclusion and provided support accordingly, they notably benefitted from a steadier growth of confidence as they received guidance through the beginning years of teaching. Therefore, forming an inclusive and supportive school culture is critical to beginning teachers' self-efficacy to implement inclusion in their classrooms.

5.3   Themes Related to the Hands: Instructional Practices

According to Sharma (2018), the hands is the ability to implement effective instructional practices in inclusive classrooms. This includes a teacher's skills in practicing inclusion in real-life classrooms, managing the behaviour, and meeting the needs of diverse learners. Past research have highlighted that inclusive classroom strategies are influenced by the following factors: teacher education (Allday et al., 2012; Leblanc et al., 2009; Peterson-Ahmed et al., 2018), practicum/field experiences (Burton & Pace, 2009; Hopkins et al., 2018), effective use of support systems and collaboration (Carlson et al., 2012), and beliefs and self-efficacy (Schwab & Alnahdi, 2020; Carlson et al., 2012; Sandholtz & Ringstaff, 2014; Schiefele & Schaffner, 2015).

5.3.1   The Hands: "Getting Thrown In" to Experiment with Strategies

In the current study, the development of instructional practices was attributed to several sources. Yet, one of the most highlighted factors was just get thrown into a real-life, diverse classroom to experience what it is like and learn from that experience. This aligned with the idea of field experiences influencing beginning teachers' inclusive classroom strategies, providing them with opportunities to relate reality to their theoretical knowledge (Burton & Pace, 2009) and to differentiate effective instruction (Hopkins et al., 2018).

According to many participants, as much as a teacher education program could try to prepare you for what an inclusive classroom might look like on paper, it was not the same as experiencing the reality of a classroom by being a part of it. Getting thrown in allowed participants to observe and get exposure to diverse learners in real life. For example, Jessie shared that it was an eye-opener to how diverse a real classroom could be. It also deepened the beginning teachers' understanding of what diverse learners need to learn and thrive, particularly through testing out different strategies and realizing what works in the real-life context, a process often referred to as *trial and error*.

Yet, getting thrown into the classroom needs to be done with a certain level of guidance and support. With mentoring and scaffolding, beginning teachers can develop instructional practices steadily with confidence; otherwise, they would get too overwhelmed and not be able to learn from the experience. For example, Colette's experience of co-teaching the same class with experienced colleagues (where they scaffolded instructional practices and worked together to support specific learners) demonstrated the use of continual guidance in the classroom. In the United States, there is also a co-teaching model – an approach where a classroom teacher and a special education teacher share responsibility for lesson planning and providing instruction in the classroom (Friend et al., 1993). While more research is needed to understand the pros and cons of co-teaching (Solis et al., 2012), the idea of giving beginning teachers the opportunity to work closely with another colleague, gradually increasing their autonomy and independence in the classroom is worth considering. This may help to ensure preservice teachers are transitioning more smoothly into their early career. It can also be a component to be added or highlighted in existing mentoring programs in Canada (e.g., PHE Canada National Mentorship Program (PHE, 2022), Ontario's New Teacher Induction Program (NTIP; Ministry of Education, 2022), British Columbia's New Teacher Mentoring Project (NTMP; The University of British Columbia [UBC], n.d.), and Alberta's Mentoring Beginning Teachers Program (e.g., The Alberta Teachers' Association, 2017).

5.3.2   The Hands: Gap Between Theory and Reality – What Worked or Did Not Work in Formal Education

On the contrary, participants had mixed feedback about learning strategies from their teacher education program or other formal education opportunities, such as professional development, workshops, and courses beyond graduation. This particularly aligned with Sharma's (2011) suggestion that there is a discrepancy between theory and reality.

Several participants have commented that formal education courses were not as effective as just being thrown in to learn in a real-life classroom. They may have also expressed feeling confused and lost about what to do when they were teaching in diverse

classes because more practical knowledge was not taught in class. Sampling some questions from across all the interviews: *How do you make lesson plans for students with disabilities? How do IEPs or IPPs work in the classroom? What is my role as a classroom teacher in a team meeting? How do you know what accommodations each student requires? How do you report a student's learning when their program has been modified? How do assistive technologies and the related applications work? What are different reading levels? Where can I go for more resources?* The questions were often nuances that, according to the participants, were neglected to be mentioned or taught in teacher education programs.

Sometimes participants also noted that there was a misalignment between the professor's specialty and what the beginning teachers were preparing to teach. For example, a professor working with elementary students with severe disabilities instructed a class of student teachers preparing to teach at a secondary level – rendering the knowledge meaningless.

There was also a notable difference in beginning teachers' practicum experiences during the teacher education program. Specifically, some participants worked with mentor teachers who were struggling themselves with understanding and implementing inclusive strategies, making it hard for the student teacher to learn effective strategies. In thinking how to improve these practicum experiences, some questions to think about may be – how could practicums be made to provide more consistent experiences for all preservice teachers across Canada? Is there a way to screen the supervising teachers regarding their inclusive practices and the school as a whole to see whether they practice effective strategies to support all learners?

Some participants engaged in additional formal education, including professional development opportunities, after graduation. According to the participants, there were some components that made training beyond graduation more meaningful than their teacher education program. One component was having instructors who were working in the field share their personal tips or bring in real-life examples for the participants to consider. Having a role-play component, where the participants get to experience what it

is like to be the student or practice delivering the instruction with an instructor to provide immediate feedback, was also beneficial.

Further, some participants indicated that the teacher education programs provided the knowledge and theories, but they need to be paired up with opportunities to practice. Perhaps it is not about ideas not being taught in the teacher education program but the lack of opportunity to immediate practice and make the connection so the ideas would "stick" – something to consider for further improvement of teacher education programs. Another issue to highlight is that the teacher education program is a combination of coursework and practicums, but participants often separated the two components, equating coursework to the program and counting practicums as a separate experience. Then, another question to think about is how can our teacher education programs make it clearer to preservice teachers that they should make use of the courses and practicums together to enhance their learning? For example, would eliciting more reflection on or association with their practicum experience during courses be helpful?

5.3.3   The Hands: What is Inclusion?

While some participants stated their teacher education program was *insufficient* in preparing them to be effective inclusive educators in reality, many participants actually continued to employ inclusive strategies without acknowledging the influence of their teacher education program. For instance, UDL and DI were two concepts that were often brought up by participants throughout the four interviews. Individuals also became more proficient at implementing these inclusive strategies or ideas as time passed (e.g., Bonnie, Jessie, Riley). At the final interview, a few of the participants realized that their learning from the teacher education program on inclusive strategies has *infiltrated* their practices, or the learning such as how to work with a specific population of diverse learner became handy. If so, an interesting question to address here is: Why are beginning teachers' development of their inclusive practices often not attributed to or associated with their teacher education programs when they are playing a role? Or perhaps, are teacher education programs getting a worst reputation than they deserve? How could this perception be improved?

5.3.4   The Hands: Building Relationships with Students and Caregivers

As previously mentioned, one common strategy that many beginning teachers depended on to develop strategies to work with their students was building a relationship with them. The idea is that, in order to understand and meet the unique needs of each child, the teacher needs to know the child well enough to decide on what works and what to try. Finding out what strategies work for each student relied on observing the students (e.g., how they interact with other students) and conversations to get feedback directly from the students to assess a strategy. Specifically, this component was similarly discussed in Hopkins et al.'s (2018) study, where the preservice teachers learned to build rapport to improve students' participation.

5.3.5   The Hands: A Supportive and Knowledgeable Team

Working with other knowledgeable teachers also contributed to beginning teachers' instructional practices. This correlated to Carlson et al.'s (2012) ideas of effective use of support systems and collaborating with others. As beginning teachers, participants often found themselves relying on the guidance of their school team when it came to new tasks. Some participants benefitted from just observing experienced teachers to add strategies to their toolbox, while others appreciated opportunities like team meetings to brainstorm or get more specific ideas on how to support certain students with diverse learning needs.

5.3.6   The Hands: Books, Media, and Technology

Finally, some participants mentioned how personal research and online tools helped consolidate concepts they have learned or to build new strategies. Although the ideas were mentioned sparsely, the participants brought up some interesting concepts – such as how exposure to videos online inevitably influenced their ideas about teaching and how children learn in classrooms, and relying more on online resources when they lacked support from their school. It is perhaps worth thinking about how else technology could be used as a tool to spread knowledge and increase beginning teachers' engagement in learning about inclusive instructional practices, such as using an online

course to teach strategies in engaging diverse learners in the study of Peterson-Ahmed and colleagues (2018).

5.4 Highlights of Overarching Ideas and Developmental Patterns

Examining the participants' development as a whole, here are some of the notable overarching ideas and developmental patterns:

First, most participants mentioned concepts of the inclusive philosophy consistently across the four years of interviews. This included the belief that each person is capable, unique, and has their own learning needs. They also believe that it is their job, as the teacher, to supply these support and tools to "unlock" their students' full potential. Most participants also spoke to the use of UDL and DI in their instructional practices – sometimes stated explicitly, sometimes appeared to be infused into their instructional practices as common sense and not necessarily labelled as an inclusive approach to teaching. Their mentioning of the practice of these concepts did not necessarily increase in frequencies over the years, but their implementation appeared to have become more proficient and natural as the beginning teachers progressed through their four years of interviews. These are beliefs and ideas that are highlighted and taught in teacher education programs. However, the development of these beliefs and instructional practices were not often attributed to their formal education. While it is impossible to say teacher education programs are the sole and/or primary contributor to participants' development of inclusive values and use of inclusive concepts, it also appears that participants just rarely made the connection.

Further, it was prevalent that many participants viewed their teacher education program as not preparing them *enough* to teach in inclusive classrooms. Courses were criticized for not doing a better job of addressing the nuances and details to practicing inclusion, like *how to make an IEP work in the classroom* or *how do assistive technologies work*. But is it truly that the ideas were not taught – or were the ideas not internalized? As much as materials could be presented or provided in courses, it could be difficult to remember them or make sense of what they are without the opportunity to

apply and practice them. Some participants have also pointed out how beneficial it was when they could role-play and get immediate feedback on how to improve their execution of the instructional practices. Perhaps the missing link is in *internalizing* what is being taught in theory: the practicing component is required to happen side-by-side with the learning of theory, or there needs to be ways of eliciting preservice teachers in thinking about the practical application during coursework, in order to make the knowledge stick. Also, keep in mind that participants often did not acknowledge practicums as a part of the teacher education program. It is important to point out to preservice teachers that practicums are the opportunities for them to practice ideas or theories they have learned in class.

Finally, there was a developmental pattern in the participants' confidence over the four years. It was often noted that the participants started off as confident when they have just graduated from their teacher education program. They felt equipped with tools and were eager to practice what they have learned and what they felt were the best ways to support their students. The moment they started teaching though, the confidence took a hit. They may quickly realize that what they had imagined the classroom to be like was a little rosier than reality; they may realize what they have been taught was not sufficient in meeting the needs of a specific student they had to work with; or they may find out that they were not able to successfully implement what they have learned – due to the lack of resources, money, time, support from their school environment, etc. As Mintz et al. (2020) put it, the teachers experience a *reality shock*, so their confidence would drop significantly. As the teachers progressed through the early years of their career, they worked on improving this. They engaged in researching more materials, learned from other teachers, and attended workshops. Yet, sometimes, *the more they learned, the more they felt incompetent* because they felt like they were still not doing enough to meet their students' needs, or that they were not actually able to implement the strategies they have learned. Fortunately, they were not completely faced with defeat; they experienced successes here and there overtime, which gave them some confidence. This perhaps explained why some participants felt that their confidence *fluctuated*.

From here on, it appeared that there were two types of mindsets that the participant could take (from what could be observed in the current four-year study). The first type was acknowledging their limits as teachers and finding a work-life balance. Some participants have come to realize that they could only do so much, given the reality of things (e.g., limited time, lack of resources, their own mental health), and they were doing the best that they could. Teachers with this mindset have come to terms with what they could accomplish as teachers and accepted that they will experience a mix of successes and failures. They were still trying their best and improving but they were also not going to overstretch themselves or see themselves as anything less if something did not work out. The second type of mindset was having very high expectations of themselves (or the school system) and difficulty letting go of these standards. They believed that as their responsibilities, they should be providing every child in their classroom with the optimal support they could get. These teachers felt that they still have a lot more to offer but just unable to, due to a wide variety of reasons like the lack of time and resources. They also felt that they (or the school system) were failing their students. In other words, the goals and expectations they have set for what they should be doing as teachers were very high, which may be achievable in theory if everything aligns but unlikely in reality. As a result, these teachers felt disappointed and defeated. It may not necessarily impact their perception of their abilities, but it affected their confidence as a teacher and made them question whether they would ever be able to meet the needs of *all* their students.

These different ways of approaching how teachers viewed their responsibilities bring out two key ideas: the necessity to (a) address teacher mental health and burnouts and (b) support beginning teachers in developing their teacher role/identity or defining realistic responsibilities. In some ways, this relates to the issue of the gap between theory and practice: preservice teachers learn about how things look like ideally but are disconnected from the reality of things. Once they enter the field, it became hard to adjust and understand what expectations are reasonable. Also, as much as some participants were able to come to their own realization of needing a work-life balance, it would have been helpful to give them a space to discuss the issue and hear experienced teachers talk about how they deal with the stress and expectations regardless.

5.5 Summary of Implications: What Can We Do as the Faculty of Education to Improve Policies and Practices?

To address current issues in teacher preparation, first and foremost, is to bridge the gap between theory and practice. As Sharma (2018) suggested, it would be beneficial to have in-service teachers co-teach inclusive education courses with university lecturers. Another idea is to have different people working in the field share their knowledge with the preservice teachers in the form of guest lectures. Based on their experiences from teacher education programs and training beyond graduation, participants also suggested the importance of having chances to practice, such as role-play to find out what it is like to implement the strategies and to experience what it feels like to be the student in the situation. Further, it would be ideal to get immediate feedback on how to improve their strategies after the practices. Another highlighted component was to make practicums or additional field experiences run parallel to their courses – that theories are paired up with and complements real-life practices, internalizing and consolidating what they learn in class. This should include emphasizing to the preservice teachers the need to practice what they have learned from class in their practicums, and to reflect on their practicum experiences when they return to class through coursework – connecting theory and practice as much as possible.

While Sharma (2018) proposed assessing preservice teachers during placements to determine whether they are ready to teach in inclusive classrooms, another criterion to think about is whether preservice teachers need prior experience working with diverse learners outside of the classroom context before starting or during their program. Previous experiences with diverse learners could help with their sense of self-efficacy as well as knowledge and beliefs about how children learn, consequently influencing their instructional practices and acceptance of inclusive values (Loreman et al., 2013; Kavanoz et al., 2017; Parasuram, 2006). It might be that providing preservice teachers with opportunities to interact with diverse learners, such as volunteering in the community, is made mandatory before they enter the teacher education program or at the start of the program. Delorey (2020) also proposed that teacher education programs can consider providing preservice teachers with alternative field experience opportunities that

encourage interaction with diverse learners outside of the school context during the program.

In terms of the content of courses, Scheulka (2018) suggested that inclusive pedagogy must be emphasized across training rather than short-term trainings to influence changes. Further, courses must include ways of addressing the *nuances* to teaching. For example, preservice teacher needs to learn about not just the purpose of an IEP but also practical knowledge of how to create and read the document, what are the available accommodations, what do those accommodations mean, how to pick ones that fit the needs of their students, and then how to implement those accommodations in the classroom. Another way of thinking about how to approach this is making sure beginning teachers receives sufficient scaffolding and mentoring at the start of their career. There will always be nuances to be learned on the job, but perhaps what is missing is the support and having someone the beginning teacher could approach without feeling embarrassed to ask about all these details. It might also be about having an experienced teacher who can share teaching responsibilities and provide more immediate guidance. This type of partnership could further help with developing inclusive beliefs, confidence, and instructional practices if the mentor or colleague also use an inclusive approach in teaching.

This also speaks to the importance of the competency of the mentor teacher and the school at which the student teacher serves during their practicum. As noted, preservice teachers' practicum experiences varied largely – from having experienced mentor teachers who have inclusive beliefs and useful tips to implementing instruction in diverse classrooms, to mentor teachers who were just as clueless as the preservice teachers were about inclusion because they were also never taught and supported in their learning. Having a supportive school team and atmosphere also encourages the beginning teacher to approach inclusive education more at ease. Therefore, it would be ideal to have ways to ensuring more consistency across practicum programs. For example, whether the school, principal, or the mentor teachers need to be screened to qualify for providing a practicum experience for the student, or ways to collect information about the school's, the principal's, and the mentor teacher's inclusive practices prior to the start of

practicum, so the teacher education program could better support a preservice teacher in terms of filling in the possible gaps in learning.

The implementation of inclusive polices should also be considered. Beginning teachers in the present study suggested that some attempts to implement inclusive strategies actually hindered their ability to better meet the needs of their students. Policy makers need to be made aware of issues that prevent teachers from implementing inclusive practices, for example, the lack of resources, time, energy, and support. As much as an idea could be beneficial to students theoretically in the ideal world, it might be counter-effective if it is not practical and not designed with current obstacles in mind.

In the present study, results suggested that beliefs about inclusion may be deeply rooted and trace back to a person's experience in the inclusive classroom growing up. This also highlighted the presence of generational differences, as younger teachers may become more accepting of the inclusive philosophy, which could very much lead to conflicts between more experienced teachers and beginning teachers. It is much more difficult to change people's beliefs about inclusion only through their teacher education program and sometimes it takes experiencing successful inclusive classrooms to realize its feasibility and benefits. On the contrary, beliefs about children's ability and teachers' responsibilities were much more flexibly developed and appeared to just come with time and experience in one's teaching career.

Finally, some additional ideas that should be considered and incorporated into developing teacher education program include educating teachers about meeting their own emotional needs and making use of media and technology. Being a teacher is hard – it comes with a lot of responsibilities and demands, and even more so to become an effective inclusive educator. While teachers may be taught how to meet their students' social-emotional needs and help regulate their emotions, their own needs are often neglected as a cost. Becoming an effective inclusive educator should include the idea of knowing how to find a balance and taking care of their own mental health. Without that, teachers could struggle even more, resulting in burnouts and impacting the students. Therefore, the ideas of mental health and self-care for teachers should be taught in

teacher education programs. It does not necessarily need to be addressed in a full course, but it would be important for the ideas to be incorporated into some lessons, as well as coming from professors or experienced teachers sharing their own struggles and ways of finding a balance for themselves. It might also be helpful to just provide a space for preservice teachers to discuss these topics – formally through workshops or informally through their chats and networks. Teachers should then be given ongoing support, especially at the beginning of their career, and in ways that are meaningful and accessible to them, such as having principals or experienced colleagues opening the conversations about mental health and reasonable teacher responsibilities.

Relatedly, creating communities for preservice and in-service teachers would be beneficial. In the present study, some beginning teachers relied on online communities for getting emotional support and practical resources. More research should be done to explore how to make use of media and technology to meet teachers' needs, such as in the study of Peterson-Ahmed et al. (2018).

5.6   Limitations and Future Research Directions

There were several limitations to this study related to the longitudinal case studies methodology. First, the sample size was determined by how many participants agreed to contribute for four consecutive years. As Bazeley (2013) had suggested, though, more is not necessarily better. Referencing the study of Guest et al. (2006) who examined data saturation, they demonstrated that in a sample of 60 participants, 80 per cent of their codes derived from six interviews and 92 per cent were identified from an additional six interviews – with the remaining codes being used infrequently. Therefore, the majority of the codes came from the range of examining interviews of seven to twelve participants – where our sample size fell.

Relatedly, there was limited control over ethnic and gender diversity, despite participants being sampled from across Canada. Most participants in the present study were white and females. Therefore, it would be beneficial to explore beginning teachers' development of inclusive practices in different ethnic groups, genders, and geographic locations in future studies, such as replicating the study in other countries for comparison.

Finally, due to the nature of the study being qualitative, there might have been researcher biases. The primary researcher's positionality was declared to help readers understand the perception that was used to interpret the results – primarily that on top of attending to the diversity of abilities, factors such as cultural differences, a person's upbringing, and mental health were also highlighted in this paper. Further, the coding system was reviewed by a second coder to enrich the perspectives, which also facilitated discussions between the two researchers to better represent the data.

The results from this longitudinal case studies helped to identify themes in how beginning teachers currently view the development of their inclusive practices. Some of findings corroborated important ideas that were in the literature, which further urges us to pay attention to these factors as we work on improving our teacher education programs and the teaching experiences of novice teachers nationally. There were also some meaningful developmental concepts to consider. For instance, recognizing that beliefs about children's ability and inclusive instructional practices were stable or consistently developing across the four years of the beginning teachers' career, but often unacknowledged because they have become commonsensical to the teachers. This also speaks to the importance of thinking about how the beginning teachers perceived where the issues lie – and a lot of it came from the discrepancy between their expectations and the reality. Therefore, we need to consider how we can help beginning teachers build a reasonable perception of their teacher responsibilities, which can then impact their self-reported efficacy, and consequently strengthen their faith in inclusive education and their motivation to implement inclusive instructional practices.

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Appendices

Appendix A: Western University Ethics Approval

Date: 14 July 2020

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: 07/Aug/2020

Date Approval Issued: 14/Jul/2020

REB Approval Expiry Date: 17/Jul/2021

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 re-approved 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 B: Introductory Questionnaire and Cover Page

INTRODUCTORY QUESTIONNAIRE and COVER PAGE

Please √ on the line as appropriate.

A. I am preparing to teach in the following grades: (check all that apply)

K-3 _____; 4-6 _____; 7-8 _____; 9-10 _____; 11-12 _____

B. I am: Male _____; Female _____; Trans* ____; Other (please specify) _____

C. **How do you describe yourself?** *(You may choose one answer, or more than one)*

Indigenous: _____

Black: _____

East Asian: _____

Latin American: _____

South Asian: _____

Southeast Asian: _____

West Asian: _____

White: _____

Other (please specify):_____

D. Birthdate (Day/month/year) _____

E. My highest level of education completed prior to entering this program is:

Secondary School or its equivalent _____   CEGEP (Quebec) _____

Bachelor's Degree or its equivalent_____   Master's Degree _____

Other, please specify _____

F. I have encountered people who are diverse learners in the following ways (check all that apply)

Self _____
Family Member _____
Friend _____
Co-Worker/Co-Volunteer ____
In a Professional Role (e.g., teacher, caregiver, advocate) _____
Not at all _____

INTRODUCTORY QUESTIONNAIRE and COVER PAGE

G. How much *professional* experience have you had working with individuals who are diverse learners? Please circle on the following scale, where 0= none at all, 1= little, 2= moderate, and 3= extensive.

None at all	Little	Moderate	Extensive
0	1	2	3

H. How much *personal* experience have you had with individuals who are diverse learners? Please circle on the following scale, where 0= none at all, 1= little, 2= moderate, and 3= extensive.

None at all	Little	Moderate	Extensive
0	1	2	3

I. To date, I have spent _____ weeks on practicum

J. My experience in teaching students with diverse learning needs to date is:

Nil _____ 0-30 days _____ At least 30 days _____

INTRODUCTORY QUESTIONNAIRE and COVER PAGE

Do you wish to be contacted for future research?

This is a longitudinal research study; our goal is to track beginning teachers' beliefs, attitudes, and knowledge over the course of their teacher education and into their first years of teaching. If you wish to participate in future research opportunities, all remaining communication will be sent through online methods (email, online surveys, etc.).

Would you be willing to be contacted over the course of this research to participate in future research opportunities?

Yes _____   No_____

If YES, please specify your name and <u>permanent</u> email address where you can be contacted:

Name: _____

Email Address: _____

Appendix C: Codebook

Code	Description	When to use	When not to use	Example
Experience (EXP)				
//coaching	the participant coaching extracurricular activities or tutoring outside of practicums named as an experience		not when coaching or tutoring is part of the practicum	"I taught swimming lessons"
//community involvement	volunteer experiences or other community involvement named as an experience		excludes coaching or tutoring in the community	"And I also worked in the community centre with autistic children."
//formal education	courses taken as a part of the teacher education program, or a degree requirement named as an experience	mentioning of exceptionalities course, etc.	not professional development or additional courses taken out of own interest	"required exceptionalities course"; "we did take a class in teacher's college, like you know, um, that talked about different types of learning disabilities…"
//practicum	practicum work named as an experience			"We could choose our placements and I did another placement in a home that had mentally and physically disabled people."
//classroom teacher	teaching as a classroom teacher after graduation named as an experience			"I teach full time science in English and in French and I have one French healthy living class"
//other teaching positions	coaching, tutoring, teaching in the classroom not as a classroom teacher or teaching at home after graduation named as an experience	teaching as a supply teacher or education assistant, homeschooling		"I am a substitute teacher"
//other career	a previous or second career that is unrelated to teaching named as an experience			"And so because I've been a small business owner and I've been able to liaison with, uhm, lots of different people in different fields…"
//PD	professional development named as an experience	workshops, seminars, additional courses taken out of interest	not courses from teacher education program	"we did PD on trauma, and how there was someone who came in from the children's hospital, um, how trauma can affect children…."
//PLC	professional learning community, or organized events/tools for teachers to collaborate, named as an experience			"We're supposed to have PLCs, which are uh, learning community…"; "Twitter is like a huge, huge thing with our school board in terms of teachers being connected and teachers posting things they're doing in the classroom and like resource sharing."
//student experience	personal experience as a diverse learner named as an experience			"Also myself. So I grew up with an anxiety disorder. I did not do well in high school because of it, but it was undiagnosed so I didn't know why I was doing poorly in high school. So I tend to be an instructor that recognizes when a student is struggling…"

//family	interaction with family members or friends named as experience, or experience derived from being a parent	parenting children, interacting with members of the family with diverse needs or friends with diverse needs, or interacting with family or friends with experience in working with people with diverse needs		"mainly parenthood. Having my own kids gave me an interesting perspective on how kids develop and how different they can be"
//personal research	participant's own research or further exploration through books or online resources named as an experience	includes articles, videos, websites that added to the participant's knowledge		"I actually use the ERIC database a lot."; "and then sometimes when I'm desperate I just google search"
People (PPL)				
//system	the bigger system (e.g., government policies, school culture) influencing the participant's practice	includes culture or politics within the school that is preventing the participant from or enabling the participant to acting in accordance with their beliefs; this also speaks to power dynamics in the school system		"I don't want to sound jaded because I want all my students to do well, I just don't always think that they're being served well by the system and it makes me frustrated because I'm part of that system"
//mentor	a person who is knowledgeable and supports or provides one-on-one guidance to the participant; someone who works closely with the participant	mentor/professor who provides specific advice or encouragement regarding participant's practice or ideas, mentor teacher or EA during practicum, role models	different from //expert, who transfers knowledge to the participant in a broader context	"And then for the past year, I met a high school teacher that was a wonderful mentor for me, and he was so helpful and, honestly he probably taught me more than anyone."
//expert	people who are deemed by the participant as having way more experience and are working in the field, providing knowledge in a broad and group context (e.g., classroom, meetings); the transfer of knowledge is in one direction (from the person in the field to the participant)	classroom teachers in general, EAs, principals, online personnel who provide resources, presenters at PD or workshops, professor of a course	different from //mentor, who provides one-on-one guidance/coaching	"I've also had the opportunity to work with a number of teachers and learn from their teaching styles and learn how those influence the way they connect with different students."
//collaborator	other teachers or personnel in a related field that allow for collaboration, co-teaching, sharing of ideas or teaching resources; the transfer of knowledge is bi-directional (the collaborator and the participant work together and learn from each other)	colleagues, staff from other organizations that allow for exchange of ideas		"the English teacher and I have a classroom right next to each other, so we do. We cross curricular-ize for his English needs, we take some of his science work and he'll either rewrite it again for the science, for the English teacher or I'll have him rewrite it so he thinks he's doing it for me for science, and I'll give it to the English teacher [...] and it counts toward his English mark as well which is great 'cause otherwise he gets nothing done in English"
//cohort	peers from same cohort at teacher education program			"I know talking to my classmates... my situation this year was completely 'normal.'"

Code	Description	Includes	Notes	Example
//diverse learner	diverse learners themselves	student, children, families or friends with diverse learning needs		"I had a stepson that had ADHD, and I learned a lot about how to reason with someone in an unreasonable state from that person."
//parent	parents of diverse learners	includes added pressure from parents, collaboration with parents		"Even though in this situation the parents are very unsupportive, and um, you know, very dishonest, and very difficult to deal with…"
//teacher	seeing teachers from a different perspective, like as a parent or a student		if learning from teachers as a beginning teacher, code //expert	" I have four very, very, very different children and some, some have, may struggle in school with some things and I have one that is…I don't consider…she's not gifted, she's not diagnosed gifted but she's above grade level in many language and math at school, you know the teachers are always trying to find things for her to keep her challenged and keep her interested"
//personal characteristics	personal qualities of the participant themselves named as a factor	participant's personality		"I think I am always a little on guard or worried or scared when I meet new people, new students"
Method (MTD)				
//exposure	the experience provides the participant with exposure to diverse learners; opportunities to work in an environment with diverse learners	teaching in an alternative classroom or a diverse classroom; teaching at different school boards with students of different cultures, SES, learning needs; travelling/living abroad		"But that's probably been…even though that wasn't a regular classroom, it was probably the biggest learning experience I had for that type of students"
//guided practice	practicing strategies as suggested by other experienced staff			"so when I'm in a classroom it's interesting for me to see kind of what they've laid out for me to do to help other learners"
//accumulating experience	accumulating hands-on teaching experience in general that changes the participant's perspective	learning from teaching in the classroom, working with diverse learner over time	if the experience specifically mentions trying out a strategy and discovering what works, code //trial and error	
//trial and error	specific description of trying out teaching strategies that leads to discovering what is effective and/or ineffective, or implementation of strategies after achieving success with previous students	may include description of activities such as planning curriculums, writing tests for students, providing instructions to students, managing classrooms		"… and trying different activities and trying to be hands-on and trying to do the same thing in a million different ways that maybe something will stick."
//conversation	the experience provides new knowledge or insights through conversing and having a dialogue with people	includes chats and asking others questions for more information		"I've had a chance to ask teachers direct questions about the supports or the challenges that they are giving their learners"

//observation	the experience provides new knowledge or insights through observing people		"I would say that probably the experiences that affect the instruction I use as a sub are, observing some of the other teachers in action, sometimes I have opportunities to kind of co-teach or be another adult in the room and get to see how they are interacting with diverse learners and the supports that they are putting in place"
//theory	the experience provides new knowledge or insights in the form of a theory	mentions specific theorists, textbook knowledge, ideas in theory; often from courses or workshops	"I guess the biggest thing that comes up here for me is UDL so universal design for learning and I… that is something that we learned about in university."
//reflection	any reflection from an experience that leads to new ideas, thoughts, beliefs, or practices	includes translation of knowledge; often involves participant questioning themselves about what they are doing in the situation; often leads to a comment	"it gives me an opportunity to recognize that sometimes when kids are misbehaving or kids aren't doing what they're supposed to be doing that, it's not necessarily a reflection on them as learners, but more a reflection of them in the situation they're in at the current moment. "
Knowledge (KNW)			
//inclusive practice	having or gaining knowledge (or lack thereof) of inclusive practices that serve to accommodate and best meet diverse students' needs	includes understanding of individualized education plan (IEP/IPP), classroom modifications /accommodations (e.g., preferential seating, standing desks), choice of materials to meet diverse needs, supporting students, classroom management, strategies	"they can choose a book from my library and I have everything from you know, Grade 3 reading level all the way up to you know, Grade 9 basically because we do have that big of a range in my classroom "
//diversity	having or gaining knowledge (or lack thereof) of diverse learning needs, mental health, culture, sexuality, SES	understanding of people with developmental disabilities, learning disabilities, giftedness, anxiety, mood disorders; people of the LGBTQ+ community, different SES	"In addition, 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…"
Beliefs (BLF)			
//inclusion	perspective on inclusive education and its philosophy (e.g., meeting everyone's learning needs), including criticism	how instructions should be or are implemented in an inclusive classroom, philosophy of inclusive education	"I have a background in spec ed, so I believe in diverse classrooms and integrating everybody…"
//mental health	importance of meeting students' emotional needs in order to have the mental capacity for learning; sometimes it includes external factors (e.g., family, SES) affecting their social-emotional wellbeing for learning		"I think that all children, that in teaching our children with exceptionalities, learn when they feel safe and supported and so the experience of providing or trying to foster that safety and support, um, those are the times that I've seen the greatest success."

//ability	comment on the ability of individuals with disabilities	expectations of students' ability, whether ability is fluid and can change	"I knew that everybody can learn but sometimes it takes a little bit longer"
//responsibilities	comment on the role or responsibility of self as a teacher		"The teacher and their beliefs in inclusivity and their willingness to um, to follow IEP plans and to differentiate their instructions to fit different learners are all really important things too."
Confidence (CFD)			
//decreased	decrease in confidence		"I would say it's probably decreased a little from like, I, I don't know. I think that I left my B.Ed. with still a pretty good like, a pretty like, I don't know like, not as much rose-coloured glasses I guess."
//maintained	confidence stayed the same		"it's about the same I would say. Um, you know, if, I feel the same. I guess like nothing really changed except the demands on me as a teacher are a lot higher"
//increased	increase in confidence		"… so those are all things that have really helped increase my feelings, my confidence, I guess."
//fluctuated	confidence fluctuated throughout the year		"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 then 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."
Relationship (RLN)			
//emotional support	a sense of emotional support from colleagues, principal, school, cohort, families	the feeling of others and the participant are "in the same boat", explicit sayings from others to motivate or encourage the participant	"And then of course having those people to call up and say, "I've had a horrible day!" They've been really helpful."

//rapport	building relationships with or getting to know students or families reported as related to the success of teaching/learning		"... honestly it's destroying the relationship that I have with these two students because they're failing..."; "The relationship between myself as a teacher and he as a student grew in trust and his performance and his success developed. It was very nice."
//self-care	taking care of own needs as a teacher/person, recognizing limits as a teacher	giving time to self for self-care, finding work-life balance, advocating own needs as a teacher, sometimes prioritizing own physical and mental health over their career	"one of the ways that I've grown I suppose in the last year would have been finding ways to advocate for myself as a teacher and my classroom and my students individually in that, for example, there was a point in time this year when I had a particular student in the room who was still on part days but who was in the room in the morning, and there was a point when I had to go to the principal and say, 'When so and so is here and there is not another adult in the room, I am unable to do anything academic at all.'"
Emotion (EMO)			
//puzzled	any expression of feeling confused, uncertain, or at a loss, including those of the participant or the participant relaying the feelings of others		"there were days when I just didn't really know what to do"; "I still don't understand"
//overwhelmed	any expression of struggling, or feeling overwhelmed or stressed, including those of the participant or the participant relaying the feelings of others		"...this is not helping because it makes me more stressed out..."
//challenged	any expression of feeling unconfident, challenged from achieving minimal success, or uncomfortable with how to handle the situation, including those of the participant or the participant relaying the feelings of others		You might try sometimes but really, ah, sometimes it's a little bit tough to 'keep all the wheels on the bus.'"
//fear	any expression of feeling nervous or scared, including those of the participant or the participant relaying the feelings of others		"it's scary to have experience to, to get to know people with exceptionalities and it makes you more comfortable and you learn... you learn tricks"
//frustrated	any expression of feeling frustrated or agitated, including those of the participant or the participant relaying the feelings of others		"I don't always think I'm doing the best for them so... and that's really frustrating "

//defeated	any expression of feeling defeated, hopeless or powerless, including those of the participant or the participant relaying the feelings of others		"and then now I'm a teacher and I feel like I don't have much power, I just have to do what my admin tells me to do..."
//shame	any expression of feeling shameful, afraid to ask for help, including those of the participant or the participant relaying the feelings of others		"I feel silly asking but I find myself like going online and checking out after"
//hopeful	any expression of feeling hopeful, affirmed from others' encouragement or experiencing successes, staying motivated and passionate about their work, including those of the participant of the participant relaying the feelings of others		"... we've been so good at you know um, we've instilled the routine, we have structure, we have a, you know, set guidelines in our classroom and this child has just um, come leaps and bounds, you know, this child, it's really, really encouraging to see this child's progress."
Comment (COM)			
//ineffective	an experience named as not useful	formal education or PD provides knowledge or theory that is impractical in practice, the course structure or activities are unhelpful, already have knowledge	"I found that it did prepare me in what to expect in that, students can be unpredictable and that sort of thing, but I don't think it really prepared me for the level and intensity that some student experience exceptionalities..."
//conflicting views	a personal opinion that criticizes or questions what is currently in place, or the opinions of another person/the system conflicts with the participant's personal perception on the topic		"it's making teachers a lot more stressed out is what's happening in [province] and I would say it's not really helping with the quality of education."
//skeptical	skeptical of the inclusion model due to experiencing difficulties in implementing or including students of diverse abilities in the classroom	often conveys observed benefits but then the problematic side of the inclusion model in practice	"on one side we're trying to integrate um, you know, children and have these diverse classrooms, but from another perspective, we have children that are being harmed, you know, psychologically or emotionally that, from being exposed to some of these events are, you know, when you have to clear the classroom, on a day-to-day basis, you have to tell twenty students, get up, leave right now, we have to evacuate the classroom because somebody's throwing chairs..."

//discrepancy	recognized discrepancy between theories learned from education or beliefs the participant hold, and practical experience of applying that knowledge/belief at work		"when I, I do feel like, when I have been successful in practicing UDL, ummm I do see that all students have benefitted ummm and have been able to successfully engage with the material at hand and I don't feel like that happens very often, truthfully."
//ideas for improvement	any suggestions of how the experience could be modified to increase knowledge/efficacy		"what I really could have used the information on are like what are stage, and I guess it's kind of board specific, so teacher's training doesn't necessarily know where you're going to go [...] Um, but what are the different sort of, how do you deal with those students in a classroom, what's a graphic organizer? How do I use this?"
//limited resources	insufficient funding, resources, people, or time, leading to lack of support or limitations to teaching, etc.		"lack of trained ETA support is a big deal for us too"
3H APPRENTICESHIP			
HANDS	when the experience influences the development of instructions in inclusive classrooms		
HEART	when the experience influences the development of beliefs in inclusive classrooms		
HEAD	when the experience influences the development of self-efficacy/knowledge in inclusive classrooms		

Curriculum Vitae

Name:	Tsz-Wing Zita Lau

Post-secondary Education and Degrees:

York University
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2011-2016 B.A.

Western University
London, Ontario, Canada
2016-2018 M.A.

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2018-2022 Ph.D.

Honours and Awards:

Canadian Psychology Associate (CPA) Certificate of Academic Excellence
2016

Social Science and Humanities Research Council (SSHRC) Canada Graduate Scholarship
2016

Ontario Graduate Scholarship
2018

W.A. Townshend Gold Medal in Education
2018

Jessica Jean Campbell Coulson Award
2018, 2021

Related Work Experience:

Research Assistant
York University
2014-2016

Research Assistant
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2016-2019

Teaching Assistant
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Conference Presentations:
Specht, J., Charles, E., deLugt, J., Delorey., J., Fairbrother, M., Gallagher, T., Howell., G., Ismailos, L., **Lau, Z.**, Maich, K., McGhie-Richmond. D., Metsala, J., Sider, S., Thompson., S.A., Thorne, C., Villella, M., Whitley, J., & Young, G. (2021, June) *Supporting the development of inclusive practice in beginning teachers.* Paper presented at the Canadian Society for Studies in Education Annual Conference, Edmonton, AB.

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. A., Thorne, C., Villella, M., Whitley, J., & Young, G. (2020, June). *Inclusive education and beginning teachers: Implications for research and practice.* Paper presentation accepted at the Canadian Society for Studies in Education Annual Conference, London, ON. (Conference canceled)

Friesen, D., Schmidt, K., Edwards, K., Celebre, A., Atwal, T., Amico, C., & **Lau, T. Z.** (2020, June). *Reading strategy use predicts comprehension success in native English readers and English language learners in elementary school.* Paper presentation accepted at the Canadian Society for Studies in Education Annual Conference, London, ON. (Conference canceled)

Bennett, S., Ismailos, L., Gallagher, T., **Lau, Z.**, & Villella, M. (2019, August). *Concept mapping: Efficacy and beliefs of beginning teachers for inclusive practice.* Paper presented at the International Association for the Scientific Study of Intellectual and Developmental Disability World Congress, Glasgow, Scotland.

Lau, T. Z., & Nowicki, E. A. (2019, June). *Why are children with learning difficulties socially excluded? A group concept mapping study with third- and fourth-graders.* Paper presented at the Canadian Society for Studies in Education Annual Conference, Vancouver, BC.

Lau, T. Z., Nowicki, E. A., & Dare, L. (2019, April). *Social exclusion of peers with learning difficulties: The thoughts of Grades 3 and 4 students.* Roundtable presentation made at the annual meeting of the American Educational Research Association, Toronto, ON.

Lau, T. Z., & Nowicki, E. A. (2018, May). *"Why are kids with learning difficulties left out of things at school?" An examination of third- and fourth-graders' perspectives.* Poster presented at the Developmental Disabilities Academic Research Day, London, ON.

Lau, T. Z., & Nowicki, E. A. (2017, May). *Children's perspective on social exclusion of peers with learning disabilities: A cross-cultural examination.* Poster presented at the Canadian Society for Studies in Education Annual Conference, Toronto, ON.

Bohr, Y., Khourochvili, M., & **Lau, T. Z.** (2017, April). *Technology and caregiver-child interaction: An exploration of the effects on infants of mobile technology involved*

parents. Paper presented at the biennial meeting of the Society for Research in Child Development, Austin, TX.

Khourochvili, M., Bohr, Y., & **Lau, T. Z.** (2016, June). *What is it like to have a mom who enjoys talking on her cell phone? An exploration of the potential effects on infants of mobile technology involved parents*. Presentation made at the Pederson, Moran & Goldberg Attachment Research Meeting, Guelph, ON.