Teaching Empathy, Equity, and Inclusion: Lessons from Reverse Integration Educators

By:

Ashley Katz

A research paper submitted in conformity with the requirements
For the degree of Master of Teaching
Department of Curriculum, Teaching and Learning
Ontario Institute for Studies in Education of the University of Toronto

Copyright by Ashley Katz, April 2016
ABSTRACT

This Master of Teaching Research Project is a qualitative study that addresses the topics of equity and inclusion in the classroom, specifically within a reverse integration setting. Although limited, the existing literature on reverse integration classrooms suggests that learning in this setting is uniquely successful in developing students’ understanding and acceptance of disabilities, and fosters meaningful relationships between students with disabilities and their able-bodied peers. With this in mind, this study aims to explore how exactly these results are achieved, guided by the following question: How do a small sample of reverse integration teachers facilitate inclusion and develop students understanding of equity and fairness in the classroom? Overarching themes include the implementation of the Universal Design for Learning, as well as the impact of facilitating opportunities for students of all abilities to explicitly discuss and learn about equity and fairness in the classroom. Ultimately, as a beginning teacher, I intend to discover the strategies used in reverse integration classrooms, so that I can promote equity and inclusion in my own classroom, regardless of the setting.

Key Words: Special Education, Disability, Inclusion, Empathy, and Universal Design for Learning
ACKNOWLEDGEMENTS

I would like to acknowledge and thank my research supervisor, Dr. Angela MacDonald-Vemic, for her commitment, continual support, and guidance throughout the research process. Additionally, I wish to thank Sarah Cashmore for her care and feedback throughout the CTL7015 course, and Jennifer MacEachern for her endless generosity in sharing her insight and resources. I also want to thank the members of P/J 261 for their encouragement throughout our two years together – because of you, I truly understand the importance of having a strong, positive community. Thank you to my friends and family, especially my mom and dad, for their support and advice throughout my post-secondary journey, and for always making me laugh, especially in times of stress.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>3</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>4</td>
</tr>
<tr>
<td>CHAPTER ONE - INTRODUCTION</td>
<td>7</td>
</tr>
<tr>
<td>1.0 Research Context</td>
<td>7</td>
</tr>
<tr>
<td>1.1 Research Problem</td>
<td>8</td>
</tr>
<tr>
<td>1.2 Research Purpose</td>
<td>9</td>
</tr>
<tr>
<td>1.3 Research Questions</td>
<td>10</td>
</tr>
<tr>
<td>1.4 Background of the Researcher</td>
<td>11</td>
</tr>
<tr>
<td>1.5 Overview of Research</td>
<td>13</td>
</tr>
<tr>
<td>CHAPTER TWO - LITERATURE REVIEW</td>
<td>13</td>
</tr>
<tr>
<td>2.0 Introduction</td>
<td>13</td>
</tr>
<tr>
<td>2.1 Supporting Students with Special Needs: An Overview</td>
<td>14</td>
</tr>
<tr>
<td>2.2 Segregation</td>
<td>14</td>
</tr>
<tr>
<td>2.2.1 Challenges of Segregation</td>
<td>15</td>
</tr>
<tr>
<td>2.3 The Inclusive Classroom</td>
<td>18</td>
</tr>
<tr>
<td>2.3.1 Disability Awareness Training</td>
<td>19</td>
</tr>
<tr>
<td>2.3.2 Challenges of Inclusion</td>
<td>20</td>
</tr>
<tr>
<td>2.4 Facilitating Inclusion through Universal Design for Learning</td>
<td>23</td>
</tr>
<tr>
<td>2.4.1 Challenges of Universal Design for Learning</td>
<td>25</td>
</tr>
<tr>
<td>2.5 Facilitating Inclusion through Reverse Integration</td>
<td>25</td>
</tr>
<tr>
<td>2.6 Conclusion</td>
<td>27</td>
</tr>
<tr>
<td>CHAPTER THREE - METHODOLOGY</td>
<td>28</td>
</tr>
<tr>
<td>3.0 Introduction</td>
<td>28</td>
</tr>
<tr>
<td>3.1 Research Approach and Procedures</td>
<td>28</td>
</tr>
<tr>
<td>3.2 Instruments of Data Collection</td>
<td>29</td>
</tr>
<tr>
<td>3.3 Participants</td>
<td>31</td>
</tr>
<tr>
<td>3.3.1 Sampling Criteria</td>
<td>31</td>
</tr>
<tr>
<td>3.3.2 Sampling Procedures/Recruitment</td>
<td>32</td>
</tr>
<tr>
<td>3.3.3 Participant Bios</td>
<td>33</td>
</tr>
<tr>
<td>3.4 Data Analysis</td>
<td>34</td>
</tr>
<tr>
<td>3.5 Ethical Review Procedures</td>
<td>35</td>
</tr>
<tr>
<td>3.6 Methodological Limitations and Strengths</td>
<td>36</td>
</tr>
<tr>
<td>3.7 Conclusion</td>
<td>37</td>
</tr>
</tbody>
</table>
CHAPTER FOUR - FINDINGS

4.0 Introduction

4.0.1 Themes and Key Findings

4.1 Educators in reverse integration programs possess a strong passion for and commitment to the program.

4.1.1 Teachers believe all students in the classroom are differently-abled, thus they see reverse integration classrooms as a reflection of the diverse world in which we live.

4.1.2 Teachers believe that the strategies used to support students with disabilities in the classroom are beneficial in supporting the learning and development of all students.

4.2 Educators in reverse integration programs use strategies rooted in the Universal Design for Learning model to support the needs and facilitate the inclusion of all students in the classroom.

4.2.1 Educators facilitate inclusion by ensuring the physical environment of their classrooms are accessible.

4.2.2 Educators facilitate inclusion as they offer multi-sensory learning opportunities for students.

4.2.3 Educators facilitate inclusion by adapting equipment for specific students and encouraging all students to use it.

4.3 Reverse integration educators facilitate inclusion and develop students’ understanding of equity and fairness by organizing opportunities to explicitly discuss and learn about difference and disability in their classrooms and communities.

4.4 Reverse integration educators recognize that the strategies used in their classrooms have positive impacts on the socio-emotional development of all students.

4.4.1 Reverse integration educators recognize the program’s ability to foster students’ empathy and awareness for others.

4.4.2 Reverse integration educators recognize the program’s ability to foster meaningful friendships, based on respect and equity, between students with and without disabilities.

4.4.3 Reverse integration educators recognize the program’s ability to develop the confidence of students with disabilities and allow them to advocate for their own needs.

4.5 Conclusion

CHAPTER FIVE - DISCUSSION

5.0 Introduction

5.1 Overview of key findings and their significance

5.2 Implications

5.2.1 The Educational Research Community

5.2.2 My Professional Identity and Practice

5.3 Recommendations

5.4 Areas for Further Research
1.0 Research Context

More than 300,000 students from kindergarten to pre-school currently have a disability that requires additional support in the classroom, such as accommodations or modifications (Ontario Ministry of Education, 2014). There are various approaches to supporting students with special needs in the classroom that fall along a spectrum that reflects the amount of time they interact with non-disabled peers. On the “segregation” end, students with disabilities are together in a classroom separate from their able-bodied peers to ensure they receive adequate individualized support, and only integrated into mainstream classrooms for short periods throughout the day (Mastropieri and Scruggs, 2013). Conversely, “full inclusion” on the other end encourages students with disabilities to remain in the general education classroom all day, only receiving specialized instruction for short periods of the day (ibid). In order to do this, teachers must focus much harder on meeting students’ needs by differentiating their learning and accommodating or adjusting the content, product, or process of their work (ibid).

Building on the need for differentiation, Robert Mace developed a different approach to creating accessible environments. Universal Design is an approach to product and environmental design that aims to be “usable to the greatest extent possible by everyone” – regardless of any differences, such as ability or age (Rao, Ok, and Bryant, 2014; p. 153). To achieve this, the environment is designed to meet the needs of “unique” individuals with the greatest need for support and, in turn, it is argued to benefit everyone, whether they identify as having a disability or not (CAST: Universal Design for Learning, 2015). This approach was soon applied to the classroom, proactively allowing for flexibility in all learning activities, so that the needs of all learners are supported. Reverse integration is a unique approach to inclusive education, “bringing
several general education students out of their classrooms for short periods of time to interact socially with students with disabilities” (Schoger, 2006, p. 5). As a result, the students with disabilities are seen as part of the mainstream and the able-bodied as the minority. Although acting as a learning environment for individuals both with and without disabilities, the classrooms employ the universal design approach as they are designed to meet the needs of students with disabilities (Rafferty and Griffin, 2005; Schoger, 2006). There is a relatively limited body of research, but studies conducted by various educational researchers have unanimously found that reverse integration programs promote an acceptance of disability and difference, as well as the creation of friendships between students with and without disabilities (Schoger, 2006; Rafferty and Griffin, 2005). Such friendships were described as more meaningful and authentic than those that developed in classrooms with different approaches to inclusion (Schoger, 2006; Rafferty and Griffin, 2005).

1.1 Research Problem

As described above, there is much confusion and opposition as to how best to support the needs of special education students. There have been many studies that have explored the various approaches to special education and begun to question their overall effectiveness in supporting students with special needs in the classroom (Novak and Bartelheim, 2012; Pitt and Curtin, 2004; Rafferty and Griffin, 2005; Schoger, 2006). A study conducted by Pitt and Curtin (2004) exposed the problems that individuals with disabilities experience in a general education classroom because of inadequate accommodations and subpar training of teachers. Rafferty and Griffin (2005) found that parents of students in full inclusion classrooms have similar fears about lack of
support for their children with disabilities. While studies have shown the success of segregated classrooms in providing accommodated learning to support students with special needs (Connor, 2006; Pitt and Curtin, 2004), others have expressed a discomfort in defining students by their disability (Jung, 2007). They stress the importance of learning together as an inclusive and collaborative community as being beneficial for those with and without disabilities in the classroom (Mastropieri and Scruggs, 2013). The current literature, which highlights the opposing opinions of various special education professionals, speaks to the success and inadequacies of our current approaches to special education.

Ultimately, given the success of reverse integration programs in fostering inclusion, understanding differences, and creating a positive environment for all students in the classroom (Rafferty and Griffin, 2005; Schoger, 2006), it is problematic that there has been no further research exploring how this is created.

1.2 Research Purpose

Although there has been a rather limited body of research on reverse integration programs, existing studies have focused on the educator and parent perspectives and this unique approach’s effect on including students with and without disabilities. Studies in reverse integration have outlined the general beliefs of both teachers and families about the program’s ability to foster inclusion in the classroom (Rafferty and Griffin, 2005; Schoger, 2006). In view of these findings, this research study was meant to better understand the strategies used by teachers in reverse integration classrooms that have been so powerful in teaching empathy and acceptance, as well as developing young students’ understanding of fairness and equity in the classroom. It is my
hope that all teachers, including those in reverse integration and general education classrooms, can learn from these findings to inform their own practices in creating classrooms that address each student’s needs and help them all reach their true potential.

1.3 Research Questions

The main question guiding my research was:

• How do a small sample of reverse integration teachers facilitate inclusion and develop students’ understanding of equity and fairness in the classroom?

• I will also address the following sub-questions:

• What outcomes do these teachers perceive for the social interaction and relationships that form between students with disabilities and their able-bodied peers?

• What challenges do teachers encounter, how do they respond to these challenges, and what resources support them in this work?

• In what ways do these teachers see the strategies used in reverse integration classrooms transferable to other classroom settings?

• How do these teachers see reverse integration programs growing and expanding in the future?
1.4 Background of the Researcher

My experience working in both mainstream and special education classrooms, combined with my own experience as a marginalized learner, taught me about inclusive education and the importance of making the curriculum accessible and relevant to all students. This interest was further expanded after I learned about the problems of many practices within inclusive education and the ways that struggling learners are being supported in the classroom.

In gym class on my first day of grade 1, my teacher organized an ‘icebreaker activity’ that was a variation of the game, Octopus. She had our class line up against the north side of the gymnasium and choose one person to be ‘it’. This person stood in the middle of the gym, shouted ‘Octopus!’ to signal students to run, and then tried to tag students as they ran from one side of the gym to the other. Instead of running, my teacher had us walk like crabs. I have a mild form of cerebral palsy that affects my balance and walking and moving like a crab was not an easy task. My teacher was quick to accommodate me and offered many other animals that I could impersonate. At the time, I happily chose a bear, which I mimicked by running with my paws in the air.

Although a seemingly small example, this experience clearly exemplifies the occasional rigidity of the education system, and how this works to marginalize different learners, both with and without special needs. At the time, I remember wondering why my teacher did not invite everyone to move as bears so that I was not segregated. Today, I ask myself why our choices had to be restricted to just one animal.

Since completing a Bachelor of Arts degree in sociology, I have developed a solid
understanding of the rhetoric surrounding disability and its potential impact on education. From a sociological standpoint, there is a great difference between ‘impairment’ and ‘disability’, terms that are often understood as being synonymous. This paper recognizes the difference between the terms. Impairment is defined as “lacking all or part of a limb, or having a defective limb, organ or mechanism in the body” (Jung, 2007, p. 161). Disability, on the other hand, is defined as “contemporary social organization of society which takes no or little account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities” (Jung, 2007, p. 162). In other words, the problem lies within the structure of society, not the individual. Therefore, if the environment was created in a different way, the impairment would not be a disability because the individual could still be fully involved in society.

This model of disability, and the burden it places on the environment, can be easily applied to all forms of difference, whether it be about English language learners or simply learners who have different forms of intelligence. It is important to explore how the classroom and the way information is presented and assessed prevents students from reaching their potential. Students in reverse integration classrooms learn and interact in an environment that allows all individuals the opportunity to participate, thus removing the perceived deficit within the individual.

I specifically chose to look into reverse integration classrooms because of my own experience in the unique program. As a child, I attended a reverse integrated ‘learn to bike program’ that implemented the principles of UDL to allow access for all students and foster an environment based on equity and fairness. Even as a young child, I could sense the way the
program fostered inclusion and acceptance, and celebrated difference. This kind of inclusion is
difficult to truly capture in general programs where students receive differentiated instruction on
an individual basis.

1.5 Overview of Research

To answer the research questions, I conducted a qualitative study using a purposeful sampling of two educators working in reverse integration classrooms. In chapter 2, I review and outline relevant literature that discusses the topic of inclusive education, then I detail the research design in chapter 3. In chapter 4, I report on the findings of the study and, in chapter 5, outline and discuss their importance to the field of education and to myself, as a teacher.

CHAPTER TWO - LITERATURE REVIEW

2.0 Introduction

In this chapter, I review literature from the area of special needs education. Specifically, I review themes related to inclusive education and various ways students with disabilities are integrated into the classroom, from segregation to inclusion. Next, I review the research on the Universal Design for Learning (UDL), how the model is implemented, and the support and criticism of this approach. Finally, I address reverse integration and detail some of the perceived risks and known benefits of such a unique approach to special needs education.
2.1 Supporting Students with Special Needs: An Overview

Promoting and fostering equity is one of the five goals recently outlined in the Ontario Ministry of Education’s “Renewed Vision for Education” (Ontario Ministry of Education, 2014). Along with developing an acceptance of and a respect for diversity, the vision includes the creation of classrooms where all students, no matter their unique needs, are placed in learning environments where they can fulfill their potential (ibid). To achieve this, the goal of the ministry and, by extension, all educators is to ensure all students have the support they need, especially students at risk for not succeeding (ibid). The most at-risk individuals are students with special education needs (ibid). Although equity seems to be an important goal for classrooms and schools in Ontario, the concept is somewhat vague and open-ended, thus leaves much room for debate as to what exactly allows students to reach their full potential, as outlined in a ministry document. Within the literature, there is a commitment by all individuals, educators, and families to act in the best interests of every student; however, educators go about this in uniquely different ways and the effectiveness of each approach is often open to interpretation.

2.2 Segregation

Segregation is a specific way of supporting students with disabilities that confines them to a special education classroom; this is defined by Pally (1982) as a “homogeneous classroom in which children with disabilities are taught self-help skills and academic subjects” (Schoger, 2006, para. 4). The premise of this segregated approach is giving students with disabilities a smaller, more confined environment so they will receive the specialized support needed to reach their potential in the classroom. Many studies have found that it is actually beneficial for various
reasons. In a study conducted by Pitt and Curtin (2004), students with disabilities who participated in both segregated and integrated special education programs reported that being in a segregated environment surrounded by their peers with disabilities made them feel more confident and also contributed to their social and emotional well-being. Students reported that they could voice their concerns more easily because they were interacting with others who lived similar experiences and faced similar challenges (ibid). They also experienced less overall anxiety and better mental health because they were “not worried about being disabled” (p. 392).

In addition to this reported improved mental health, many students felt that segregated programs provided better opportunities for academic support (Pitt and Curtin, 2004; Rafferty and Griffin, 2006). In inclusion programs, many students commented that, in order to receive accommodations, they had to rely on classmates who volunteered to lend their services, i.e. note-takers. The students with disabilities had to trust that their note-takers would attend every class and, unfortunately, this was often not the case (Pitt and Curtin, 2004). Therefore, the success of the students needing accommodation was dependent on the commitment of those providing the support; at times, this hindered students’ ability to reach their potential. With these perspectives in mind, educational theorists argue in favour of a segregated approach to learning, as they believe that students will only be able to achieve their potential, as described by the ministry, in specialized classrooms where unique support is provided.

2.2.1 Challenges of Segregation

There are several challenges to the segregation of students with disabilities. The approach is often questioned because of its potential disregard to the “people first” ideology of disability,
which positions disability as a secondary characteristic of an individual, rather than the core of his or her being (Jung, 2007, p. 162). Ultimately, rather than use the term “disabled person”, proponents of the person-first ideology would say “person with a disability” (ibid). It is argued that the change in language helps to focus on the similarities between people with disabilities and those without, because it focuses on the fact that we are all just people and the core of our being is the same. By simply placing all students with disabilities into a special classroom and away from all “normal” students, it seems that educators are viewing students only in terms of their disabilities, thus seeing them in terms of their deficit (ibid). This restrictive view of disability likely makes it difficult for students to reach their potential, as mandated in the Ministry of Education’s goals.

Contestants of segregation also argue that the approach hinders the social development of students with disabilities because they do not have any non-disabled students to act as role models from whom they could potentially learn (Schoger, 2006; Rafferty and Griffin, 2005). This is especially evident with students who are non-verbal, as they lack the opportunity to develop language skills through interaction with peers who do not have language limitations (Rafferty and Griffin, 2005). Furthermore, in a study conducted by Rafferty and Griffin that interviewed parents and teachers on their perspectives on inclusive classrooms, both parties agreed that learning about diversity and differences is important to help develop empathy and positive social skills (Rafferty and Griffin, 2005; Schoger, 2006). When students are in segregated classrooms, their social interaction with others – specifically, with their non-disabled peers – is hindered (ibid) When not placed in the same classroom, interactions between students with disabilities and their non-disabled peers often must be organized and enforced by teachers
Novak and Bartelheim (2012) conducted a study that interviewed learners with special needs who had experience being integrated into general education classrooms. He found that, when placed in a segregated classroom, students’ academic needs are being met, but their social development may be stilted (ibid).

Novak and Bartelheim (2012) looked at the interactions of students with and without disabilities in the classroom, found that this has the potential to further isolate students with disabilities. Furthermore, this allows others to define them by their disabilities, rather than seeing them as capable individuals. Students without disabilities were often found to stereotype those they saw around school, thus feeling overall greater fear and making more rejections of those with disabilities on the playground (ibid). In order to facilitate social interaction amongst students with and without disabilities, teachers may utilize various levels of integration. Integration is an approach to special education where specific students with disabilities are brought into general education classes for short periods of time throughout the week to facilitate more inclusive interaction and allow students with disabilities to learn from their able-bodied peers (Mastropieri and Scruggs, 2013). Inclusion is typically facilitated based on the unique needs of each student and organized to occur at times when students would require the least support, e.g. in art, drama, and music periods. Physical education also may be considered, depending on physical abilities. With that being said, many students reported feeling excluded and chose to sit out and not participate in the activities of general education classrooms for fear of being seen as different (Connor, 2006).

According to Kathie Snow, an inclusive classroom is one in which all participants are
“givers and receivers of knowledge” (Dixon, 2005, p. 35). Typically, individuals with disabilities are thought of as being “thieves, guests, or charity cases” because they are framed as those who take knowledge without giving any knowledge, or at least valuable knowledge (ibid). According to Anderson (2006), this often-seen simple changing of attitudes through disability awareness training does not accomplish this give-and-take dynamic in a classroom. For this to happen, disability can no longer be seen as abnormal, and the knowledge of individuals with disabilities needs to be seen as a “valuable source of lived experiences, rather than see[ing] disabled bodies as ‘something to be accommodated.’” (Anderson, 2006, p. 369).

2.3 The Inclusive Classroom

Full inclusion occurs when a student with a disability learns within a general education classroom and is taught by a general education teacher throughout the entire day (Mastropieri and Scruggs, 2013; Rafferty and Griffin, 2005). Although specialized professionals may come in to support the student at different times throughout the day, he or she remains in the classroom (ibid). At its most basic level, inclusion involves a process of “normalization”, a phrase first coined by Nirje (1996) to describe the need for people with disabilities to create “conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society” (Renzaglia, et al., 2003, p. 140). Various studies found that the “normalization” Nirje describes is directly connected to the practices of inclusive education (Mastropieri and Scruggs, 2013; Rafferty and Griffin, 2005; Renzaglia, et al., 2003).

A study conducted by Novak and Barlthiem (2012) explored the interactions among students with and without disabilities in a general education classroom. The classroom focused
on inclusion by employing various strategies, such as heterogeneous ability groups to allow for
collaboration and peer tutoring, as well as collaborative games and various forms of
differentiated instruction. During the study, Novak and Bartelheim observed classroom
interaction between students and had them complete two questionnaires to see how their ideas
and perceptions about disability had changed over the study. They found that the stigma
surrounding disability was reduced, as students with and without disabilities displayed a greater
understanding of differences, and they were willing to accept and build friendships with each
other (ibid). All students, both those with and without disabilities, have been shown to benefit
from inclusive education, with significant development in their social skills (ibid). Non-disabled
students have demonstrated a greater level of empathy and patience, while students with
disabilities showed improvement in their communication that ultimately translated into greater
self-confidence (ibid).

In their study, Novak and Bartelheim (2012) defined an “inclusive classroom” based on
whether or not it implemented the various strategies noted above. However, the elements of an
inclusive classroom varied throughout the literature and, in the following sections, I will outline
four unique approaches to inclusive education and how they are enacted in the classroom.

2.3.1 Disability Awareness Training

An activist in disability studies, Lee Barton defines an inclusive classroom as one that
is “founded upon a moral position, which values and respects every individual” (Beckett, 2009,
p. 318). He promotes a classroom with a foundation built on respect and consideration and a
focus on the importance of positive attitudes towards people with differences as a key aspect in
the fight against inequality. This is similar to an “anti-bullying” approach, and is designed to combat discrimination towards any group that is marked by its differences, whether it be gender, race, or sexual preference (p. 319). In order to achieve this, Barton says it is important to teach towards disability awareness (Beckett, 2009). He asks teachers to employ such strategies as the insistence that staff demonstrate positive interactions with "disabled people", and the strategic placement of such individuals in classroom books and reading material (p. 321). He asserts that, if this form of learning is correctly utilized, the classroom environment will be supportive and allow for the successful participation of all students (Beckett, 2009).

2.3.2 Challenges of Inclusion

There have been various arguments opposing the implementation of inclusive education. A study conducted by Rafferty and Griffin (2005) explored the challenges that parents of students with and without disabilities perceived as part of inclusive classrooms. Their study was combined with reverse integration classrooms, as will be discussed later in this literature review. Among the most prominent was the concern that full inclusion classrooms would fail to provide students with special needs with the support necessary to reach their potential in the classroom (Mastropieri and Scruggs, 2013; Rafferty and Griffin, 2005; Schoger, 2006). Lack of qualified staff, such as general education teachers who lack the appropriate training to support special needs students, was the basis for such concerns (ibid).
It is also argued that general education classes lack the structure and resources to be able to support students with disabilities (ibid). Mastropieri and Scruggs (2013) stated that “students with special needs may require materials at lower reading levels, braillers, speech synthesizers, specialized computers, or specialized training materials that general education classrooms lack” (p. 20). Furthermore, when teachers in general education classes can meet the needs of special education students, often through individualized accommodation, opponents of full inclusion argue that this may lead to feelings of isolation and decreased self-confidence among students with disabilities (Mastropieri and Scruggs, 2013; Rafferty and Griffin, 2005; Schoger, 2006). To some extent, such feelings and experiences seem to negate the sense of community and acceptance of diversity that is said to be the foundation of inclusive education.

Studies have shown that the implementation of full inclusion not only affects students with disabilities who are being integrated into the class, but also has consequences for their non-disabled peers (Rafferty and Griffin, 2005). One of the greatest perceived risks of the inclusion program was that a general education teacher’s lack of experience in dealing with students with disabilities would result in an unhealthy and chaotic classroom environment, and ultimately non-disabled students would internalize this behaviour (ibid).

In addition to the challenges and drawbacks of full inclusion, many researchers argue against practices of mainstreaming or integration, an approach to inclusion that allows students with disabilities to join the general education classroom for specific periods throughout the day (Jung, 2007; Mastropieri and Scruggs, 2013; Pitt and Curtin, 2004). The goal of this practice was to promote acceptance and increase interaction between students with disabilities and their non-disabled peers, but many studies found that this was not the case (Pitt and Curtin, 2004;
Rafferty and Griffin, 2005). Pitt and Curtin (2004) conducted a study that explored the experiences of university students placed in both special and general education classes throughout their schooling, and found that many students reported feeling excluded and “othered” by their non-disabled peers, as well as a fear of being labeled as “disabled” because of the need for teachers to accommodate their work (Pitt and Curtain, 2004). According to work by Mastropieri and Scruggs (2013), accommodation and the implementation of “Individualized Education Plans” (IEP) plays an essential role in one’s ability to integrate into the general education classroom, even for a short period of time.

Integration into general education classrooms is something that students with disabilities were encouraged to “earn by demonstrating that their skills were adequate to function independently in general education settings” (p. 7). With that in mind, many researchers in disability studies question whether integration or mainstreaming is truly inclusive. Rod Michalko, a researcher and professor who is blind, opposes the “rhetoric of accommodation, where “fitting into” the mainstream is defined as the responsibility – and the assumed goal – of an individual (Jung, 2007, p. 162). Disability is individualized and the burden of change is placed on the individual with a disability. Michalko explores this idea further through what he terms “blindisms”, i.e. “mannerisms” that make sighted people uncomfortable and, therefore, must be minimized. For example, a blind person must always look in the direction of the person speaking to them, despite the fact that this mannerism does not benefit the blind individual, the goal being to make the non-disabled person feel at ease because this is what is normal for them (ibid). For these reasons, the effectiveness of integration and the mainstreaming of students with
disabilities becomes questionable, as it arguably may not embrace difference or promote true inclusion.

2.4 Facilitating Inclusion through Universal Design for Learning (UDL)

Originally developed by Ron Mace, the universal design model is an approach to product and environmental design that aims to be “usable to the greatest extent possible by everyone”, despite any differences such as age or ability (Rao, Ok, and Bryant, 2014, p. 153). To achieve this, the environment is designed to meet the needs of “unique” individuals with the greatest need for support, as it is argued that this design will benefit everyone, whether one identifies as having a disability or not (CAST: Universal Design for Learning, 2014.). The implementation of subtitles, for example, is beneficial for those who are hard of hearing, and also meets the needs of English language learners and couples with different sleep schedules. It is designed to help individuals who need the most support – in this case, those who experience hearing loss – but also addresses the needs of various other individuals (ibid).

The universal design model was applied to the field of education under the moniker of “Universal Design for Learning” (UDL) and aimed to make all learning environments more accessible for all students. To address the needs of all students, the UDL must eliminate existing barriers and increase access to the curriculum by introducing flexibility into all learning opportunities (Darragh, 2007; Rao, Ok, and Bryant, 2014). This occurs through “multiple means of access” to ensure that teachers address various elements of each lesson or activity. The first, “multiple means of representation”, provides learners with flexible ways of acquiring information – for example, creating opportunities for students to learn uses of the senses, vision,
hearing, and touching (ibid). Similarly, “multiple means of engagement” focuses on developing lessons that embrace students interests, thus motivating them to participate (ibid). Creating an accessible environment is another important component of engagement because it promotes full student participation. For instance, a UDL classroom would provide pillows at the snack table to encourage the engagement of all students. The pillows increase comfort, but also support the needs of a student with Down Syndrome who needs more support to sit at the snack table because of low tone (Darrough, 2007, p. 169). Lastly, UDL invites “multiple means of expression”, which allows for flexibility in how students demonstrate their understanding (Darragh, 2007; Rao, Ok, and Bryant, 2014). Abell, Jung, and Taylor (2011) conducted a study that explored the effectiveness of employing the UDL approach from pre-school to high school, with most supporting the positive impact of introducing flexibility in the classroom.

One of the ways teachers regularly used UDL was by creating opportunities for “student led inquiry” and small group work (ibid). After such an inquiry, the perspective of students and teachers proved that, when learning through an implemented a UDL approach, students were more engaged in their learning (ibid). In her study, Jennifer Katz (2014) explored the effect that the Universal Design for Learning had on the classroom dynamic, as well as the confidence of teachers using it. Teachers also found that, after implementing the UDL approach, students demonstrated higher levels of self-confidence and, in turn, took more risks in their learning and showed more resiliency when faced with challenges (Katz, 2014). This resulted in an overall more positive environment for students and better facilitated their learning. The same was true of teachers, who gained confidence in their ability to support the diverse needs of all students and a greater willingness to take risks in their teaching (ibid).
2.4.1 Challenges of the Universal Design for Learning

Despite the many studies that examine UDL, some argue that the implementation of the concept remains too vague and unclear (Rao, ok, and Bryant, 2014). Researchers and educators continue to ask for more specific and practical suggestions as to how to implement this approach in their classrooms, finding various challenges when attempting to apply its principles. Assessment was often reported as difficult because teachers were unsure of how to gain perspective on a student’s understanding without having a traditional unit test (Katz, 2014). Other struggles included insufficient time to prepare and plan activities, as well as a lack of available resources. Additionally, teachers cited a lack of support from co-workers (ibid).

2.5 Facilitating Inclusion through Reverse Integration

Reverse integration, sometimes referred to as reverse or backwards inclusion, is a distinct approach that integrates a small group of non-disabled students into a class of students with disabilities (Rafferty and Griffin, 2005; Schoger, 2006). The classroom and activities are designed to meet the needs of the students with disabilities (Schoger, 2006), thus creating an environment that is universally designed and accessible to all learners. As the title suggests, the approach is the reverse of the more common forms of integration described earlier in this paper. The intent is to foster greater inclusion while giving both groups of students the opportunity to interact and build more meaningful relationships (Rafferty and Griffin, 2005; Schoger, 2006).

Rafferty and Griffin (2005) argue that this meaningful interaction, specifically within the universally designed environment, helps to challenge many preconceived notions or stereotypes that one group holds against the other. Although the research on reverse integration is somewhat
limited, there have been various studies that explored the benefits and challenges of this approach to integration. Kimberly Schoger (2006) implemented the approach of reverse integration by placing three non-disabled, general education students into the special education classroom; the purpose was to give these students an opportunity to interact with the students with disabilities. The students with disabilities were specifically chosen because of their difficulty adapting to general education classes using the traditional approach to integration (ibid). In this specific study, students were reverse integrated for 30 to 40 minutes, three to four times per week, often during recess and free-play periods (ibid). During their time together, all students participated in various activities, such as making smoothies, conducting science experiments, and participating in circle time. All activities were adapted to meet the individualized needs of students with special needs and had specific objectives, often social in nature, on which students could focus (ibid). It was Schoger’s intention to evaluate the effectiveness of the reverse integration program by examining the student's progress relative to these specific social objectives.

Rafferty and Griffin (2005) similarly explored the benefits and risks of reverse inclusion by examining the perspectives and opinions of participating teachers and parents of children with and without disabilities. There have been various proven benefits to reverse integration as evaluated through student behaviour, and the perspectives of reverse integration teachers and parents of students in the program. Reverse integration approaches have fostered a greater feeling of inclusion and community; non-disabled students become more easily accepting and understanding of their peers with disabilities, and the students with disabilities experience a greater level of confidence (Rafferty and Griffin, 2005; Schoger, 2006). This acceptance
extended beyond the classroom to the playground, and even resulted in non-disabled students inviting their peers with disabilities to social events, such as birthday parties (Schoger, 2006). In addition to social interaction, students with disabilities were found to enhance various aspects of their social emotional development – namely, increasing their confidence, participation, and independence (Rafferty and Griffin, 2005; Schoger, 2006). Some believe that the improvements made by students with disabilities in the reverse integration program occurred because of their exposure to their non-disabled peers who could act as models demonstrating appropriate behaviour (Rafferty and Griffin, 2005).

Despite the many benefits, there were also various challenges that occurred during the planning process and throughout the implementation of the reverse integration program. Many of these resulted from lack of time to plan appropriate activities, given that this required collaboration between the special education and general education teachers (Schoger, 2006).

2.6 Conclusion

In this literature review, I looked at research on supporting the needs of students with disabilities through approaches such as segregation, mainstreaming, and inclusion. This review elucidates the extent that attention has been paid to the benefits and risks of each approach. It is clear that, while each approach has its strengths, there were also areas in which each approach lacks. Furthermore, it raises questions about the implementation of the Universal Design for Learning, and points to the need for further research in the areas of reverse integration. My research builds on the relatively limited body of work on reverse integration. Specifically, I explore how such programs are organized and implemented, as well as their effect on creating
opportunities for inclusion. My work contributes to the existing research because it begins to fill in the gaps of information on reverse integration. More specifically, it explores the strategies reverse integration teachers use to facilitate the inclusion and develop students’ understanding of equity and fairness in the classroom. It was my goal to learn of specific strategies utilized in reverse integration programs so that all teachers, those in reverse integration and general education classrooms, can become more informed on how to create an inclusive and accessible classroom.

CHAPTER THREE - METHODOLOGY

3.0 Introduction

In this chapter, I describe the research methodology. I begin by reviewing the general approach, procedures, and data collection instruments, before delving more specifically into participant sampling and recruitment. I explain data analysis procedures, review the ethical considerations pertinent to my study, identify a range of methodological limitations, and also speak to the strengths of the methodology. Finally, I conclude the chapter with a brief summary of key methodological decisions and my rationale for these decisions given the research purpose and questions.

3.1 Research Approach and Procedures

This research study was conducted using a qualitative research approach involving a literature review and semi-structured interviews with teachers. In regards to the importance of qualitative research, a technique that is often criticized as non-scientific, Jackson (1968) states,
“some things cannot be meaningfully expressed through numbers” and, instead, need the subjective perspective and detail only provided through qualitative research (as cited in Berg, 2001, p. 3). Rather than just “how much”, researchers conducting qualitative research uncover the “what, when, why, and how of subjects”, thereby introducing “texture… meanings and understandings to problems and phenomena that would otherwise be unidentified” (p.147). As a researcher, I wanted to uncover the sort of “texture” and depth Jackson speaks of, which can only be achieved by valuing the voice of a teacher. The study was an opportunity for teachers to describe what strategies they use and why they think these strategies are helpful. This should allow my research to have value in the field of education, giving readers an in-depth perspective of topics and enabling them to make sense of the research in order to apply it to their own lives and classrooms. Ultimately, qualitative research explores meaning-making through the eyes of the participant, rather than imposing meaning as a researcher (Berg, 2001; Warren and Karner, 2010).

3.2 Instruments of Data Collection

For the purposes of this study, research was gathered using semi-structured, open-ended interviews, consisting of about 15 to 20 questions with two participants. Throughout the interview process, I ensured that all participation was voluntary and I was sure to protect participants’ privacy by identifying them with pseudonyms. Each interview was approximately 30 to 45 minutes long, and included questions that addressed the unique ways reverse integration programs foster inclusion and acceptance in the classroom. Another theme that was touched upon
was each participant’s perception regarding the effectiveness of such strategies on the students in her class.

For many, collecting data through interviews can be seen as a natural and authentic process, very similar to that of a simple conversation, which allows one to learn about the lived experiences of the participant (Berg, 2001; Warren and Karner, 2010). What differentiates interviews, specifically when they are semi-structured, from everyday conversations is the clear intention or purpose that one party, the interviewer, has before and during the conversation (Berg, 2001). When conducting a semi-structured interview, the interviewer enters the conversation with a list of intended questions to address during the conversation.

Berg (2001) states that it is these “predetermined questions” that often make the semi-structured interview process more contrived. The guidelines to conducting semi-structured interviews encourage flexibility on the part of the interviewer and allow for fluidity in the conversation (Berg, 2001). Such standards include allowing the interviewer to change the wording or order of the questions, and the ability to add or remove probes between questions (ibid). According to Jackson, the ability to probe participants, as done in semi-structured interviews, encourages participants to connect to otherwise “half-forgotten” memories, thus allowing for a more in-depth and complete response (p. 3). Unlike in structured interviews, new themes or additional questions can be introduced as a result of new information gained through the interview process (Berg, 2001; Warren and Karner, 2010), thus taking on the form of a more natural conversation. The opportunity to demonstrate flexibility and somewhat revise my questions in the midst of the interview process was suitable, specifically due to the minimal research already established on reverse integration. The semi-structured format allowed me to
adjust my questions as I became more knowledgeable on the subject, thus allowing for more comprehensive and valuable findings.

3.3 Participants

In this section, I outline the sampling criteria that I used to select my participants, and discuss the various ways I went about finding suitable participants. I also have included a section in which I briefly introduce each of my participants.

3.3.1 Sampling Criteria

The overall quality of my study and, thus, the potential impact of my research was very much dependent on my participants. As a result, it was important that I find exemplary educators who could offer dynamic insight into reverse integration programs. Since reverse integration is a unique approach to special education with very little research currently conducted, I anticipated that it would be challenging to find teachers with this experience. I searched for participants who met the following criteria:

- Must be educators working in reverse integration classrooms at the time of interview with at least two years of experience
- Must have demonstrated leadership and expertise in the area of reverse integration by leading at least one professional development workshop
- Must have pervious experience as a teacher (not student teacher or volunteer) working in a general education classroom
Such criteria had to be met by all participants for a variety of reasons. Firstly, it was essential that all participants have current, practical experience within reverse integration classrooms to ensure that their responses were in-depth and insightful. Their direct experience in the classroom would help me to uncover specific strategies they use, as well as their effectiveness on the academic, social, and emotional growth of students using anecdotal evidence. Secondly, in addition to experience working in reverse integration classrooms, it was essential that all participants have experience as qualified teachers in general education classrooms. Participants must understand how the approaches used in reverse integration classrooms contrast with those often used in general education classrooms. Since I wanted to uncover how reverse integration classroom strategies, such as the Universal Design for Learning, can foster greater inclusion and acceptance in general education classrooms, participants with in-depth knowledge in both settings was very important. Lastly, acquiring participants who were willing to reflect on their experience as educators was necessary to ensure the validity of my research.

3.3.2 Sampling procedures/Recruitment

To recruit participants, I attended professional development conferences hosted by professional associations, teacher education programs, and subject-area specialization organizations relating to the topic of reverse integration. I also used convenience and purposive sampling by connecting with various contacts on the board who had direct or indirect experience related to the field of special education, or working with individuals with physical disabilities (Del Baso and Lewis, 2001). This can be seen as convenience and purposive sampling because I
simply interviewed individuals I knew who fit the criteria, rather than compiling a list of all reverse integration teachers and randomly selecting them. My personal connection to many professionals who work with individuals with special needs because of my own physical disability was also helpful in finding leads on participants. When finding other potential participants via word of mouth, I was sure to provide them with my contract information, rather than acquiring theirs, to ensure that all participation would be voluntarily initiated. To acquire these participants, I asked colleagues and others within the field of special education for leads on individuals who may fit my criteria. I stressed that potential participants had to have direct experience working in reverse integration classrooms.

3.3.3 Participant Bios

As previously stated, in order to protect the anonymity of all participants, each individual will be referenced using a pseudonym.

Samantha

At the time of the research, Samantha was a teacher working in a reverse integration full-day kindergarten classroom. She had a strong background in early childhood education and was passionate about teaching through play-based learning in the classroom. Additionally, Samantha possessed a wealth of experience working with students with special needs, as she completed a six-month placement as a teacher candidate in a special needs classroom. After graduating, she taught junior kindergarten in a public school for one year, at which point she earned a position in her current reverse integration program. She was now in her third year of work in this reverse
integration kindergarten classroom, a program that she co-taught. Samantha’s first-hand experience in a reverse integration setting provides insight into the specific practices that take place in that unique setting.

Nicole

Nicole was an educator working in the role of a teacher supervisor at a private reverse integration pre-school catering to children from 18 months to 5 years old. Before she began that position, Nicole completed her Bachelor of Education with a specialization in early childhood education, and then worked as a kindergarten teacher for two years. Afterwards, she began her current position as a teacher supervisor, a role she described as “a little bit of everything”, dealing with issues ranging from curriculum development to the establishment of positive school-family relationships. Nicole’s position undoubtedly provides insight on the many unique goals of reverse integration programs, as well as how such goals are carried out from differing perspectives.

3.4 Data Analysis

In this section of the chapter, I describe the various stages of data analysis, beginning with how I transcribed the interviews to discuss the significance of my findings. Doucet (2003) describes the analysis process as “physically and emotionally exhausting”, as the researcher tries to “filter through” the realities of the participants and understand how they make sense of and interact with the social relationships and phenomena around them (Warren and Karner 2010, p. 215).
Once I conducted interviews with my participants, I transcribed my findings and converted my recorded data to written form (Warren and Karner, 2010), a process that made my data more tangible and allowed me to become more familiar with my participants’ responses (ibid). Recording interviews allows researchers to capture more “thick data”, as it enables one to hear the subtleties in participants’ voices, such as inflection and emotion (Berg, 2001; Warren and Karner, 2010).

After transcribing and re-reading my interviews, I analyzed them using the process of coding. Warner and Karner (2010) state that one should have a basic sense of the direction of their findings because they have extensively re-read and reviewed them during the transcription process. Coding can be described as the “identification of recurrent patterns or themes” in data (p. 218), and is done by organizing the data into categories (Berg, 2001; Del Baso and Lewis 2001; Warren and Karner, 2010). I specifically engaged in “open coding”, which involves reviewing the data several times and being open to developing different interpretations, noticing new things each time (Warren and Karner, 2010, p. 160). Open coding is important because researchers’ interpretation of the data, or what stands out to them, is greatly affected by recent events or conversations in which they may have engaged (ibid). After I coded and categorized my data, I synthesized my findings, while searching for greater themes and connections to the subject of education.

**3.5 Ethical Review Procedures**

To ensure confidentiality and the overall protection of all interview participants and all others involved, I established and enforced various standards throughout the research
process. Firstly, all participants read and signed the letter of consent (see appendix A). In signing the form, participants agreed that they understood the topic of research and that I would adequately explain and address any questions they had, as the researcher. Participants also understood that they could withdraw their participation in the research without any penalties. They were promised anonymity and assigned a pseudonym when addressed at all points of the research, and could decline to answer any specific question, if they wished. They were informed that I would store the data on my password-protected computer and the only other individual who would have access to my research would be my course instructor, Dr. Angela MacDonald-Vemic. Once my study would be presented or published, I would destroy the audio recording, which may take up to a maximum of five years from the time the data had been collected. There were no known risks or benefits to participation, and I indicated that I would share a copy of the transcript with my participants to ensure accuracy.

According to Warner and Karner (2010), upholding ethical standards is an important aspect in establishing trust between researchers and participants, as it allows participants to feel comfortable and be open to sharing their experiences. Their well-being, comfort, and safety, thus, is of the utmost importance throughout the study.

3.6 Methodological Limitations and Strengths

As a result of the protocol surrounding The Master of Teaching Research Project, arguably various limitations can be found within the study. Most importantly, the overall scope of the research conducted was rather small and, given that the results are based on responses from only two participants, the findings cannot be generalized (Berg, 2001; Del Baso and Lewis, 2001;
Warren and Karner, 2010). Additionally, due to the ethical protocol related to the study, I am prevented from interviewing students, thus learning from their first-hand experiences. Although I could gain some perspective by addressing the teachers’ perceived impact of the strategies used in reverse integration classes on students, it can be argued that research still lacks in this area. Lastly, the relatively short time given to complete this research can be seen as a limitation (Berg, 2001).

Despite the challenges, there are various strengths within this body of research. Experience (Berg, 2001; Karner and Warren, 2010) acquired by the participants and their ability to provide answers that reach beyond the researcher’s information is helpful (Bel Baso and Lewis, 2001). Open-ended, face-to-face interviews also allow participants to elaborate on their answers, thus providing researchers with insight on their perspectives and actions (Del Baso and Lewis, 2001).

3.7 Conclusion

In this chapter, I reviewed the methodology that I will carry out in my study on reverse integration. First, I described my decision to engage in qualitative research, citing that this approach provides a deeper perspective, and gives a voice to those with first-hand experience in the classroom (Berg, 2001; Warren and Karner, 2010). Next, I outlined how I will use semi-structured interviews to gather data, and how the flexibility this offers will allow me to adjust my questions as I learn. This is especially valuable because of the little research currently conducted on reverse integration. Then, I described my participants and how I will go about selecting them.
Finally, I explained the ethical considerations of my research, followed by the strengths and limitations of this study. Next, in chapter 4, I will report my research findings.

CHAPTER FOUR - FINDINGS

4.0 Introduction

In this chapter, I present and discuss my findings based on data collected from two face-to-face, semi-structured interviews with educators who have first-hand experience in reverse integration classrooms. The purpose of this research is to learn about the strategies used in reverse integration classrooms, which have proven to be successful in developing students’ understanding of disability and creating meaningful friendships between students. With this knowledge, I hope to provide teachers with insight on how other teachers in various other classroom setting, including general education classrooms, can implement practices of inclusion to achieve equity in the classroom.

4.0.1 Themes and Key Findings

Participant responses regarding beliefs, perspectives, and first-hand experiences in reverse integration classrooms revealed four themes and key findings, along with various sub-themes. The general themes and key findings of this research include the following:

- 4.1 Educators in reverse integration programs possess a strong passion for and commitment to the program.
• 4.1.1 Teachers believe all students in the classroom are differently-abled, thus they see reverse integration classrooms as a reflection of the diverse world in which we live.

• 4.1.2 Teachers believe that the strategies used to support students with disabilities in the classroom are beneficial in supporting the learning and development of all students.

• 4.2 Educators in reverse integration programs use strategies rooted in the Universal Design for Learning model to support the needs and facilitate the inclusion of all students in the classroom.
  • 4.2.1 Educators facilitate inclusion by ensuring the physical environment of their classrooms are accessible.
  • 4.2.2 Educators facilitate inclusion as they offer multi-sensory learning opportunities for students.
  • 4.2.3 Educators facilitate inclusion by adapting their equipment for specific students, and encouraging all students to use it.

• 4.3 Educators in reverse integration classrooms explicitly teach students about equity and fairness, as well as empathy for others.

• 4.4 Reverse integration educators recognize that the strategies used in their classrooms have positive impacts on the socio-emotional development of all students.
  • 4.4.1 Reverse integration educators recognize the program’s ability to foster students’ empathy and awareness for others.
• 4.4.2 Reverse integration educators recognize the program’s ability to foster meaningful friendships, founded in respect and equity, between students with and without disabilities.

• 4.4.3 Reverse integration educators recognize the program’s ability to develop the confidence of students with disabilities, allowing them to advocate for their own needs.
4.1 Educators in reverse integration programs possess a strong passion for and commitment to the program.

The quote, “The best teachers teach from the heart, not a book,” by an unknown author speaks to the passion and commitment necessary to be an exemplary educator in a classroom with children of all abilities. This strong internal drive and devotion was a common thread amongst teachers working in reverse integration classrooms. It plays an important role in facilitating inclusion inside and outside of the classroom space. The passion of both participants and their perspectives of the program are based on two core beliefs. First, teachers see reverse integration classrooms as reflective of the diversity beyond the walls of the classroom, within the world. Second, they expressed that, in reality, all classrooms are integrated because all children are differently-abled, regardless of a defined diagnosis or disability. Thus, they highlight that the strategies utilized to support the needs of students with disabilities in reverse integration classrooms are truly beneficial to all students in the classroom and can be utilized in a variety of classroom settings.

4.1.1 Teachers believe all students in the classroom are differently-abled, thus they see reverse integration classrooms as a reflection of the diverse world in which we live.

Much of the discussion about passion and commitment can be related to the teachers’ strong beliefs in the reverse integration program because they mirror the diversity within all aspects of life. Samantha, a reverse integration kindergarten teacher, states, “There must be a program where you’re able to support the students’ needs, but have them integrated because, in life, you’re not segregated, you’re always around people with all different abilities, races, and whatnot.” This sentiment was echoed by Nicole, a teacher supervisor at a reverse integration pre-
school for students, aged 18 months to 5 years, who talked about the impact of interacting with
diverse and differently-abled people. She says, “It’s the norm. So [the children in the reverse
integration program] move away from here and it’s all quite normal to them.”

The normality of disability was not only something that both participants spoke about,
but this approach to difference and disability was very much reflected in their language itself.
Throughout our interview, Samantha referred to the “different abilities” of her students. For
example, she said, “There’s no cookie cutter of a child that comes through our class. We’re
constantly learning about the different—I don’t want to say impairments, but the different—ways
that the children move and experience life.” In this way, disability is positioned as something
normal, no different than the other differences found among the children in the classroom, such
as hair colour or height. Interestingly, although the classrooms are defined as reverse integrated,
when describing their program, both participants referred to it, simply, as integrated. Although
there are more students with disabilities in the classroom to qualify it as a reverse integrated
space, differentiating between students with and without various defined impairments, such as
cerebral palsy or muscular dystrophy, is not important because each child is seen as having
unique needs. In this way, the teachers very much embrace the concept of ‘normalization’, a key
aspect among the literature of creating inclusive and equitable classrooms (Beckett, 2009).
Furthermore, as will be described in the following findings, the teachers’ understanding of
disability as difference informs the practices in the classroom and helps to develop an
understanding of equity among all of their students.
4.1.2 *Teachers believe that the strategies used to support students with disabilities in the classroom are beneficial in supporting the learning and development of all students.*

Throughout their interviews, both teachers expressed a strong belief in the universality of the strategies used in reverse integration classrooms when supporting the needs and learning styles of students with and without disabilities. Samantha also spoke of how many of the materials in her classroom, such as pencils and scissors, have been adapted to meet the needs of her students with disabilities. To meet the needs of students who struggle with fine motor skills, many of the pencils have been adapted to include a unique grip created by drilling a hole in a small bouncy ball and fitting it around the pencil. Not only are students more engaged in and excited about their learning, Samantha often feels that these adapted materials are also beneficial to learning and contribute to the development of all students – even those characterized as able-bodied. When explaining the benefits of all children using the adapted pencil grips, she states,

> We believe what is good for some students is so important for everybody. And, in fact, the students who don’t need the adapted equipment benefit to the same extent. In kindergarten, some of them have never held a marker before, some of them have never cut before. We really think that what’s really necessary for some students to help them succeed can be used by all students.

Nicole made similar comments, as she described the benefits of having visual schedules placed on the classroom walls. She states, “All of these strategies can be used for kids who have attention issues, or kids who are second language, and just in general to keep kids organized and knowing what’s happening in their classroom.” At the foundation of both educators’ statements rests the core of the Universal Design for Learning model, which embraces the idea that, through supporting the learning for students who face the most challenge, teachers are actually creating opportunities that benefit everyone’s learning (Darragh, 2007; Rao, Ok, and Bryant, 2014). This
is clear in Samantha’s statement as she describes the way the pencil grips in her classroom, although intended for students with physical disabilities, can be used to support the learning of all her young students.

With this in mind, both teachers extend this ideology to state that the strategies used to support learning are beneficial for all students in the reverse integrated setting, as well as transferable to various other classroom settings, including general education classrooms. Samantha explicitly addresses this topic as she states, “Every strategy that I have in this program is applicable to any grade, age, level, gender. All students, even those in typical classrooms, are different and unique. They have different needs, and it’s so important that we consider that.”

### 4.2 Educators in reverse integration programs use strategies rooted in the Universal Design for Learning model to support the needs and facilitate the inclusion of all students in the classroom.

Both Samantha and Nicole have demonstrated a strong connection between their beliefs and subsequent practice as reverse integration educators. Furthermore, their perspectives on disability and difference, as demonstrated in finding 1, have proven to greatly inform their pedagogical decisions as teachers working to meet the needs of a wide variety of students. The pedagogical choices of both teachers embrace various aspects of the Universal Design for Learning (UDL) model, an approach originated by Robert Mace, which challenges the “one size fits all approach” to teaching and learning (CAST: Universal Design for Learning, 2014). Instead, UDL embraces notions of flexibility and choice, allowing all individuals to learn through means that are best for them (ibid). Rather than differentiating individually according to the specific needs of one student, UDL encourages teachers to plan to meet the needs of their
learners who encounter the most barriers, often students with disabilities or English language
learners, because the strategies used to help them will likely support all other learners in the
classroom (Darragh, 2007; Rao, Ok, and Bryant, 2014). Both teachers embraced UDL within
their classrooms by ensuring an accessible physical environment, offering choice and flexibility
in student learning, and encouraging all students to use or try various types of adapted
equipment. It is through these means that both teachers described being able to facilitate
inclusion and support the needs of all students in their classrooms.

4.2.1 Educators facilitate inclusion by ensuring the physical environment of their classrooms
are accessible.

Given the physical nature of the disabilities that many students in reverse integration
classrooms face, both teachers explicitly addressed the importance of creating a physical
environment that is accessible to all of their learners. Nicole states, “We’re really good at
adapting the environment to make it work for students with disabilities so that they can be as
independent as possible. We adapt play material, we adapt seating… we adapt everything.” In
terms of the physical environment, Nicole speaks to the importance of using visual schedules and
having pictures and visual cues displayed on the walls of each reverse integration classroom.

In Samantha’s classroom, she says she works to ensure the entire physical environment is
organized in a way that is open and allows all of her students, specifically those with walkers and
wheelchairs, to freely move around. This allows for full participation in classroom activities.
Samantha highlights the classroom’s ‘pretend centre’, which she says would likely be a small
house in another classroom setting, is instead under a ‘massive tent’. She states,
When we have our pretend centre, the barn, we’re going to make sure that a wheelchair or a walker can fit in there. Not just a wheelchair, but a wheelchair with three other students, or a walker and two other students, where they will be playing by themselves because it’s big enough, but they’ll have their friends in there too. We are constantly coming up with different things to help our students participate.

Both examples demonstrate the teachers’ commitment to ensuring “multiple means of engagement” (Darragh, 2007; Rao, Ok, and Bryant, 2014) because they are creating opportunities for students to engage in the physical space of the classroom in many ways. In Samantha’s pretend centre, for example, students can use the space with many different kinds of equipment because it is simply open enough to allow for this.

This approach is somewhat different than what is described in other integrated classrooms where students feel restricted by their environment. Rod Michalko believes that the accommodations and aids provided in schools, and in society in general, are minimal and often done out of a legal obligation. He refers to this as a “minimalist orientation to disability” (Jung, 2007, p. 128-129). Unfortunately, this ideology is what led schools to provide aids to students with disabilities, but only to accommodate certain parts of the classroom for the students, thus restricting their ability to fully engage in the class (ibid). In a classroom, students with disabilities are confined to certain spaces, which ultimately limits the talents, abilities, and skills that they can bring to the class. As a result, they are given a certain identity, and this leads to the reinforcement of stereotypes and perceptions of students with disabilities. In reverse integration classrooms, on the other hand, students of all abilities are able to engage in the environment without any restrictions. Both of my participants said this was an essential aspect in allowing students to reach their potential, while breaking down stereotypes associated with people with disabilities.
The physical environment of the classroom plays an important role, thereby ensuring it is accessible for all learners is common amongst the literature on the subject. A study conducted by Johnna Darragh (2007) explored the way the environment of an integrated pre-school classroom was designed using the UDL model, similar to that found in reverse integration. In this classroom, pillows were placed at all learning centres to support the physical needs of a small selection of students with Down syndrome. Darragh found that creating this accessible environment was key in supporting these students specific needs (ibid), which undoubtably helps to breakdown stereotypes, as described above.

**4.2.2 Educators facilitate inclusion as they offer multi-sensory learning opportunities for students.**

Nicole and Samantha both stressed the importance of meeting the diverse needs of all students, including those with and without disabilities in reverse integration classrooms. In order to facilitate inclusion, both teachers create learning opportunities that allow students to access information and demonstrate their knowledge in various ways. Samantha clearly addresses this approach in her classroom, stressing that they actively work to eliminate the creation of activities that “only meet the needs of one child”. Reinforcing the importance of “multiple means of representation”, Samantha recalls an instance of her students having opportunities to access information and express themselves in different ways throughout their current unit on farm animals. In describing the different farm-themed learning centres, she states,
They learn through the different centres and they’re able to act out the information. In our pretend centre, they’re creating it out of cardboard, painting it, then they get to dress up as animals and show their habitat, their diet… We have our mural where our kids look through books, they research a specific animal, we help them read the fact, they draw a picture, and then we scribe for them, or they type, or they write their idea that goes up on our mural. So, all their artifacts are up there. We have a listening centre where we’ve created our own books about the animals that the students are interested in.

Samantha describes this approach as “multi-sensory”, a concept that very much embraces a key principle of Universal Design for Learning, described as “multiple means of expression”. When offering “multiple means of expression”, teachers are simply inviting their students to demonstrate their knowledge and understanding in many different ways (Darragh, 2007; Rao, Ok, and Bryant, 2014). This is evident in Samantha’s classroom because students are given different ways to show what they had learned about farm animals. Such forms of expression include dressing up like farm animals and acting out their understanding at the pretend centre, drawing a picture for their class mural at the art centre, and writing a fact about a farm animal at the writing centre. Samantha says that incorporating these open-ended and flexible learning opportunities gives students choice and freedom in their learning.

Samantha’s example also demonstrates “multiple means of representation”. Through this tactic, students are presented with a variety of ways to acquire new information that often enables them to use various senses, such as sight, sound, and touch, when learning (ibid). The learning centres Samantha described in her classroom present information in different ways – for example, by reading books about farm animals, listening to books, or even watching videos. Samantha says that having this flexibility is important, as it supports the learning of everyone.
In addition to creating different activities that present information in varied ways, both participants also highlighted the fact that they try to make each activity multi-sensory in itself. Samantha says that this allows students to work together at the same activity or learning centre, while learning new information through avenues that meet their personal needs or learning style. To illustrate this, Samantha describes her use of a promethium board during read-aloud times: “We hardly ever read books for the class with a book; we just take pictures of it and put it up on the big screen so that we can really see. Everything is large print, and in different colours, to differentiate the different steps in the sequence.” This example demonstrates a multi-sensory approach that allows for “multiple means of representation” because it gives students the opportunity to both see and hear the story as it is being read to them.

Nicole’s reverse integration program also allows for “multiple means of representation” throughout each learning opportunity. She states that many of the students in her pre-school classroom are non-verbal, thus they use basic sign language and gestures to communicate. To support their needs and development, teachers often use this communication in their teaching, providing “multiple means of representation” to help students gain new information. They can listen to the teachers’ words or watch their signs and gestures. Again, this mirrors the importance of accessing information through different senses, such as sight and sound. Research has found that this ultimately ensures that all students, regardless of their abilities, can engage in a meaningful learning opportunity by accessing new information in multiple ways (Darragh, 2007; Rao, Ok, and Bryant, 2014). Furthermore, studies have shown that, when students with and without disabilities can interact and work together in the classroom – the kind best facilitated
when offering multiple means of representation – they are able to form strong bonds and learn to value each other’s differences. This point will be further explored in finding 4.4.

4.2.3 Educators facilitate inclusion by adapting equipment for specific students and encouraging all students to use it.

The importance of differentiation was an idea clearly echoed by both my participants, as they worked to ensure all students, including those with disabilities such as muscular dystrophy and cerebral palsy, could access classroom materials. Nicole described how many of the toys in her school have been adapted to support students with disabilities, recalling a specific toy car that was adapted to include a large switch. She stated that this change allows students who struggle with fine motor movements to participate and play with their peers. Samantha similarly discusses how many of the paintbrushes in her classroom have been adapted to meet the needs of students with disabilities, specifically those who struggle with gross motor skills that effect their movement. She says,

We are constantly coming up with different things to help our students participate. Our students in a power wheelchair [may] want to paint a piece of cardboard on the ground, but they can’t go down to the group. So, we attach a painting roller to a broomstick […] and they’re able to be at their walker or a wheelchair, and they’re able to use a paintbrush.

Both educators agree that adapting and modifying classroom equipment and materials, such as the means described above, is an essential aspect of ensuring that each student can participate in classroom activities, and ultimately feel included and valued amongst their classmates. Nicole’s statements regarding the importance of differentiation were also present within the research on special education. Regardless of one’s position on the best practices surrounding special education, whether classrooms be segregated, integrated, or fully inclusive, educational
researchers agree that all learning opportunities should meet the needs of students to allow them to reach their full potential. Modifying and adapting learning opportunities and materials is simply an essential aspect of access and inclusion (Mastropieri and Scruggs, 2013; Connor, 2006; Schoger, 2006). Research has found that one of the ways students are receiving adaptations and modifications to their learning is by having a note-taker (Pitt and Curtin, 2004), so this approach is not unique to reverse integration classrooms.

A unique addition to reverse integration classrooms, however, is for teachers to encourage all students – just not those with a disability – to explore and use the adapted equipment when possible. This includes children who are seen as able-bodied whose participation in activities is not dependent on the use of an adapted material. Samantha explains that, in her classroom, all students often have the opportunity to use adapted equipment, such as the adapted paintbrush described above. She explains that making many copies of the adapted equipment lets many students use it at once. In doing this, Samantha is utilizing various principles of the Universal Design for Learning approach. She allows for multiple means of representation as students are encouraged more to participate and have better access to gain knowledge and information in different ways. In the case of the painting activity, students can use typical paintbrushes or the adapted paintbrush. This is very similar to the way that using adapted toy cars in Nicole’s classroom invites students to participate in the playful activity in different ways, either by using the adapted switch or choosing to play with the car “normally”.

Furthermore, both educators feel that this facilitates greater inclusion because it helps students with disabilities feel more included, as they are not the only ones using different or special equipment. This was a common theme throughout the literature as studies found that
students were less likely to request the accommodations they needed for fear of being rejected by their peers. When receiving different accommodations, students did feel excluded and different from their peers (Pitt and Curtin, 2006).

### 4.3 Reverse integration educators facilitate inclusion and develop students’ understanding of equity and fairness by organizing opportunities to explicitly discuss and learn about difference and disability in their classrooms and communities.

When discussing how they address difference in the classroom, Samantha clearly states, “We don’t sugarcoat or beat around the bush”. In her classroom, they interweave the concepts of equity and empathy, often explicitly, throughout each lesson and unit. It can also be found in everyday classroom routines, such as the “Join Us” song, which is sung each day and welcomes all of the students to the classroom. In Nicole’s program, the children, who start at 18 months, also discuss and participate in activities surrounding difference. They create opportunities for students to participate in role-play, as well as engage in read-aloud time with themes of diversity and difference. Samantha also used read-aloud time in her teachings and gave various examples of how difference and acceptance of diversity are discussed in the classroom through the theme, “No matter what you see, I’m still me” – an idea that they introduce to their students using a children’s book called “Big Al”. Samantha states,

We have this whole thing, ‘No matter what you see, I’m still me’. It’s about this fish who looks scary: he’s big, he’s ugly and the other fish don’t want to play with him. But deep down, he’s just like them: he’s nice, he’s kind. He ends up saving them from a fisherman. They all love him.

Themes about celebrating differences can also be seen in another activity organized in Samantha’s class. In this activity, she takes two pictures of each of her students. The first is
simply a photo of each student smiling; however, in the second photo, she uses the “Photo Booth” application to distort their images. Before taking the picture, she allows each student to choose a photo effect, such as “stretch” or “squeeze”, which will manipulate and change their image, making them look silly. Of the activity, she states, “So, they have silly faces… they don’t look like themselves, but they’re still them.” The examples above demonstrate the way that Samantha facilitates inclusion and acceptance in her classroom, by providing the students with opportunities to learn about disability in a way that does not position it as a deficit, but rather just a difference in the way we move through our lives. Samantha’s activities acknowledge the differences in physical appearance – quite obviously, given the physical nature of her students’ disabilities – but also promote that, on the inside, when we look past the physical differences, we are all the same.

Nicole and Samantha carried out each lesson and activity with the purpose of developing students’ empathy for and understanding of disability. This goal was a common thread throughout the literature, specifically by Lee Barton who advocates for a strategy called “Disability Awareness Training” (Beckett, 2009). This approach calls for teachers to model respect towards students with disabilities, as well as include books with diverse characters in the classroom to “normalize” disability in the classroom (ibid). While both teachers undoubtedly engage in the principles of disability awareness training, their approaches have proven to go beyond this – not only teaching students to respect difference, but to see people with disabilities as valuable and capable members of the classroom. Furthermore, the students in reverse integration classrooms work together to remove barriers that would prevent their friends with
disabilities from participating, thus developing their understanding of equity and fairness in the classroom and beyond.

4.4 Reverse integration educators recognize that the strategies used in their classrooms have positive impacts on the socio-emotional development of all students.

Both participants spoke of the unique goals of reverse integration programs, as well as the profound impact that participating in this program has on students with and without disabilities in the classroom. Specifically, participants highlighted students’ growth in the area of socio-emotional development. They agree that students not only demonstrate a deeper empathy and awareness for the needs of others, but that this empathy translates to the development of equitable friendships among students of differing abilities. Furthermore, both participants spoke to the social-emotional growth they recognized amongst their students with disabilities who developed confidence and demonstrated a greater ability to advocate for their own needs.

4.4.1 Reverse integration educators recognize the program’s ability to foster students’ empathy and awareness for others.

Samantha describes the pre-school to kindergarten age group as having difficulty understanding “theory of mind” – the idea that one’s peers have thoughts, feelings, and perspectives different from their own – and, instead, only see things through their own eyes. Of the program’s impact, Samantha specifically states, “The children that leave this program are more empathetic to students who are new to the country, who don’t speak the language, who have different abilities, and that’s really our main goal.” She recounts an example that clearly exemplifies this development of empathy: After participating in an activity that gave students
without disabilities the opportunity to use various support equipment, including walkers and wheelchairs, to experience life like their peers with disabilities, Samantha encouraged students to reflect on their experiences. Many students commented that moving around was more challenging but, when probed further, one student suggested that next time they play a game like tag some individuals could walk backwards to make it more fair for their peers who a have a disability. Not only did this student demonstrate empathy by putting himself in the place of someone with a disability, but he also demonstrated a strong understanding of equity and fairness. His suggestion showed his understanding of fairness as equity rather than equality because everyone gets what they need to be successful.

Nicole, whose sons attended a reverse integration school themselves, spoke of a similar impact on their development. She states,

I think it really [teaches] empathy. It [teaches] acceptance and understanding. I know with my own kids, who are now adults – both my sons will move in very quickly to help someone – in a good way, you know? Not in a sort of pity way, but [...] ‘You need some help, let me give you a hand with that.’ So, I’m quite proud of them for that. I do believe that it forms empathy and acceptance in those children, and patience.

Nicole’s distinction between “pity” and what she describes as her sons’ actions is important to note, as she feels the motivation behind the actions is a powerful aspect of the relationship. One is based on understanding and empathy, and the other comes from a place of misunderstanding and seeing disability as a deficit. Lack of empathy and focus on pity were prevalent characteristics among the existing literature on typical integration. Pitt and Curtin (2004) found that many students with disabilities described feeling pity from their able-bodied peers when receiving accommodations in a general education classroom.
4.4.2 Reverse integration educators recognize the program’s ability to foster meaningful friendships, based on respect and equity, between students with and without disabilities.

Both participants noticed the need to explicitly create opportunities to foster friendships between students with and without disabilities. Nicole referred to this as “set-up situations” that encourage students to work together through play-based activities, such as putting together puzzles. Similarly, Samantha often purposefully paired together specific students with and without disabilities to build the beginnings of a friendship. Of her direct approach, she says, “I think it’s important to, in the nicest way possible, force these friendships because, once they realize that, ‘Oh, wait a minute, she’s really fun to play with’, they’ll be more drawn to that child.”

She believes that this kind of purposeful interaction, as well as the equity-driven lessons described earlier, allow students with and without disabilities to develop genuine bonds that extend beyond the classroom. Samantha provides evidence of these friendships by discussing the school reunion that takes place each year. Families come together and students can reconnect or maintain bonds even after their time in reverse integration is over. The development of such friendships was a common finding throughout the literature on reverse integration programs. In their study exploring the impact of reverse integration programs on students with and without disabilities, Rafferty and Griffin (2006) found that friendships formed between students with and without disabilities extended beyond the classroom, with many children playing together on the playground and inviting each other to special events, such as birthday parties. Samantha describes the empathy for others and acceptance of differences as the foundation of these
friendships. She states, “My students see themselves, as well as others, as important and capable members of the classroom community.”

Such equitable relationships are very different from those that have been found to develop using a typical approach where students are only integrated for short periods of time throughout the day (Schoger, 2006). In these relationships, the students without disabilities facilitate all of the learning and are seen as the models for the other students to replicate. Therefore, it can be argued that these relationships still reflect the deficit approach to disability, as it is the able-bodied peers who are helping the students with disabilities, thus not facilitating the understanding of equity and respect for others that occurs in reverse integration classrooms.

4.4.3 Reverse integration educators recognize the program’s ability to develop the confidence of students with disabilities and allow them to advocate for their own needs.

Despite their belief in integrated programs, both participants acknowledged that the “cushy life” of their schools is often not continued once they leave. This perspective is a common thread throughout the literature, where many students face challenges trying to find academic and social support. With this in mind, one of the primary goals of reverse integration programs is to provide students and families with the tools to advocate for themselves to ensure they receive necessary support. When speaking about the goals of her reverse integration program, Samantha states, “We’re really preparing the students for when they leave here to say, ‘I have cerebral palsy. My body needs to use a wheelchair to get me from point A to point B’.” Nicole also spoke to the importance of learning to advocate; however, because of the young ages
of the students, her school focuses on the importance of parents advocating on their children’s behalves. She states,

We’re so family-oriented here... We have some parents who are just starting their journey with their child... and part of our job is to make sure that these families know their rights and understand that they need to be the voice for their child, and how to do that. So, we teach them not to go in and tell everybody where to go, but [that] you have to work with [people and] still stand your ground.

It is understandable that, when working with pre-school children, parents and families who are “just starting their journey” are encouraged to be the voice for their children. Similarly, as they mature, the focus shifts to preparing the young students themselves. The importance of teaching self-advocating was a prominent theme among the literature. Once students have graduated from their reverse integration program, they will enter a system that is very much dependent on individualized accommodation and differentiation. This is an approach to special education which Pitt and Curtin (2004), found to rely and depend on the student’s voice to request what they need. This is problematic, given that students with disabilities feel reluctant and resistant to request necessary accommodations when placed in general education classrooms for fear of the social repercussions, such as labelling (ibid). In order to acquire the support needed, it is essential that students can clearly and confidently state their needs, a skill that is at the forefront of reverse integration classrooms.

4.5 Conclusion

In conclusion, this study found that teachers in reverse integration classrooms are using a variety of unique strategies to support the needs, and facilitate the inclusion, of all students in the classroom. These strategies, which are rooted in the Universal Design for Learning model,
include creating an accessible classroom environment, as well as lessons and activities that allow students the choice and flexibility in how they access information, and encouraging all students to use and experiment with adapted equipment. These findings make a significant contribution to the existing literature by focusing on how teachers go about facilitating inclusion and developing bonds between differently-abled students. Most of the literature addresses the perceived benefits and drawbacks of reverse integration programs. Among the benefits include the ability to foster students’ empathy and understanding of disability, in addition to creating meaningful bonds between peers. Once they become aware of the strategies, teachers gain knowledge that they can hopefully use to promote equity and respect in their own classrooms, regardless of the setting.

CHAPTER FIVE - DISCUSSION

5.0 Introduction

In this chapter, I discuss the overall implications and significance of this research study. I begin by reviewing my key findings on how teachers in reverse integration classrooms foster inclusion. Then, I discuss the implications of the findings, both for the educational community and my own practice as a beginning teacher. With this in mind, I make recommendations, which may be utilized by other educational professionals, such as teachers, schools, and school boards. Finally, I pose questions and suggest areas that I feel would benefit from further research and discussion.
5.1 Overview of key findings and their significance

As discussed in the previous chapter of this study, teachers in reverse integration classrooms facilitate inclusion in various ways. Teachers set the tone and establish expectations for the classroom, and those in reverse integration classrooms demonstrate a strong passion for and belief in reverse integration programs. Their passion and commitment is founded by the belief that the diverse makeup of a reverse integration classroom, one where students interact with individuals who are different than them, is reflective of the diverse world outside the classroom. Additionally, the participants recognized that all strategies used in reverse integration classrooms are beneficial for students with and without disabilities, thus significant for general education classrooms, in addition to various other classroom settings.

The participants’ personal understanding and conception of disability as difference is reflected in the strategies they use in their classrooms. Firstly, their strategies are rooted in Universal Design for Learning so they are flexible and provide students with choices to meet their diverse needs, while still feeling included in the classroom. Specific strategies include creating an accessible environment for the classroom, allowing all students to access information in various ways, and encouraging them to use adapted equipment. This finding is significant, as much of the literature discusses the inability of various other special education approaches to achieve these. Pitt and Curtin (2004) found that students felt excluded and judged when requesting or receiving accommodations in general education classrooms.

Furthermore, reverse integration classrooms have shown to positively impact the socio-emotional development of students with and without disabilities. Students demonstrated a greater understanding of equity and fairness, which translated to the development of meaningful and
equitable relationships among students. Given the proven success of reverse integration classrooms in fostering empathy and acceptance among students toward their peers with disabilities, the study’s findings are significant because they provide teachers with an understanding of how these relationships are formed.

5.2 Implications

In this section, I outline the implications of my research for both those in the educational research community – including school boards, schools, and educational professionals – and my own practice and development as a new teacher.

5.2.1 The Educational Research Community

The unique strategies used in reverse integration classrooms to successfully support students and facilitate inclusion have value and can be utilized in various other classroom settings, including general education classrooms. According to the Ministry of Education’s *Achieving Excellence: Ensuring Equity* document (2014), schools in Ontario should be continually working toward fostering better school environments and creating equitable conditions for all students. Given this, and both participants’ acknowledgement that the equity and accessibility created in their reverse integration programs is not extended outside the classroom, there is much work to be done for the province to reach the desired standards of both. Thus, the findings of this study are greatly significant to the educational community.

Both participants highlighted reverse integration programs’ positive impact on students with and without disabilities in the classroom. Students with disabilities left the program feeling
more confident and better able to advocate for themselves and their needs. This is important
given that studies within the literature found students with a disability were reluctant to self-
advocate and express their needs when learning in a general education setting. The reason behind
this is the social isolation and judgments that may come from their non-disabled peers (Pitt and
Curtin, 2004). With that in mind, it is important to note the reverse integration classroom
strategies that have successfully promoted self-advocating among students with disabilities, and
how reverse integration teachers develop students’ understanding of equity and fairness, such as
having direct conversations in the classroom. This will help prevent the apparent judgement that
has taken place in various other school settings.

Both participants highlighted the incredible support needed in reverse integration
classrooms. In order to make the necessary accommodations for, and support the needs of, the
students in their classroom, reverse integration teachers use an interdisciplinary approach. They
work collaboratively with various other educational professionals – such as physiotherapists,
occupational therapists, and speech language pathologists – to create a plan of action that
simultaneously supports each student’s physical, socio-emotional, and academic development.

5.2.2 My Professional Identity and Practice

I have always had a strong commitment to inclusion and the creation of accessible and
equitable classrooms, a consideration very much at the forefront of reverse integration
classrooms. After conducting research on reverse integration programs, I am confident that I
have furthered my own understanding of equity and inclusion in the classroom. With that being
said, I am committed to embracing many of the unique strategies teachers use in reverse integration classrooms in my own practice as a teacher, regardless of the classroom setting.

After hearing the perspectives of a small selection of reverse integration teachers, it is evident that, in addition to specific teaching strategies that facilitate inclusion, one’s mindset plays an important role. In my own teaching, and as a person in general, I will always strive to challenge myself to question and evaluate the environment around me through a lens of accessibility. I will allow this knowledge to inform my teaching as I aim to create equitable conditions for all students to support them in reaching their potential.

With this in mind, as a classroom teacher, I am committed to sharing this passion and awareness with my students. Similar to the direct and specific discussions that took place in reverse integration settings, I will create opportunities to develop my students’ awareness of diversity and difference in the classroom. I recognize that having conversations, such as how can we adapt a game of tag for students who use wheelchairs, is not only important if there is actually a student who uses a wheelchair in the classroom. Arguably, it is just as valuable to discuss if there is not an individual using a wheelchair in the classroom. Meaningful discussions and activities about different disabilities will make students more aware, which has been shown to clarify misconceptions regarding the abilities of people with disabilities, as well as alleviate fear and establish a level of comfort when interacting with people who are different.

Providing students with the opportunity to use tools and equipment that have been adapted for individuals with disabilities, as is done in reverse integration classrooms, can also facilitate inclusion and encourage the open-mindedness and empathy that I believe should be present in all classrooms. I hope to embrace this strategy in many ways, even by simply having a
diverse selection of Braille, dual language, and tactile books in my classroom library for all students to use – including those with a stronger kinesthetic learning style. Again, this could promote awareness and make students feel more comfortable about discussing and interacting with students with disabilities.

I will also implement the Universal Design for Learning model in my classroom to the best of my ability by considering the needs of all students in the classroom and offering choice and flexibility where possible. This flexibility will help to ensure that all students have a way to participate and access the information so that learning is meaningful. One participant in my study described using the strategy of taking a photo of each page in a book to display for students to read along with in her reverse integration classroom. This strategy provides various points to access information and can be utilized in any classroom, including my own in the future.

5.3 Recommendations

One of the most rewarding aspects of becoming an educational professional is the opportunity to engage in lifelong learning. In my experience, the best teachers are those who demonstrate an ongoing commitment to reflecting on their teaching practices and reaching their students in new ways. With that being said, I feel that the findings presented in this study suggest the need for alternative ways to further professional learning in various areas. One of my suggestions is that special education become a more prominent aspect of pre-service teacher education programs in Ontario, especially including a greater focus on accommodating students with physical disabilities.
In addition to the theoretical knowledge in their special education courses, I believe that all teacher candidates should have the opportunity to be placed in at least one special education classroom. Not only will this provide teachers with the opportunity to learn more about students with special needs and the strategies used to support them, but they will also become more familiar with equipment such as wheelchairs and speech devices used in those classrooms. I feel that, once teachers have a greater theoretical understanding of students with disabilities, they can better collaborate with various educational professionals to meet their students’ needs.

Furthermore, I believe this first-hand exposure to and experience with students with disabilities and the equipment they use will make them more informed and well-rounded teachers, as well as reduce the fear and uncertainty surrounding disability by general education teachers. Once teachers become more comfortable with disability, they can better facilitate the kinds of meaningful discussions that occur in reverse integration classrooms and have been shown to develop empathy and acceptance among students. I strongly believe that these conversations should take place in every classroom, regardless of whether or not there is a student in the classroom who uses special equipment or has a disability.

Throughout their interviews, both participants explicitly stated that the strategies used in reverse integration classrooms can and should, in fact, be considered a part of best practice in any classroom setting. In addition to needing more attention and training in overall special education, I feel that reverse integration programs should be introduced and discussed in all initial teacher education programs, specifically highlighted in special education courses offered in pre-service teacher education. It would be beneficial to use reverse integration classrooms as a model for teacher candidates to utilize Universal Design in the classroom, emphasizing its
flexibility and benefits for all students. In addition, reverse integration teachers could lead organized workshops for current teachers to create more professional development opportunities. During such workshops, teachers would learn more about the best practices used to facilitate equity and inclusion in reverse integration classrooms, then apply these strategies to their own.

As future and current teachers become more aware of reverse integration programs, I suggest that they create more opportunities – whether at recess or during other short periods of the day – for students with and without disabilities to interact. However, this interaction should take place in a classroom or area that is accessible to all students with a large number of materials that have been adapted to meet the needs of the students with disabilities. From my research, it is clear that having accessible materials and space is essential in ensuring positive interactions which build the confidence of both students.

5.4 Areas for further research

Research regarding reverse integration programs is limited, especially on the impact that learning and interacting in a reverse integration setting has on all students, both with and without disabilities. Many studies found that students in these uniquely integrated classrooms develop a special understanding and appreciation of difference, as well as strong empathy towards their peers (Rafferty and Griffin, 2005; Schoger, 2006). I am confident that, through my research, I have been able to build upon existing research and delve further into issues pertaining to the topic – specifically, strategies that teachers use to cultivate these inclusive relationships in reverse integration classrooms. I feel that further research should be done to explore the long-
term effects on students who have spent time in a reverse integration classroom, and the effect that increased empathy has on their educational progress.

During our interview, Nicole mentioned that her own sons are more willing as adults to help others because of their interaction with their peers with disabilities from a young age. I would like to see if there is a lasting result on students in general who were taught in reverse integration classrooms. It also would be interesting to see the long-term impact that teaching in a reverse integration classroom has on teachers as they move onto different settings, such as a general education classroom. Such research could explore how teachers apply strategies they used in reverse integration classrooms in more mainstream settings. Throughout both interviews, participants agreed that reverse integration strategies can and should be used in other settings, and there would be great benefits to see how exactly this could be carried out.

5.5 Concluding Comments

In this chapter, I provided a short summary of my findings as outlined in chapter 4, including reverse integration teachers strong commitment to and passion for reverse integration programs. A passion which is driven by the programs reflection of the diversity of the world we in. Additionally, teachers are driven to work in the program because of their understanding that each child is different and learns best in different learning conditions. For these teachers, disability is simply an extension of difference, rather than a deficit. It is based on this understanding that teachers see the strategies used in reverse integration programs as transferable to all classrooms, and it is with this perspective in mind that the significance of this study rests. My research also found that to facilitate inclusion, teachers use strategies rooted in Universal
Design for Learning, as well as create opportunities for direct discussion about disability in the classroom. I then followed up by describing the impact of such strategies on the socio-emotional development of all students, specifically developing their empathy and ability to form friendships among their peers. I then discussed the implications of my research in relation to the broader educational community. The significance of the findings for other teachers as well as school boards, rests in the fact these strategies have worked to support all students in the classroom, providing them with the differentiated learning styles they need while still making them feel that valuable and important participants of the classroom. This is especially important given the Ministry’s commitment to creating equitable conditions in the classroom.

I then highlighted the significance of my study on my own personal practice as a beginning teacher. This includes facilitating opportunities for students in my class to directly learn about disability by engaging in direct discussion and creating lessons which focus on topics of equity. With this in mind, I then outlined various recommendations in light of my research, such as making reverse integration a more prominent part of the discussion on special education. I suggest that initial teacher education programs discuss reverse integration within their courses on special education.

Furthermore, I feel that each teacher candidate must have a placement in a special education classroom as I feel this will make them feel more comfortable adapting for and teaching others about students with disabilities. I then consider areas for possible further research, such as exploring how reverse integration teachers apply their knowledge when they begin to work in general education classrooms. I feel that gaining more information in this area will help to provide all teachers with possible ways to ensure equity and inclusion are at the
foundation of their own classroom. As teachers we should constantly challenge ourselves to ensure all students feel safe and comfortable in our classrooms so that they can reach their potential. Overall, I feel this study has the opens up opportunity to begin to make great strides in the area of equity and inclusion, by providing information on a program which although successful is relatively unheard-of in the field of education.


Appendix A - Letter of Consent

Date:

Dear ______________________________,

My name is Ashley and I am a student in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). A component of this degree program involves conducting a small-scale qualitative research study. My research will focus on exploring reverse integration programs. I am interested in interviewing teachers who have experience working in reverse integration classrooms. I think that your knowledge and experience will provide insights into this topic.

Your participation in this research will involve one 45-60 minute interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a research conference or publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications.

This information will remain confidential. This data will be stored on my password-protected computer and the only people who will have access to the research data will be my course instructor ______________________________. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks or benefits to participation, and I will share with you a copy of the transcript to ensure accuracy.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Ashley Katz
Consent Form

I acknowledge that the topic of this interview has been explained to me, and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty.

I have read the letter provided to me by ______________ and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: ________________________________________

Name (printed): _______________________________________________

Date: ______________________________________
Appendix B- Interview Questions

Introductory Script:

Thank you for participating in this research. The aim of this study is to learn about reverse integration classrooms. This interview should take approximately 30-40 minutes and I will ask you a series of questions concerning the strategies used in reverse integration classrooms. The questions will be presented 4 parts. I want to remind you that you may choose not to answer any question. Do you have any questions before we begin?

Teacher Background and Experience

1. What grades and subject areas do you currently teach?
2. Which have you taught previously?
3. How long have you been a teacher?
4. Can you describe your school for me, i.e. size, demographics?
5. How long have you been teaching in a reverse integration classroom?
6. What personal, professional, and/or educational experiences contributed to developing your interest in and preparedness for teaching in a reverse integration classroom, i.e. teachers college, additional qualification courses, professional development opportunities, personal significance?

Teacher Practices

1. Can I get a better picture of the students in your class? (What are the demographics?)
2. Tell me more about your students with disabilities (What disabilities do they have?). And the non-disabled students? (Do they have siblings with disabilities? Any interaction with students with disabilities outside the classroom?)
3. Can you tell me more about your reverse integration program? (How is your program structured?)
4. To what extent do you embrace universal design for learning in your classroom? What are some key considerations you make in terms of instructional design in order to better promote universal access?
5. Can you describe a specific example of what is done to the classroom environment? What about your curricular content? How does this better support the needs of all students?
6. From your point of view, what impact does this have on students? What outcomes do you observe from students? (i.e. their academic and social development)

Teacher Beliefs and Values

1. In your words, and drawing on your experiences, what is the premise of the reverse integration model?
2. What do you believe are some benefits of the reverse integration model? Who does this model benefit and why/how? What are some limitations?
3. Why do you think that the reverse integration model is not more common?
4. What are your views on the dominant approach to fostering an inclusive classroom? (What does inclusive education mean to you? What does an inclusive classroom look and sound like?)

Influencing Factors (Supports and Challenges)

1. What range of factors and resources support are available to support you in creating reverse integration classrooms?
2. What challenges do you experience in this work? How do you respond to these challenges?

Next Steps

1. What advice, if any, do they have for beginning teachers who are interested in working in reverse integration programs?
2. What goals do you have for your reverse integration program?
3. To what extent do you think the strategies used in reverse integration can be applied to general education classrooms? How?
4. In what ways do you see the program growing and expanding in the future?