Independence in the Visual Arts Classroom: Students with Physical Disabilities

By

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Abstract

This qualitative research study explores the pedagogical practices and equipment teachers and/or educators use to establish an inclusive environment for students with physical disabilities in the visual arts classroom. The main question of this qualitative research is what are teachers or educators doing to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently? This study was established on semi-structured interviews with two educators and one teacher. The findings indicate that an inclusive environment starts with the voice, opinions, and interests of students with physical disabilities. The participants provided access to learners with physical disabilities through practical approaches rather than assistive technology.

Keywords: physical disabilities, visual arts, independence, inclusive environment
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Chapter 1: INTRODUCTION

1.0 Research Context

Creating art is a beneficial process for all students including students with disabilities. According to *The Ontario Curriculum, Grades 1–8: The Arts, 2009*, when students participate in the creative process they become aware of the self and their abilities to solve problems creatively through various stages of this process, which involves generating ideas, exploration, and reflection. This process allows students to express themselves as the individuals that they are (Ontario Ministry of Education, 2009). Students with disabilities use visual arts as another way to express themselves and communicate (Perera, Eales, & Blashki, 2009). However, communicating through visual arts has been a challenge when appropriate supports have been overlooked or are not made available to students with disabilities (Taylor, 2005a).

This qualitative research study explores how teachers create an inclusive visual arts classroom for students with disabilities, specifically for students with physical disabilities, to produce art. The importance lies in having students with physical disabilities create works of art independently and how their way of learning is represented or not represented in the visual arts classroom. There is little emphasis on this topic and it needs to be addressed, so teachers know how to work with students with physical disabilities. Specifically, how to develop their independent skills, understand that the process of creating art is valued over the finished product, and use assistive technology in the classroom to help students with physical disabilities create works of art.
1.1 Research Problem

Students with physical disabilities are not always equipped with the appropriate tools and methods to participate in the subject of visual arts, let alone be independent in their creative process. According to Simpson, McBride, Spencer, Lowdermilk, and Lynch (2009), there has been an increase in inclusive and universal design for learning (UDL) classrooms. However, students are not always provided with the appropriate supports to help them meet grade-level expectations (Simpson et al., 2009). As a consequence, students with physical disabilities may not be able to thrive and meet grade-level expectations.

Furthermore, what is startling is that in inclusive classrooms, teachers are uninformed of the technologies that currently exist to help students with disabilities (Hasselbring & Bausch 2005/2006, as cited in Simpson et al., 2009). Therefore, the problem does not only lie in the lack of supports for students with disabilities to use, but also there is a lack of knowledge when it comes to utilizing the technologies that currently exists. In other words, there is a disconnect that seems to persist even with the rise of inclusive and UDL classrooms.

A concern that needs to be addressed when providing appropriate support for students with disabilities is adapting assistive technology to the physical changes that they may undergo over time. For example, students with Duchenne muscular dystrophy, “a disease of the muscle,” need to have their assistive technology altered more frequently, due to their condition worsening over time (Heller, Mezei, & Avant, 2008, p. 15).

Another problem that I elaborate on is the danger of interference. A study by Causton-Theoharis and Burdick (2008) suggests that paraprofessionals, aides who assist students with disabilities in the classroom, act as gatekeepers where they can either provide access or deny
access to authentic art production. When the gate is closed, this can be a detriment to the goals that students with disabilities may have set out for themselves.

The gate being closed shows up in distinct ways, such as “interfering with physical access, interrupting authenticity, and altering art production entirely” (Causton-‐Theoharis & Burdick, 2008, p. 171). This is a representation of why appropriate roles in the classroom need to be defined. Discussion also needs to take place regarding the issues that undermine the abilities of students with physical disabilities. In visual arts, value is attached to works of art and I emphasize that teachers, educators, or paraprofessionals should not get so caught up in this aspect of art, but rather focus on the importance of the process and see how students with physical disabilities can contribute autonomously without others trying to take the reigns for them.

There are many underlying problems that need to be articulated. Students with physical disabilities should have the opportunity to succeed in all capacities and independence is essential to one’s learning, especially in the realm of visual arts. The visual arts have the potential to develop self-‐awareness where students with physical disabilities can acknowledge that they are able to do something.

1.2 Research Purpose

The purpose of my qualitative research is to learn what techniques (pedagogical practices) and equipment teachers or educators use to teach visual arts in ways that are inclusive and responsive to the needs of their students with physical disabilities within the art classroom. My intention is to share my findings with the educational community where teachers and
educators can learn new ways to teach visual arts following inclusive art practices and use assistive technology to foster inclusive classrooms.

Students with physical disabilities need educators who are informed and experienced using technology in a variety of ways to provide support. Therefore, training in assistive technology is necessary and every person involved with students with disabilities should have the opportunity to receive training (Simpson et al., 2009). As a result, training could potentially help with the disconnect that persists where teachers and/or educators are unaware of the variety of technologies they could use in the classroom to benefit their students.

### 1.3 Research Question and Subsidiary Questions

The main question of my qualitative research is what are teachers or educators doing to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently?

The subsidiary questions to follow the main question are:

1. How are teachers making visual arts accessible to students with physical disabilities?
2. Based on teachers’ personal experience, what did they learn from visual arts training and teacher education that prepared them to apply inclusive teaching practices in art education?
3. What factors and resources support and challenge teachers in their work with students with physical disabilities?
1.4 Reflexive Positioning Statement

As a young girl, any time I immersed myself in visual arts, I felt like I was part of something, I felt included. I was confronted with differential treatment based on negative preconceived notions of my educational performance and outcome. Creating art and depicting the world around me was great, it was a time where I could truly be myself and not get caught up in presenting the right answers as I had to with other subject areas. Visual arts gave me the opportunity to be independent and free from all constraints.

Having been treated differently and being excluded at times, I knew visual arts was going to be something that would always resonate with me and would be something that I would ultimately share with others, especially groups of people that were marginalized. As an adult, I had volunteered to assist patients at a healthcare centre in visual arts where assistive technology was used. From this experience, I had realized how valuable it was to leave ample room for the patients to be creative and come up with artistic concepts.

Before volunteering at the healthcare centre, I was unaware of the use of assistive technology being used to help patients in the subject area of visual arts. The fact that I was unaware of how technology was being used to aid patients in visual arts had an impact on me and has driven my research in this particular area. Traditional methods of creating art had not been imposed on the patients; it was a great sight to see. The patients felt accomplished in their attributes and some looked forward to creating artworks, not only for themselves, but others. To see cameras modified and patients using devices to create artworks, from my account, made me question whether or not such measures were being emphasized in the classroom in schools.

As I recall past experiences, I noticed that I had only seen such assistive technology regarding visual arts in a healthcare centre, but would it be used in the classroom and if so, who’s
responsibility is it to ensure that technology is modified appropriately and used in a manner that enforces inclusive teaching practices? For the art classrooms that do not use assistive technology, what are teachers or educators doing to ensure that the students with physical disabilities are able to create artworks? With that said, students of all different learning styles need to be acknowledged and have their needs met.

1.5 Preview of Whole

My qualitative research study comprises five chapters. Chapter 1 outlines the details of the research topic and raises the problems surrounding the practices of how assistive technology is being used, the purpose of the study, and research questions that I explore. Chapter 2 reviews the literature inclusivity, accessible practices, and the challenges that arise. Chapter 3 addresses the methodology including the steps taken to find and conduct interviews with teachers or educators, and the themes that surface through synthesizing information that was disclosed. Chapter 4 presents and discusses findings. Lastly, chapter 5 discusses the implications and/or recommendations.
2.0 Introduction to the chapter

In the literature review, the term “students with disabilities” is used instead of “students with physical disabilities;” this is consistent with the literature I reviewed for this qualitative study.

In this chapter, I review research that reflects the challenges and effectiveness of inclusive and accessible practices in visual arts through art pedagogy for students with disabilities. This includes exclusion practices and negative assumptions made about students with disabilities, interference in the creative process, technological advances and challenges, and art pedagogical practices that support students with disabilities. The literature is lacking in detailed analyses of how teachers would support students with disabilities when it comes to producing artworks. This is a missing element in art curricula that needs to be investigated further. So far, assistive technology appears to be more prominent in the literature than the strategies and the instructional teaching that teachers may be doing within the classroom. The narrative is far from being complete or even satisfactory because there is not much insight as to whether the subject of visual arts is a top priority.

2.1 Negative Assumptions of Students with Disabilities

The perception of students with disabilities is a major problem and the research indicates that ignorance persists where their capabilities are concerned. Titchkosky (2009) states, “we perceive disability through our cultural assumptions” and it starts from our imagination (p. 76). The assumptions that have appeared in the literature carry a negative connotation, which leads to a flawed educational system when it comes to the art curriculum. For example, Taylor (2005a)
addresses this major concern where assumptions and beliefs held by individuals, such as family members and professionals dictate what students with disabilities can and cannot do in the subject of visual arts. The assumptions and beliefs that one is not capable of doing something based on their physical state has its repercussions. It is evident in the literature that some students with disabilities are “denied access” to participate in visual arts (Taylor, 2005a, p. 326).

This only perpetuates further problems where pedagogy is concerned. Wexler (2011) points out that “art educators must be willing to permit children with developmental disabilities to learn from first-hand explorations, rather than second-hand notions of what teachers think they should learn” (p. 67). The joys of exploration are sometimes forgotten about due to the assumptions that persist about students with disabilities being incapable. Art is a process and learning can emerge if students are given the opportunity to explore. This is where the pedagogy for some teachers needs to change, so time is allocated for students with disabilities to get the most out of the art curriculum.

2.1.1 Excluding their voices

So far, the literature is able to examine the lives of students with disabilities in their artistic endeavours, but it is their voices and their opinions that remains a missing link in the literature. Davis and Watson (2001) argue that in order to establish better inclusive practices, educational policies, and processes, policy makers need to consider the opinions of students with disabilities. The teacher’s voice is not the only one that the literature needs to be concerned with. Furthermore, the authors point out that it is uncommon in the literature to hear the perspectives of students with disabilities. By not having their views present almost implies that it is okay for educators and policy makers to establish policies and practices for them, as they see fit, without
dealing with the ramifications or actually supporting students with disabilities which can be exclusionary in its practices.

2.2 Interference in the Creative Process and Problems Creating Art

Another issue that presents itself in the literature as a recurring theme is interference. According to the authors Giangreco, Edelman, Luiselli, and MacFarland (1997), they state that there has been an increase of instructional assistants where they play a major role in public schools to ensure that students with disabilities are being supported appropriately and “to implement more inclusive schooling practices” (p. 8). In their study, the authors found that “instructional assistants were in close proximity to the students with disabilities on an ongoing basis” (Giangreco et al., 1997, p. 9). Furthermore, the authors mention that the study participants acknowledged that at times it was necessary for instructional assistants to work in close proximity with students with disabilities, such as assisting them with tactile and instructional tasks, and health matters; however, they realized that having the support of instructional assistants all the time could be harmful to their learning and acquiring skills (Giangreco et al., 1997).

The presence of the instructional assistants working in close proximity with the students, at times, meant that they took on the role of the teacher in providing instructions. Giangreco et al. (1997) acknowledge that if instructional assistants were present and worked closely with students with disabilities in the general classrooms, the classroom teachers felt that it was not their responsibility to provide the students with instructions. Most took a hands-off approach, while the instructional assistants took the lead, and carried out the classroom teachers’ job by educating and instructing the students (Giangreco et al., 1997). Also, Giangreco et al. (1997) found that
“Data consistently indicated that it was the instructional assistants, not the professional staff, who were making and implementing virtually all of the day-to-day curricular and instructional decisions” (p. 10). This explains that students with disabilities have not been included as part of the class, but remained a separate entity within the classroom.

Allowing instructional assistants to have control over students with disabilities has led to a new found freedom for them where they decide when to enter or leave the classroom and change the activities presented by the classroom teacher, as they instruct the students in their care (Giangreco et al., 1997). As a result, this affects the learning style of the students with disabilities where they become reliant on the instructional assistants, even for things that they are capable of doing themselves. This interferes with students’ development where there is a loss of autonomy and at times gender identity, and they are unable to interact with classmates because of the persistent governing that occurs (Giangreco et al., 1997).

2.2.1 Less autonomy

In some cases, assistance is required for students to be creative and carry out the art-making process. Young (2008) asserts that interference occurs when assistants lose sight of supporting and actually engage in the creative process, affecting the outcome of the artwork. When assistants get involved in the art-making process, boundaries need to be established between the assistants and the students because at times, it is all to easy for the assistants to get carried away with the tasks at hand. Particularly, when students with disabilities are faced with challenges that deter them from the creative process.

In Causton-Theoharis and Burdick’s (2008) study, they have outlined detailed scenarios where paraprofessionals have been intrusive where they have confiscated materials that are used
to help students with disabilities as they create works of art. As a result, this hinders the authentic process for students with disabilities. Additionally, the authors have mentioned solutions, such as planning ahead and using adaptations, so students with disabilities can fully engage in the process of creating art and not have their works compromised.

According to Taylor (2005b), whose work is based on her PhD research, arts education can aid in one’s development when it comes to identity. However, she elaborates on the notion of how students with disabilities are being addressed, by not having the opportunity as their non-disabled peers to engage in their own learning and self discovery through visual arts. The ideas and stigmas that society has placed on students with disabilities only emphasizes that they are unable and that someone else, an enabler, can ensure that they make waves through the conventional ways of producing art; essentially, the enabler creates the work for the students with disabilities and they are compelled to go along with this (Taylor, 2005b). Furthermore, Taylor’s (2005b) research brought forth the perspectives of students and provided some examples of their personal works of art. Taylor’s work is invaluable to the literature because she has worked extensively on the relationship between art education and students with disabilities. She sees the value in presenting students’ voices and concerns, which is also a main element in the discussion brought forth by Davis and Watson (2001), as mentioned earlier.

2.2.2 The problem with tools

According Perera et al. (2009), there seems to be a lack of appreciation for those with upper limb disabilities who produce artworks because the tools that are made available are not geared towards their specific needs; therefore, the reality is that people with disabilities are engaging in non-digital tools or digital tools made available and receiving assistance from others
to create an appropriate environment, so they can engage in the process of art making. Furthermore, the authors state that tool designers are not necessarily thinking of people with disabilities when it comes to the production of art.

Visual arts may have its benefits that encourage one to be expressive and showcase their individuality, but the “technological support…is scarce” because the technological supports that are made are designed for creating opportunities in one’s day-to-day life and for employment purposes (Perera et al., 2009, p. 78). As a result, some would see the production of technological tools made specifically for people with upper limb disabilities, as not being valuable and inefficient where visual arts is involved; so, there is not much literature that advocates for such ventures where creating art is part of one’s livelihood (Perera et al., 2009).

2.2.3 Art is more than just rehabilitation

The ideas of art education for students with disabilities still refer to corrective efforts and rehabilitation (Derby, 2011). When the topic of art education is present in literature alongside the studies of disability, it usually connotes therapy. A study done by Taylor (2005b) states that the art education that students with disabilities receive can be summed up into “a therapeutic leisure activity that has long associated disability with the notion of training, therapy and handicrafts, and which has its roots in the practices of institutions and later day centres” (p. 766). Now, stating that creating artworks can somehow help in one’s development is not unfavourable; however, when it only attributes to the idea of therapy and nothing more, that becomes a problem for students with disabilities who may want to pursue visual arts for reasons that have nothing to do with treatment. The literature is substantially missing in this area that involves creating
artworks that does not have a focus on rehabilitation and therapeutic needs for students with disabilities.

2.3 Technology: Artistic Opportunities and Challenges

In the literature, most accounts of assistive technology and information communication technology have provided modes in which students with disabilities have been able to produce works of art without interference, making art accessible. Taylor (2005a) states, “Central to achieving access in art and design are the complementary support systems of information technology (IT) and practical assistance that ensure that all students have the opportunity to develop their creativity” (p. 326). Taylor (2005a) and Perera et al. (2009), contribute to this conversation and uphold the idea that technology can conceivably provide those with a disability, specifically those with an upper limb disability, the support that they need to be secure in their capabilities, to be productive, and more importantly, independent. The use of technology is not just a support tool, but is also a medium that students with disabilities can utilize (Perera et al., 2009).

In addition, Perera et al. (2009) report that people with upper limb disabilities would find paralinguistic voice recognition technologies useful; paralinguistic voice acts to recognize the volume of one’s voice to produce artworks on a screen by controlling cursor movement. According to the work of the authors, vocal paralanguage refers to the sounds that one makes which excludes speech making it universal, inclusive for all. This is effective because it is not concerned with speech recognition and caters to a wider audience (Perera et al., 2009).

According to Taylor (2005a), information communication technology (ICT) has not only been invaluable to the subject of visual arts, but has accommodated to the needs of students with
disabilities and their educational experience. Technological advances have emerged and have appeared in literature in the context of disabilities as being a viable mechanism that will assist people with disabilities. Through a pilot project, Young (2008) reveals that adult learners with disabilities could be autonomous by using computer technology (CT), to create art. If this is the case, surely some form of CT would meet standards or be modified where it could be used in an educational setting that promotes art-making practices and encourages autonomy.

Moreover, Taylor (2005a) mentions that ICT has enhanced art education of students with disabilities by providing solutions, such as enhancing the visuals through magnification, changes in the screen contrast, the use of key guards that help with upper limb disabilities, and hardware and software modifications. ICT can provide these students with access where they can experiment with images, print, and establish a sense of fluidity in their works while engaging in the application of contemporary art techniques (Taylor, 2005a).

2.3.1 Assistive Technology: When the impact wanes

However, the use of assistive technology does not adhere to the one size fits all, but rather used as a starting point where devices can be adjusted and customized to serve a particular purpose for an individual engaging in visual art lessons; otherwise, using assistive technological devices without any changes would be ineffective and impractical (Smith, 2000). Despite the changes that have been made to assistive technology devices to help meet individual needs, Smith (2000) states that it is difficult to incorporate assistive technology into curricular activities due to an “unwieldy number of assistive technology devices and accompanying strategies” (p. 274). Consequently, the solution for adjusting assistive technology to accommodate the needs of students with disabilities could also be a problem. With all the strategies required to accompany
assistive technology devices, students with disabilities would not be working independently, and that potentially puts them in a compromising position where their independence could be sacrificed. This is contradictory, considering assistive technology is viewed in the literature as supporting independence for students with disabilities.

Smith (2000) also mentions that there are four variables that complicate the impact of assistive technology. First, the instructional aide can restrain favourable results, as mentioned earlier, followed by special education teams that impact how students with disabilities perform. The third variable includes the educational outcomes of students with disabilities, which are based on the instructions of special education teachers. Last of all, the emergence of the universal design strategies which have implemented learning for all students may result in students with disabilities no longer needing assistive technology for accessible purposes.

**2.4 Teachers: Applying Instructional Strategies**

As mentioned in chapter 1, the research suggests that teachers lack understanding and know-how when it comes to accessible and inclusive practices for students with disabilities. When it comes to instruction, to be inclusive and meet the needs of students with disabilities, Guay (1993) suggests that the focus needs to be on looking for similarities among students through instructional strategies and work towards establishing a complete arts curriculum rather than resort to singular activities. According to Morreau and Anderson (1986), the task analysis strategy described as simplifying an art skill into small steps would help teachers with instruction (as cited in Guay, 1993). A strategy like this one mentioned could be a starting basis for teachers uncertain of where to start.
2.4.1 Preservice teachers and art pedagogy

Pedagogy can be a concern for teachers working with students with disabilities. Therefore, the preservice experience has been brought forth. Guay (1994) focuses on preservice teachers and the pedagogy that they need to learn in order to assist students with disabilities in art classes. The author states that preservice art education courses need to address difficulties that currently exist in art classes, as well as be considerate to the necessities that require teachers to do their jobs effectively; when these things are deliberated, preservice teachers will obtain more from such courses. A concern that Guay (1994) finds in her study is that in teacher education programs, preservice art teachers are learning about special education curricula through nonart courses; this is not suitable for preservice art teachers, especially with problems that persist around providing an inclusive education and having students with disabilities being integrated into the classrooms. Teachers need effective methods, tools, and resources on how to support their students in art, so instruction and practices must be addressed not only through special education, but also through art curricula. Based on Guay’s findings, this could be an underlying problem for preservice teachers where they could lack considerable knowledge in an area where they should be well versed in.

2.4.2 What are teachers doing?

Teachers are trying to be inclusive. Guay (1993) found that “teachers with integrated art classrooms expected all students to engage in the same studio problems” (p. 226). This would unite the students together rather than separate them by instructions. When additional help was necessary, teachers were able to provide students with one-to-one instructions, as well as provide demonstrations (Guay, 1993). The students would share what they had learned (Guay, 1993);
consolidation occurred in these art classes, which reflects the inclusive environment that students should participate in.

For students that needed further assistance, “Teachers used a cue hierarchy, verbal cuing, and additional demonstration preceding hand-over-hand assistance if needed” (Guay, 1993, p. 229). The teachers were explicit in their instructions by going over techniques and vocabulary and they had the students recall the instructions given (Guay, 1993). The teachers conveyed that the learning was all about the students; their opinions and ideas mattered, as well as their own ability to engage in the art lesson (Guay, 1993). Guay’s findings indicated that it was not all about teacher-directed instruction.

In addition, Guay (1993) indicates that motivation was a central factor to the lesson. She states that some teachers would help some of their students with disabilities by completing some of their tasks to provide them with a starting point, but reminded themselves that they are not trying to interfere and do the work for the students. For teachers, knowing their students is instrumental because teachers need to know where that fine line is, not to cross it, not to impede. Now, not all teachers did this, instead, they were able to come up with some innovative processes to cater to their students without imposing nonart objectives (Guay, 1993).

2.5 Conclusion

In the four major themes that emerged from the literature, Negative Assumptions of Students with Disabilities, Interference in the Creative Process and Problems Creating Art, Technology: Artistic Opportunities and Challenges, and Teachers: Applying Instructional Strategies, I have shown that further analyses need to be made in order to comprehend how teachers are creating an inclusive environment for students with disabilities. The creation of
educational art lessons continues to be a problem that exists, making it a challenge for teachers to be inclusive and knowledgeable with assistive and communicative technologies. The social constructions and societal frameworks of how art education and disability studies connect is still a hurdle that needs to be addressed, regarding literature, in order for visual arts to be recognized as more than just therapy or a pass time activity for students with disabilities.

What I learned from the literature has helped to guide my steps in finding answers to the gaps that are currently present, even among inclusive classrooms. In my research, it is important to address strategies used along with assistive technology, and the innovative techniques that teachers have resorted to, to ensure inclusionary practices for students with disabilities in visual art classrooms. My research contributes to the works that already exist by providing teachers and educators with up-to-date practical strategies, resources, and assistive technology that can be used in the visual arts curriculum.
Chapter 3: RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, I discuss the research methodology of my qualitative study regarding the research approach and procedures, the instrument of data collection, the participants which entails the sampling criteria, procedures/recruitment, followed by the participants’ brief biographies, the data analysis, ethical review procedures, and lastly the methodological limitations and strengths. This outlines the necessary steps taken to emphasize and understand the teachers’ or educators’ experience of the development of inclusive art pedagogy and providing support for students with physical disabilities in the art classroom.

3.1 Research Approach & Procedures

My research approach and procedures reveal an exploratory position where I provide insights into the problems that currently persist around the establishment and the attainment of inclusive art pedagogy for students with physical disabilities. Hence, I conducted this qualitative research study through semi-structured interviews with two educators and one teacher. Two of the interviews occurred face-to-face, while one was conducted via the telephone due to an unforeseen circumstance. According to Merriam (2002), in a qualitative study, the researcher “strive[s] to understand the meaning people have constructed about their world and their experiences” (pp. 4-5). Overtime, the meaning evolves and the importance of the qualitative study examines what led to the arrival of one’s reality (Cooper & White, 2012).

Creswell (2013) states that the researcher is a “key instrument” when he outlines the characteristics of qualitative research (p. 45); this indicates that the researcher is the one who will proceed to examine and describe the findings in conjunction with the literature and apply a clear
lens to the study at hand. Furthermore, a qualitative study implements reflexivity (Creswell, 2013) where I am able to position myself within the study and present my insights to readers about my experiences, as well as the experiences of others through an in-depth analysis. Such characteristics, as mentioned, are beneficial to the case study approach that I have taken to develop this qualitative study.

The qualitative case study approach “is a good approach when the inquirer has clearly identifiable cases with boundaries and seeks to provide an in-depth understanding of the cases or a comparison of several cases” (Creswell, 2013, p.100). Based on the analysis that I have conducted and the experiences of the teacher and educators that I have interviewed were based on specific criteria as noted in the participants’ section of the methodology.

3.2 Instruments of Data Collection

The main instrument of data collection for this study was a semi-structured interview. A semi-structured interview refers to flexibility and the interviewer making last minute changes to scheduled probes, to build on grasping a complete description of the interviewee’s personal experiences (Qu & Dumay, 2011). In addition, though flexible, the semi-structured interview protocol does entail some structure, referred to as the interview guide where broad themes can be discussed that contribute to the topic and issues of the study (Qu & Dumay, 2011). Hence, conducting semi-structured interviews were invaluable to this study because I was able to engage in a dialogue with the participants or show my interest during some pivotal points of each interview. It was important to me to establish a connection with the participants, so they felt comfortable to speak about their experiences. Also, this presented me with the opportunity to ask probing questions in the midst of the questions that I created beforehand (see Appendix B). At
times, I was surprised by the participants’ remarks that were vocalized in relation to their personal experiences regarding students with physical disabilities; therefore, the semi-structured protocol provided participants to elaborate on their explanations and bring clarity to the main research question: What are teachers or educators doing to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently?

Taking the background of my participants into account, I created two interview guides (see Appendix B). The first guide was compiled of 31 questions and this was used specifically for the teacher that I interviewed. The second guide was compiled of 29 questions and this was used for the educators that I interviewed. Based on the length of the questions that I created, I thought the duration of each interview would be approximately 70 minutes. However, this was not the case and each interview did not surpass 50 minutes. I recorded each interview using a built-in microphone on my laptop. In order to capture the essence of each interview, I took notes as soon as possible, as a way to recall what aspects or responses stood out for me, as well as the tone of voice that was used to respond to the questions and at times the hesitation to speak.

As an interviewer, it was important to me to have the participants explain their thoughts and provide authentic responses. Therefore, I did not provide my participants with the questions beforehand. Personally, I believed this could lead to prepared responses by the participants. The responses provided by the participants might come across as scripted and this is not what I am looking for. The opportunity to have someone’s initial reaction to a question and to think about their response was more informative because it was not just about their response, but the body language that they conveyed, as well as their intonation. I took note of these cues and ensured to elaborate on the body language and the participant’s intonation once the interview...
was over. The participant’s genuine response to each question added to my data and that was important based on my research question being primarily focused on inclusivity.

3.3 Participants

In this section, I discuss the criteria that I used to find my research participants, along with the sampling procedures/recruitments to ensure that I could build upon what was already revealed in the literature review in an ethical manner. Lastly, I include the biographies of each participant where pseudonyms are used to protect their identity.

3.3.1 Sampling Criteria

The following criteria were applied when selecting participants for this study:

- Teachers that work with students with physical disabilities in a school, art school, or alternative art classroom
- Teachers that use assistive technology in visual arts
- Teachers that have a background in fine art history and visual arts training

It is imperative that the teachers work with students with physical disabilities because it is the premise of this qualitative study. Secondly, teachers who work with students with physical disabilities have an understanding of how to maneuver their classroom environment, most likely having dealt with situations where they had to be quite resourceful and keep their students engaged in the creative process, along with supporting their independent work in visual arts.

In the literature review, assistive technology has been mentioned along with helping students with physical disabilities in their daily lives. Therefore, it is important to have a clear understanding of what assistive technology entails, how it is used in the classroom, or is it not
used as the literature states, how practical is it, and what strategies can the participants put
emphasis on for teachers and pre-service teachers that need guidance in this area?

Teachers with a fine art history and visual arts background can add to the literature that
currently exists and speak to the art techniques and terminology when discussing their personal
and professional experiences within the art classroom. Furthermore, teachers can mention artists
that they look to for inspiration and/or art techniques that set a foundation in their art classrooms
or practice, such as Sol LeWitt and the conceptual art movement, and can possibly speak to
disability in the arts.

3.3.2 Sampling Procedures/Recruitment

For this study, I used purposeful sampling to recruit my participants. As Merriam (2002)
states, purposeful sampling provides a premise where ample information can be utilized to make
connections among the sampling criteria that was established. Hence, during the recruitment
process, I referred to the criteria that I constructed regularly. Also, purposeful sampling worked
in my favour due to the premise of the study, the subject matter, and in correlation with the case
study approach for this study. With purposeful sampling, I was able to obtain sufficient
information from my participants during the semi-structured interviews.

The strategies that I employed to recruit my participants were looking at school board
listings of schools that specialized in special needs, visual arts, or alternative programs, as well
as explored other organizations, such as the Ontario Arts Council, a government agency that
supports art endeavours and artists or programs that supported students or people with physical
disabilities. From there, I narrowed down my search to a few schools and organizations where I
sent out emails with a brief synopsis explaining my research, its purpose and the criteria that the
participants should have along with my contact information, so those willing to participate could contact me directly. In addition, to increase my prospects of finding participants that met the criteria, I reached out to some organizations via the telephone. The personal connection, talking to someone on the telephone, led to my research being shared with others through a listserv that dealt with my subject matter. Ultimately, this led to two participants, while one of my participants was recruited based on convenience, being present in an educational environment surrounded by teacher colleagues.

3.3.3 Participant Bios

Carrie is an artist and program coordinator. She has been instructing/coordinating for 21 years. She works with children who have developmental and physical needs from ages 4 to 18 and works within a rehabilitative, medical institution. She has a Bachelor in Fine Arts and recognizes that children are not their disability.

Andy is a teacher and department coordinator for the arts. He has been teaching for 16 years and has taught 10 years in the Region of Peel. He has taught grades 7 to 12 and is currently teaching visual arts in an independent school. For Andy, visual art is his forte and he has an interest in working with youth, which led to his respective position. As a certified teacher, he can speak to the Ontario arts curriculum.

Taryn has been a program coordinator and facilitator for 12 years. They have been instructing for 4 years at a visual art organization establishing educational programming that meets the needs of artists with physical disabilities. The experiences that have led Taryn to this work are interests in community arts and collaborative art therapy.
3.4 Data Analysis

In this section, I discuss how I analyzed the data that I collected. The initial stage of the data analysis was emotionally overpowering, especially in coding. The coding process was a bit tedious for me. Once I completed transcribing my first interview, I had to go back and listen to the audio recording while reading the finalized transcript to gauge the data and highlight salient quotes to code for my first pass. This way of coding worked for me because while I transcribed my data there was no continuity. Transcribing was a stop-and-go process and that hindered my ability to decipher salient quotes and refer to annotating relevant parts. As I listened to the audio recording and read the transcript simultaneously, I felt like I was starting over. Nevertheless, it was the best solution for me to become familiar with the data and code during my first pass. I referred to the same procedure for my second and third interviews.

As I started coding, what stood out for me was In Vivo coding; however, I did not stick to this and branched out inputting descriptive and value codes. This allowed for a variety of codes that I could refine and change during my second pass of coding. Also, looking at my data from an inclusive perspective, it was an integral part to include the voice and values of the participants. I wanted to give myself the opportunity to seek out what the participants were saying and why. I sought after the why to be able to convey a sense of depth and synthesize the participants’ responses. For the second pass of coding, I listened to the audio recording again and looked for ways to refine my preliminary codes (first pass). I grappled with this process because I knew that the codes from my second pass were going to set the foundation for my categories. This brought on some confusion. After conversing with a few colleagues, I detected that I did not focus on process coding. Therefore, I referred to process coding to refine my codes and that put a lot into perspective for me. Hence, I was able to focus on what steps my participants took to
implement inclusive teaching practices. After putting similar or repeated codes together, my categories and themes started to emerge. The themes are outlined in Chapter 4.

### 3.5 Ethical Review Procedures

For the ethical review, I followed the procedures stipulated by the Master of Teaching program for consent and protection of privacy. Before conducting the interviews, consent was required. In the consent form (see Appendix A), each participant read the consent form and signed if they agreed with the conditions, a face-to-face, semi-structured, 70-minute interview, and addressed any concerns with me, the researcher. Pseudonyms were used to protect the identity of the participants. The real names of the participants were not used in any of the notes taken for this study and/or transcripts created in the data analysis. The information collected was stored on my password-protected laptop and copies of the documents were stored on an external hard drive for safekeeping. To fulfill my educational requirements and any further studies and/or potential publications that are unforeseen, the data will be kept in my possession for five years. After this time, the information will be discarded.

At the start of the interview, participants were informed that they would not be penalized if they choose not to answer any question. As a result, there were no known risks to participation. In Tracy’s (2010) work, the criteria of quality that resonates with me most are ethical and sincerity. My intention is to be transparent, along with presenting my findings ethically. I do not want to misconstrue the information that my participants disclosed. Whether I agree with their statements or not, my participants’ experiences could paint a picture about why there is a lack of inclusivity in visual art classrooms for students with physical disabilities.
3.6 Methodological Limitations and Strengths

A methodological limitation of this study was not being able to speak to students with physical disabilities directly about their personal experiences when creating artwork, receiving support, opportunities, finding out if they were able to create artwork independently, and if they find assistive technology beneficial or not. As Davis (2008) notes, through visual arts, students are able to see and value their own inquiry, so without hearing directly from them, especially where their creative process is concerned, was a loss. Another limitation was not being able to observe students with physical disabilities as they create artwork, see how teachers interact with their students, and how inclusive practices are used in the visual arts classroom.

The strength of this study relied on a small sample size of teachers or educators to interview to make meaning from their teaching practices and educational training. This allowed me to delve into themes, synthesize information obtained, and elaborate on any missing areas that the participants did not speak to in the interviews. As well, hearing directly from the participants, where they were able to voice their opinions, concerns, and add to the literature is invaluable where gaps persist.

3.7 Conclusion

In this chapter, I have provided an overview of the steps taken to conduct my methodology that focuses on the techniques (pedagogical practices) and equipment teachers use to teach visual arts in ways that are inclusive and responsive to the needs of their students with physical disabilities within the art classroom. The research approach and procedure taken – a qualitative case study approach – was beneficial to my data collection where I conducted semi-structured interviews with three teachers or educators, individually. The qualitative case study
approach allowed me to engage in a rich dialogue with the participants where I asked follow-up questions due to the flexible nature of the semi-structured interviews. The sampling criteria led to purposeful sampling, where the participants could speak to the practice of the study and address the concerns of interference, using assistive technology, and negative social constructions that students with disabilities face within visual arts, where visual arts is more to these students than mere therapy or a rehabilitative practice. My decision to follow these approaches and procedures was advantageous to this qualitative study and brought forth themes that were not particularly highlighted in the literature review. For this study, I adhered to the ethical review procedures stipulated to ensure the privacy of the participants and to avoid any detriments. Next, in chapter 4, I discuss my findings from the three interviews conducted.
Chapter 4: RESEARCH FINDINGS

4.0 Introduction

In this chapter, I present the research findings and discuss the themes that emerged from the three semi-structured interviews that I conducted regarding the main research question: What are teachers or educators doing to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently? The themes are 1) Inclusivity starts with the voice, opinions, and interests of students with physical disabilities; 2) Autonomy: Establishing an inclusive environment with supporters, educational assistants, and scribes; 3) Participants provide access to learners with physical disabilities; 4) Visual arts training and teacher education: Applying inclusive teaching practices in art education; 5) Pedagogical resources and other supports; and 6) Advice for beginning teachers. Some of these major themes have sub-themes, which address pivotal features, such as authentic art production, inclusive practices, and resources. The main focus of this research paper is on students with physical disabilities. However, each participant referred to those with physical disabilities differently in terms of the environment that they work in. In the interview with Carrie, she stated children; Andy stated students, and Taryn stated artists. Therefore, in this chapter, I refer to all three collectively as learners with physical disabilities, unless noted otherwise where I take into account the way in which the participants addressed their learners.

4.1 Inclusivity starts with the voice, opinions, and interests of students with physical disabilities

The participants listened to the ideas and thoughts raised by learners with physical disabilities on how they would like to express themselves through visual arts. The learner’s voice
is relevant and at the forefront in establishing an inclusive environment. Each participant had their own distinctive approach to establishing an inclusive environment and did this in respect to following the directions of learners with physical disabilities. Carrie values autonomy in her approach; the preservation of autonomy was a foundational attribute that existed in the work that she did with children with physical disabilities. Carrie engaged in observation and then supported the children with physical disabilities by following their cues. She made this quite clear in her remark:

So it’s really listening to the [child] and letting them direct their experience so and letting me know like I rarely will ask them if they need help. I’ll wait ‘til they tell me or indicate somehow that they might need some support, so I want to give them their autonomy, give them their again, their independence, but as soon as they ask, I’ll help them.

Carrie explained that children with physical disabilities are in charge of their own work and ultimately make artistic decisions. As educators, it is essential that we listen and value the thoughts of learners with physical disabilities to preserve their autonomy.

Similarly, Taryn listened to the learners that they worked with, but their approach was different from Carrie’s. Taryn stated that in their work as a scribe, they followed the direction of the learners with physical disabilities during art production. Taryn’s experience with a disability, along with being interested in community building, and intrigued by collaborative arts therapies, led to a collaborative approach with artists with physical disabilities where they have priority over the art-making process:

I got involved with [an organization], first as a scribe. Um, so that was sort of like the […] semi-collaborative relationship where I would sit with an artist and they would tell
me what their creative vision was and I would, um, do my best to translate it exactly as they saw it in their minds onto the page.

Taryn’s approach conveyed a sense of selflessness where they listened to the “creative vision” of artists with physical disabilities. In Taryn’s approach one learns how to build a rapport with someone and develop a relationship, which establishes joint ventures through the creative and art-making process.

Andy established an inclusive environment for his learners through differentiated instruction; however, this is not exclusive to students with physical disabilities based on the experiences that he had throughout his career. As a part of his teaching practice, Andy has established an inclusive environment for students with a range of abilities. He stated, “it’s always been kind of a mixed classroom, so I haven’t gone into a specialized program.” Hence, the environment that he has worked in as a “general classroom teacher” has not been specific to students with physical disabilities.

Andy focused on the importance of the art-making process, rather than the product. He elaborated on the choices that all students had when selecting a material or technique to use to demonstrate their learning. The students were not guided by exemplars. In addition, Andy also emphasized how the Ontario arts curriculum is not for confinement, but for exploration and this is present in his practice where students learn to understand different materials.

The research findings indicate that the approach that each participant employed started with acknowledging learners with physical disabilities first. Through these inclusive approaches, learners with physical disabilities were able to voice their opinions and interests in art production. In the literature, the voices of students with physical disabilities are too often absent and not taken into consideration. Davis and Watson (2001) acknowledge too often decisions are
made for students with physical disabilities, barriers are formed, these students lose creative control, and that hinders authentic art production. The approaches that the participants have shared, such as the preservation of autonomy, collaboration, and individual expression support an inclusive visual arts classroom for students with physical disabilities. Furthermore, through the employment of these approaches, the voices of students with physical disabilities are heard.

4.1.1 Authentic art production derives from self-awareness

The way in which each participant defined authentic art production encompassed a common concept of self-awareness and the importance of learners developing their truth over time. This may involve exploring and sharing themselves in their artworks or being the conversation starter in a vast array of concerns in society. When asked, what does authentic art production mean to you? Carrie stated, “Definitely it means that an individual is expressing from themselves without too much prompting, so whatever the environment’s created or activities created, the child can use it as a springboard simply, but they’re never coerced into producing something.…” Furthermore, she elaborated that the children were the ones to set goals, and her role as a facilitator was to “remove barriers.” Taryn’s response was similar to Carrie’s. Taryn also commented on the artist feeling safe to explore their imagination, not hastened, and lastly, “supported in making mistakes.” Intriguingly, Andy addressed authentic art production as students not only being self-aware, but also creating works of art that become part of the broader community and start a dialogue. The artwork is not simply art in itself, but that it carries some weight, a sense of significance bares authenticity.

All three participants conveyed the importance of putting learners’ needs first and established opportunities for them to engage in exploratory practices in visual arts.
4.2 Autonomy: Establishing an inclusive environment with supporters, educational assistants, and scribes

For learners with physical disabilities, autonomy is fostered through support, as well as through the appropriate accommodations. Carrie stated,

they’re there the whole time whatever the accommodations they need to participate fully if it’s nursing or personal support worker or a one-to-one system to help them work hand over hand, so they can functionally use a paintbrush or what not or they can direct their, the marks they want to make on the paper, that to me would be inclusive so that the child is part of everything all the time, and there’s no barriers because there’s accommodations put in place.

According to Carrie’s account, participation was encouraged and the appropriate supporters were on hand to provide assistance. Similarly, Andy discussed an accommodative environment. Andy referred to an experience at a previous school that he worked at where accommodations were in place for students with developmental disabilities that were being integrated into his art classroom. These students received support from educational assistants to engage in art projects.

In Taryn’s account, they expressed the significance of having supporters, but they also declared what it means for artists with physical disabilities to produce artworks independently. According to Taryn, when artists with physical disabilities produce artworks independently it “doesn’t necessarily mean that they’re doing it alone, but that they’re doing it on their own, like that they have creative control over the process.” Taryn reasoned their point by making a comparison, saying that artists with physical disabilities may need assistance like those who use interpreters to communicate. Furthermore, Taryn applied the same thought around the use of
technology, where supporters are relevant and should not disengage from the art-making process when artists with physical disabilities use or are equipped with technology. Taryn stated,

   a lot of people think that if a person has a piece of technology to help them then they’re suddenly independent because they no longer need another person to help, but in some way that also takes away the relational aspect, the relationship that’s really critical to working against social isolation.

Therefore, in Taryn’s explanation, when someone receives assistance or support, it does not mean that artists with physical disabilities did not produce their artwork independently. Independence is there, it appears in the form of the art-making process, as opposed to what people would traditionally define as producing art independently, such as alone or self-reliant.

Being a scribe in their formative years, Taryn understands the value in training the scribe and informing them about anti-oppressive philosophy. Those who are in the role of the scribe are there to ask thorough questions. The example that Taryn provided was about drawing a tree. If an artist with a physical disability wants to draw a tree, it is important that the scribe ask questions, such as “What colour is the tree?” “What feeling do you want people to feel when they see the tree?” This ensures that the scribe is being supportive and listens, rather than taking over the process, as well as “educating people about the difference between collaboration and supporting in what allyship really is” in this work.

In addition, Taryn acknowledged that relationships in the art-making process should not only exist between the artists with physical disabilities and the facilitators, but relationships should be formed amongst the artists to support each other and solve problems where barriers persist because “They’re the ones with the lived experiences and the knowledge about what the barriers are exactly.” In contrast, the literature speaks to the absence of relationships due to
interference. Some students with physical disabilities may face challenges to forming relationships with their peers in an integrated visual arts classroom because there is a risk that paraprofessionals may interfere excessively and some classroom teachers excuse themselves from their duties to support these students (Giangreco et al., 1997). All participants were conscious of not interfering.

4.3 Participants provide access to learners with physical disabilities

All participants provided access to the learners in their respective positions and educational settings to create artworks. Access is provided in a multitude of ways. According to Taryn, providing access involved the community at large:

My role is to network with different community organizations to be able to…connect the artists to other artists in the community and, um, develop educational programming for them that’s specific to their needs, um, which mostly comes in the form of individualized programming, so I’ll sit down with them, I’ll sit down with a few artists every week […], and we talk about portfolio development, and you know, creative skills, and um also do some informal counseling for them….

Taryn’s work expressed a sense of community where they build a foundation around networking and partnerships for artists with physical disabilities. They also ensure that learners with physical disabilities are able to participate in creating artworks by establishing programming that meets their specific needs.

Carrie’s method of providing access derived from using inexpensive means. In the interview, Carrie described making visual arts accessible to children with physical disabilities by
simplifying her practice where she sourced low-tech materials and devised solutions where they created artworks that did not require a great deal:

We might just quickly put a lock handle on a paintbrush and duct tape it together so they can paint from the wheelchair onto the wall or maybe put the paper on the floor and stick it on the floor. So we just try to find ways in the moment that are fun and really find ways that are non-medicalized with adaptations, so there’s no stigma and it’s fun….

Andy provided access through collaboration:

I mean part of it is like using the classroom, thinking about what the strengths are in the classroom, so doing a lot of collaborative work and a lot of teamwork in the classroom, so getting feedback from each other and recognizing the range of interpretations and strategies that are always applicable when you’re doing an arts-based challenge, instead of having one right answer.

Andy not only provides learners with the opportunity to engage with their peers, but students are able to engage in their own thought process.

In essence, students working together where revelations and solutions could be shared, as well as students being exposed to various ways of creating artworks formulated access. In this environment, no one was left out and information could be easily reached when working with peers. As a result, all three participants provided access using practical approaches, such as networking, simple solutions, and working collaboratively. In the literature, when access is discussed, it refers to the inhibiting practices (Taylor, 2005a); therefore, the practical approaches revealed by the participants communicate accessible means that are not prominent in the literature.
4.4 Visual arts training and teacher education: Applying inclusive teaching practices in art education

Andy and Taryn disclosed that visual arts training and/or teacher education did not make an outstanding impression when it came to applying inclusive teaching practices in art education. When asked about teacher education, Andy admitted, “It’s not very memorable.” From the participants’ responses, Andy’s account caught me off guard. I hoped to hear some rather important information about teacher education training and/or programs that prepared pre-service teachers to implement inclusive teaching practices in art education, especially for students with physical disabilities. Taryn emphasized that it was practical experience outside of formal training that made an impact:

Hm, well my formal training in high school, I’m not sure that it really helped me, um, like directly, to work with, to work from an inclusive perspective, but um during that time I was involved in [a community arts organization], so I was able to make some connections in high school from my learning, like from my more practical learning in the community and create a mural, like a high school mural.

By way of contrast, Carrie, who defined herself as an artist since the age of 4 years old and sees the world through an artistic lens, explained that inclusive teaching practices went hand in hand with being an artist: “it’s a general sort of philosophy of being an artist or art. Having an open mind and […] not being scared by difference.”

This finding is consistent with literature that indicates a lack of discussion around effective methods and resources from visual arts training and teacher education programs involving art pedagogy for students with disabilities (Guay, 1994). Overall, the three participants
were able to apply inclusive practices, even if their practices did not stem from visual arts training and/or teacher education.

4.5 Pedagogical resources and other supports

All participants spoke about artists or art movements that cohere with their pedagogical practices. For instance, Carrie explained that she looks to industrial design, woodworking, furniture design, and the sustainability movement where she utilizes the resources that are made available by nature. She involves traditional elements of art making, like painting, but she really likes the learners to be hands-on and create three-dimensional works. Also, she mentioned Arte Povera, an art movement that resorts to inexpensive, elemental, and found materials in artwork.

Andy referred to the works of Ai Weiwei and Janine Antoni, two contemporary artists. He mentioned these two artists because their works provide him with the “opportunity to teach critical thinking as well, and not just technique or creativity” and their works “set up a question or a social or political challenge.” Furthermore, Andy said that he uses the Internet and online resources because these are the materials that the students have access to and this includes bring your own device (BYOD) where students can use their personal device to access links. On the other hand, Carrie stated that she would rather not use the Internet. She draws inspiration from her life experiences and then reflects on how she would support a child in the art-making process where they look to their own lives for inspiration.

Taryn mentioned that they refer to the community arts movement for inspiration, Augusto Boal’s work, Theatre of the Oppressed, regarding social change, culture jamming/do it yourself (DIY) culture, and street art. The resources that the participants use and refer to in their
pedagogical practices are not solely rooted in technology as the literature reveals (Perera et al., 2009; Taylor, 2005a).

4.5.1 Solutions: Students come up with their own assistive tool

Out of the three interviews, Carrie was the only participant to state that her learners made their own tools to address problems they had. Carrie shared her experience of a project that she did with children with physical disabilities where they produced their own tools. She elaborated on what the children made:

So kids develop[ed] different types of tools and maybe a stick that helps them reach a light switch or one kid made a ball that she could squeeze so she could release her anxiety and one child made a stand so she could put her artwork on it and draw independently.

These learners came up with their own solutions, supporting their learning and independence. This project caught my attention because I have not found this in the literature. I am used to reading about tools being purchased to support learners with physical disabilities, but to have these learners create their own tools to meet their own needs is innovative. This indicates that solutions are not always provided for learners with physical disabilities, but that when the appropriate accommodations are in place, these learners can create their own solutions and solve problems that persist in their art-making process.

4.5.2 We, not I: The team

All participants revealed that they received support in their work and programming that they cultivated around visual arts and/or learners with physical disabilities. The support that they
received was not only apparent in the details that they stated, but it was also evident in how the participants responded during the interviews. When I asked a question that was geared towards their practice, I would hear *we*, as opposed to *I*. I was surprised by this revelation. It projected a sense of unity and collaboration, which are prominent in the work done by each participant. All participants received support specifically from those in their work environment, such as colleagues, administration, management team, as well as those from outside their creative spaces, such as parents, professional artists, and musicians.

4.5.3 Assistive Technology

Carrie was the only participant who used assistive technology as part of her arts-based practice. In Carrie’s experience, she commented on children with physical disabilities using a device called the Powerlink. She stated,

the Powerlink which allows you to plug in say a domestic sewing machine or a blender and then there’s a switch, like a little button and it just takes a very light touch, so we are able to hook up tools that might take a lot of effort for someone who doesn’t have the ability physically by their strength to push a button, to push this other switch, that’s very easy to push and then allows them to be independent without yeah … another person doing it for them.

Carrie mentioned that the Powerlink is a bit expensive. She tends to use affordable solutions, and as a result, this helps to make creating works of art in the home environment accessible to children with physical disabilities; they do not have to source expensive materials.

Carrie used assistive technology on a daily basis when she worked with the children because most of them required assistive technology and she found it useful in her practice. When
I asked her, what adjustments have you made to assistive technology to establish an inclusive art environment? She admitted that she did not make adjustments to assistive technology. As an alternative, Carrie and the children made their own solutions. Also, she stated that the use of assistive technology ultimately comes down to the child and not to assume that they want to use any kind of assistive technology when creating works of art; the children have a choice.

According to Taryn, assistive technology was not really a part of their instruction or used by the scribes to provide support, but rather, it was the artists with physical disabilities that used their own assistive technology in the creative space because they found it helpful in the art-making process and/or it was utilized for communicative purposes. Moreover, Taryn mentioned that they were unaware of what specific assistive technologies there were to support artists in this work. Taryn spoke to the assistive technology that the artists with physical disabilities brought into the creative space, such as the dynavox, which is a communication device filled with pictures or words that the artists used to converse with others. Also, other means of communication came about through the yes-no signal, where the artists move their eyes left or right to respond to questions asked. Similarly, in Andy’s account, assistive technology was hardly used. The classes that he taught did not require him to use assistive technology; however, he has employed scaffolding along with technology to ensure that students were progressing and developing a deeper understanding of the content addressed in class.

4.5.4 Challenges in practice

All participants spoke about the challenges that exist in their practice. Carrie revealed that what she finds challenging is not having enough assistive technology when working with a group of children with physical disabilities; she has remedied this challenge by having the children take
turns. Another challenge that she disclosed is not having enough one-to-one support for children with physical disabilities in the art programs. Carrie explained that a lack of one-to-one support can inhibit children from participating because it becomes a safety issue where the children could hurt themselves or others if they have high needs and those needs are not being met.

For Taryn, the challenge is finding accessible space; there is not a lot of space in the studio in which the artists work in. Also, trying to find an accessible space for the artists to show their works is a challenge. Taryn explained that there is not enough space for materials and after each art session, they have to pack up. Furthermore, balancing is also a challenge when trying to meet the needs of the artists with physical disabilities in terms of their mode of transportation, ensuring that their Wheel-Trans ride is taken care of, and other personal support needs are met.

When asked, what would further support you to meet these challenges? Taryn stated that volunteers and funding would be essential. In the interview, Andy did not speak to many challenges, but the one that he mentioned is not being able to give all students equal time when they need help.
4.6 Advice for beginning teachers

All three participants were able to provide some insightful suggestions to beginning teachers. According to Andy, students are always going to have their challenges in the art class because art is personal and they are in control of their vision. Therefore, as a visual arts teacher, it is important to discern that you are guiding all students in the creative process, providing thorough feedback, as well as providing one-on-one time. Hence, Andy held the belief that it should not be a problem to differentiate and support students with physical disabilities. Throughout the interview Andy mentioned that the curriculum is flexible, so teachers should not be fixated on “micromanaging certain aspects of techniques, or micromanaging certain media,” but more importantly make the curriculum accessible to all.

Carrie advised teachers to advocate for adult support, whether that is a facilitator or developmental service worker for children that need someone to work with on a one-to-one basis. Also, she recommended that as a teacher, share your wealth of knowledge by training others on how best to support students with physical disabilities and implement inclusive practices, so they know how to support your students. Furthermore, she suggested that teachers find good adult support that understand that they are there to help, and not do the work or establish their own expectations of how students with physical disabilities should produce artworks.

Taryn advised teachers to “follow the lead of the person with disability…instead of taking a prescriptive tone….” Teachers should read and inform themselves of how to provide accommodations by not merely removing barriers, but to create opportunities for learners with physical disabilities. The advice that the participants provide is in-depth and establishes a starting point for beginning teachers.
4.7 Conclusion

The key findings of this qualitative research study indicate that the three participants have a keen interest in the learner’s voice. All participants honoured student voice and positioned learners with physical disabilities to make decisions about how they would like to create works of art. The participants conveyed the importance of establishing inclusive environments where learners with physical disabilities can thrive in the art-making process. All participants creatively explored ways to engage learners and meet their needs by removing barriers, as well as providing opportunities for them. The participants stated strategies and resources to be used in establishing an inclusive environment for students with physical disabilities in the visual arts classroom. These key findings will be developed further in chapter 5, where I discuss the implications, recommendations, and further study.
Chapter 5: IMPLICATIONS

5.0 Introduction to the chapter/overview

In this qualitative research study, I have sought to answer my main research question: What are teachers or educators doing to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently? And to learn more about the pedagogical practices and the equipment that teachers and/or educators use to teach visual arts to students with physical disabilities in ways that are inclusive, responsive, and provide opportunities for these students to engage in authentic art production independently. In this chapter I summarize the key findings, the implications that arose, provide recommendations, and identify areas for further study.

5.1 Overview of key findings and their significance

After analyzing the accounts made by the three participants, six themes emerged: 1) Inclusivity starts with the voice, opinions, and interests of students with physical disabilities; 2) Autonomy: Establishing an inclusive environment with supporters, educational assistants, and scribes; 3) Participants provide access to learners with physical disabilities; 4) Visual arts training and teacher education: Applying inclusive teaching practices in art education; 5) Pedagogical resources and other supports; and 6) Advice for beginning teachers.

In the first theme, Inclusivity starts with the voice, participants of this study highlighted that the learner’s voice is significant in establishing an inclusive environment. The learners are independent and are able to make choices, rather than being told what to do and what to make in the art-making process. The literature indicates that teachers often overlook the voices of students with physical disabilities (Davis & Watson, 2001; Taylor, 2005a; Titchkosky, 2009).
This can result in the opinions and interests of students with physical disabilities being restricted and unable to produce works of art authentically.

The second theme, *Autonomy: Establishing an inclusive environment with supporters, educational assistants, and scribes*, with accommodations in place and help from supporters, learners with physical disabilities have the opportunity to participate in art production. In the interview with Taryn, they called attention to a critical issue, social isolation; which can be deterred when learners with physical disabilities are included, have the supports that they need, and are forming relationships.

Theme three, *Participants provide access to learners with physical disabilities*. The participants provided access to learners with physical disabilities in many ways. Taryn provided access by getting artists with physical disabilities to connect and network with the arts community, and form new relationships with artists in the city. Carrie employed low-tech materials and simple solutions to make visual arts accessible to the children with physical disabilities. Andy mentioned that working collaboratively with students and in the art community helps with access and new ways of creating artwork. However, in the literature, I found that practical solutions or techniques to provide access for students with physical disabilities were not explicitly stated, but rather the emphasis was on constraints that students with physical disabilities experienced (Davis & Watson, 2001; Giangreco et al., 1997; Taylor, 2005a; Young, 2008). My study provided specific practical solutions and techniques that teachers can and do use to establish an inclusive environment where students with physical disabilities can thrive in visual arts independently.

Theme four, visual arts training and/or teacher education for all three participants was not essential in fostering inclusive teaching practices in their current pedagogy. For example, Carrie
stated that being an artist at the age of 4, and looking at the world through an artistic lens led to implementing inclusive teaching practices in her work.

Theme five, *Pedagogical resources and other supports*, it appears that the participants gained their insights from artists and art movements. This is a positive result, as the participants are implementing what artists have done in their practice by having learners with physical disabilities engage in these art practices and make real-world connections. Secondly, when referring to teacher’s practices with assistive technology, Andy and Taryn addressed assistive technology in a relatively limited way. Carrie was the only participant who used assistive technology on a daily basis, but did not make adjustments to it, but rather created solutions, such as tools to provide access for children with physical disabilities.

The last theme, *Advice for beginning teachers*, indicated that teachers do not have to fixate on traditional ways, such as relying on realism and technique to produce artworks because there is more to art production. Carrie, Andy, and Taryn acknowledged the importance of one-to-one support. Andy mentioned the importance of visual arts teachers guiding their students appropriately through the creative process, while Taryn advised teachers to create opportunities for learners with physical disabilities.

### 5.2 Implications

This study has several important implications, but one that stands out is that establishing an inclusive environment for students with physical disabilities relies on inclusive pedagogical practices, as opposed to relying greatly on assistive technology, which was emphasized in the literature as a critical component of visual arts education for these students, but less so by the participants of this study.
5.2.1 Broad: The Educational Research Community

The broad implications of this study for the educational community are that teachers can use inexpensive materials and low-tech solutions to help students with physical disabilities thrive in the art-making process independently. Assistive technology does not have to be a requirement in art production. According to Smith (2000) assistive technology is not always effective and adjustments may need to happen regularly in order to make accommodations for students with physical disabilities. Hence, teachers need to take into account that one size does not fit all, practical strategies are individualized and are based on students’ needs, though some strategies may be passed on or used for other students, every encounter is different and should be treated as such when establishing an inclusive environment.

The findings of this study also suggest that policy makers, schools, school boards, and teachers need to involve the opinions and concerns of students with physical disabilities when establishing policies, implementing strategies, and supports for access. Students’ contributions are invaluable and allow teachers or educators to foster and employ the appropriate solutions when establishing inclusive spaces. Also, teachers, educators, and paraprofessionals will have a better understanding of not overstepping and interfering in the art-making process (Causton-Theoharis & Burdick, 2008; Giangreco et al., 1997; Young, 2008).

Furthermore, support is still essential to the art-making process whether that means the aid of paraprofessionals, scribes, and/or parents within the art classroom. The participants stated that they functioned as a team with their colleagues. What the supporters need to recognize is that their presence is appreciated, but they do not need to take over the process. Carrie recommended that teachers ought to pass on and train others in inclusive pedagogical practices
where clear boundaries are formed and students with physical disabilities are not taken advantage of.

Lastly, teachers need to establish rich tasks that keep students with physical disabilities engaged. Art lessons should emphasize student-directed learning for students with physical disabilities. These students need to be involved in art production, even if that means that they establish their own techniques creating individualized practices that work for them; such as when Carrie had children with physical disabilities make their own tools that were appropriate for their own learning. Teachers should not subscribe to low expectations of their students, which can be implicit or explicit in their teaching practices.

5.2.2 Narrow: Your Professional Identity and Practice

The implication for me as a teacher is to instill what I have learned from the findings into my own teaching practice, specifically focusing on community building, so students with physical disabilities feel welcomed and are not isolated. In addition, the findings reaffirm an aspect of my teaching philosophy that students ought to see themselves reflected in the classroom. When discussions on art practices for students with disabilities are not prevalent, ignorance endures, and other subjects tend to receive more attention. As a researcher, the implications for me are to continue to advocate and continue to engage in allyship with groups that are marginalized, along with exploring ideas and themes in disability and the effects of social isolation on students with physical disabilities.
5.3 Recommendations

I would recommend that teacher education programs explore disability in the arts and present works of art that have been made by artists with physical disabilities. In Fine Art History studies, disability in the arts was not discussed, as renowned names of artists and art movements took the fore. People need to acknowledge that students with physical disabilities are capable of producing works of art, but the exposure is not there. In teacher education programs, pre-service teachers should be able to study physical disabilities/special education accompanied by visual arts. Students with physical disabilities should have opportunities to collaborate with other students.

In my findings, collaboration was encouraged between teacher/facilitator and learners with physical disabilities, as well as collaborations amongst peers and colleagues. The literature stated obstacles to collaboration where authors alluded to barriers being formed, which prevented students with physical disabilities from engaging with their peers. Teachers need to encourage authentic art production where students with physical disabilities can create works through exploratory practices just like any other student. Art is more than just therapy and it should not be presented in this way when teachers have students with physical disabilities in their art classrooms.

5.4 Areas for further research

Education research scholars should direct their attention to the voices of students with physical disabilities where their accounts are documented and made accessible through publication. Hearing directly from these students is invaluable to this work. In addition, further research can be done on the practices of teachers who are able to successfully establish inclusive
environments for students with physical disabilities in schools and explain in-depth what that looks like. Many of the practices that were identified in this study did not happen in a school environment; nevertheless, these practices can be employed in such a setting.

5.5 Concluding Comments

The purpose of this study was to learn how teachers and/or educators establish an inclusive environment where students with physical disabilities are able to produce art independently. The findings revealed that there were many important aspects of establishing an inclusive environment that went well beyond discussions about assistive technology. Students’ voices are essential to the conversation and help to safeguard against low expectations and interference, as well as students will have autonomy and ownership over the process and production of their artworks.

My research matters because there are widely held, damaging preconceptions about what people with physical disabilities can and cannot do. Information on this topic may enlighten others and perhaps change perceptions. Visual art matters and it should be made accessible to all students in the school system. This study speaks to the abilities of students with physical disabilities and to the educational community, specifically teachers, where they can establish an inclusive environment for students with physical disabilities and know that there are creative low-tech solutions can benefit their practice. I hope that more teachers and educators will find themselves working with students with physical disabilities because when I sought out participants, there were not a lot of teachers who worked in visual arts with students with physical disabilities, particularly in schools or that moved beyond therapeutic needs.
Themes of disability in the arts matter and more work should be done in this area to educate the arts community and improve teacher education programs on other aspects of visual arts that are not receiving attention. I plan on using low-tech and simple solutions in my practice to educate all students and provide access to students with physical disabilities. I want to foster a sense of community and employ other methods of making art, as conveyed in this study. I want all educators to be inspired to experiment in their pedagogical practices and encourage students with physical disabilities to create authentic works of art that reflect who they are and not feel threatened by the assumptions of others and what they expect or think their work should look like. Students with physical disabilities should have the opportunity to say, “I made that!”
References


Cooper, K., & White, R. E. (2012). *Qualitative research in the post-modern era: Contexts of qualitative research*. Dordrecht, NL: Springer.


Appendix A: Letter of Consent

Date:

Dear Participant,

My name is Natasha Davis and I am a teacher candidate in the Master of Teaching program at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT). As part of investigating an educational topic, I am conducting a small-scale qualitative research study. My research will focus on the techniques (pedagogical practices) and equipment teachers use to teach visual arts in ways that are inclusive and responsive to the needs of their students with physical disabilities within the art classroom. In addition, I would like to place emphasis on how these practices support students with physical disabilities to produce art independently. I am interested in interviewing teachers or educators who work with students with physical disabilities, use assistive technology in visual arts, and have a background in fine art history and visual arts training. I believe that your knowledge, experience, and teaching style will provide new insights into this topic, as well as reveal strategies and techniques that will encourage and guide teachers on how best to support students with physical disabilities in the visual arts classroom.

I am writing a report on this study to fulfill a major requisite of the Master of Teaching Program. To ensure the completion of this study, my course instructor, Rodney Handelsman will be supporting me through this process. Your participation in this research will involve a 70-minute interview, which will be audio-recorded and then transcribed. 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 conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information will remain confidential. To ensure anonymity, a pseudonym will be used in future discussions or written works around the information obtained. The only people who will have access to my assignment work will be my course instructor.

You are free to change your mind at any time, and to withdraw even after you have consented to participate. To leave the study, you can contact me via email. You may choose to decline to answer any specific question that is asked during the interview. The data will be stored on a password-protected laptop and external hard drive. The audio recording will be destroyed after five years, which provides me with ample time to fulfill my educational requirements, present and/or publish the data collected. There are no known risks or benefits to you for assisting in the project, 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,

Natasha Davis
tasha.davis@mail.utoronto.ca

Course Instructor’s Name: Rodney Handelsman
Contact Info: rodney.handelsman@utoronto.ca

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 at any time without penalty.

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

Signature: ________________________________

Name (printed): ________________________________

Date: ________________________________

Contact Information (email or phone number): ________________________________
Appendix B: Interview Protocol/Questions (Teacher)

Thank you for participating in this qualitative research study. The aim of this study is to learn how teachers establish an inclusive environment where students with physical disabilities can thrive in visual arts independently through techniques (pedagogical practices) and assistive technology. The interview should take approximately 70 minutes where I will ask you 31 questions, divided into five parts as follows, background information, beliefs/values, teacher practices, influencing factors, and lastly, next steps. I want to remind you that you may choose to decline to answer any specific question asked during this interview. Do you have any questions before we begin?

Section 1: Background Information
1. How long have you been teaching for?
2. What grade(s) and subject(s) do you teach? Which have you taught previously?
3. Can you describe for me the school/educational environment you currently work in? (E.g., size, demographics, program priorities)
   a. Is art education a priority in the school?
   b. Does your school support/encourage art pedagogy for students with physical disabilities? If yes, what do you believe is the rationale? Education? Therapeutic benefits?
4. What roles do you fulfill in this school? (E.g., teacher, counselor, therapist, coach, leader, advisor)
5. As you know, I am interested in speaking with you about your experience using assistive technology when teaching visual arts to students with physical disabilities. To begin, can you tell me more about what experiences you have had that contributed to your developing interest in visual arts? (E.g., personal, professional, educational experiences)
6. And what about your interest and commitment to supporting students with physical disabilities?
7. How, if at all, did visual arts training and teacher education prepare you to apply inclusive teaching practices in art education?
8. What made you choose this career path of working with students with physical disabilities in a visual arts classroom/setting?
9. How long have you been working these areas, respectively?
10. Please describe your classroom environment. What are your students with physical disabilities like when creating artworks?

Section 2: Beliefs/Values
11. What does authentic art production mean to you?
12. What does inclusive and responsive art pedagogy mean to you?
13. Why is teaching visual arts to students with physical disabilities important?
14. What do you believe are the benefits of having students with physical disabilities creating artwork independently?
15. What artists, art movements, and/or art techniques do you look to for inspiration aimed at your teaching practice?
16. What resources do you use for lesson planning?

Section 3: Teacher Practices
17. What opportunities have you created for students with physical disabilities to produce works of art independently?
18. Can you describe a specific example of how you have done this?
   a. What were your learning goals?
   b. What instructional methods did you apply? What did students do?
   c. What outcomes did you observe from students?
19. How do you provide support for authentic art production when assisting your students with physical disabilities?
20. How do you overcome barriers to ensure authentic art production by students with physical disabilities?

Teacher Practices with Assistive Technology
21. What equipment do you use to create an inclusive and responsive art classroom for students with physical disabilities? How do you access this equipment?
22. How do you implement the use of assistive technology in the art-making process with your students with physical disabilities?
23. To what extent do you use assistive technology in your art teaching practice? Daily? Sometimes? What factors determine your use?
24. What difficulties, if any, have you faced with incorporating assistive technology devices? Do you find assistive technology useful or is it a hindrance to your teaching practice?
25. What adjustments have you made to assistive technology to establish an inclusive art classroom?
26. What other strategies, if any, have you used along with assistive technology?

Section 4: Influencing Factors
27. What support do you have in this work? Do you work alongside paraprofessionals or educational assistants in the classroom?
28. In your experience, do teachers, staff, and/or parents show an interest in students with physical disabilities creating artwork independently? If yes, what indicators of this have you seen?
29. What challenges do you encounter when implementing inclusive practices for making visual art with students with physical disabilities? How do you respond to these challenges? What would further support you to meet these challenges?

Section 5: Next Steps
30. What are your hopes for students with physical disabilities creating visual art?
31. What advice, if any, do you have for beginning teachers committed to implementing inclusive practices for teaching visual arts to students with physical disabilities?
Thank you for your time and participation.
Appendix B: Interview Protocol/Questions (Educators)

Thank you for participating in this qualitative research study. The aim of this study is to learn how teachers establish an inclusive environment where students with physical disabilities can thrive in visual arts independently through techniques (pedagogical practices) and assistive technology. The interview should take approximately 70 minutes where I will ask you 29 questions, divided into five parts as follows, background information, beliefs/values, teacher practices, influencing factors, and lastly, next steps. I want to remind you that you may choose to decline to answer any specific question asked during this interview. Do you have any questions before we begin?

Section 1: Background Information
1. How long have you been instructing/coordinating for?
2. Can you describe for me the school/educational environment you currently work in? (E.g., size, demographics, program priorities)
   a. Is art education a priority in this environment?
   b. Does this environment support/encourage art pedagogy for students with physical disabilities? If yes, what do you believe is the rationale? Education? Therapeutic benefits?
3. What roles do you fulfill in this environment? (E.g., teacher, counselor, therapist, coach, leader, advisor)
4. As you know, I am interested in speaking with you about your experience using assistive technology when teaching visual arts to students with physical disabilities. To begin, can you tell me more about what experiences you have had that contributed to your developing interest in visual arts? (E.g., personal, professional, educational experiences)
5. And what about your interest and commitment to supporting students with physical disabilities?
6. How, if at all, did visual arts training prepare you to apply inclusive teaching practices in art education?
7. What made you choose this career path of working with students with physical disabilities in a visual arts classroom/setting?
8. Please describe your environment. What are your students with physical disabilities like when creating artworks?

Section 2: Beliefs/Values
9. What does authentic art production mean to you?
10. What does inclusive and responsive art pedagogy mean to you?
11. Why is teaching visual arts to students with physical disabilities important?
12. What do you believe are the benefits of having students with physical disabilities creating artwork independently?
INDEPENDENCE IN THE CLASSROOM

13. What artists, art movements, and/or art techniques do you look to for inspiration aimed at your practice?

14. What resources do you use for planning in your practice?

Section 3: Teacher Practices

15. What opportunities have you created for students with physical disabilities to produce works of art independently?

16. Can you describe a specific example of how you have done this?
   a. What were your learning goals?
   b. What instructional methods did you apply? What did students do?
   c. What outcomes did you observe from students?

17. How do you provide support for authentic art production when assisting your students with physical disabilities?

18. How do you overcome barriers to ensure authentic art production by students with physical disabilities?

Teacher Practices with Assistive Technology

19. What equipment do you use to create an inclusive and responsive art environment for students with physical disabilities? How do you access this equipment?

20. How do you implement the use of assistive technology in the art-making process with your students with physical disabilities?


22. What difficulties, if any, have you faced with incorporating assistive technology devices? Do you find assistive technology useful or is it a hindrance to your practice?

23. What adjustments have you made to assistive technology to establish an inclusive art environment?

24. What other strategies, if any, have you used along with assistive technology?

Section 4: Influencing Factors

25. What support do you have in this work? Do you work alongside paraprofessionals or educational assistants?

26. In your experience, do teachers, staff, and/or parents show an interest in students with physical disabilities creating artwork independently? If yes, what indicators of this have you seen?

27. What challenges do you encounter when implementing inclusive practices for students with physical disabilities? How do you respond to these challenges? What would further support you to meet these challenges?

Section 5: Next Steps

28. What are your hopes for students with physical disabilities creating visual art?

29. What advice, if any, do you have for beginning teachers committed to implementing inclusive practices for teaching visual arts to students with physical disabilities?

Thank you for your time and participation.