The Body Biography as a User-Centered Design Practice:

Four Artists Narrate Their Studio Stories

by

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Abstract

Although best practices have been associated with art studios for individuals with disabilities, there is a gap in pertinent literature on obtaining feedback from the artists. Consequently, I conducted a qualitative research study, theoretically and practically grounded in narrative inquiry and multimodal literacies in relation to accessibility via user-centered design. The centerpiece was the body biography practice used to access the artists’ feedback for informing best practices in their studio. Findings led to insights in (i) helping studios facilitate best practices, (ii) addressing online design implications of the body biography practice, and (iii) helping individuals designing for people with disabilities.
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Chapter 1: Introduction

…one of the crucial ways in which people might connect with the world is to find their own means of expression (Greene, 2013, p. 251)

During the course of my career as an educator and researcher, I have had the privilege of working with individuals representing a spectrum of ages and disabilities from elementary school students with Down Syndrome to university students with Pragmatic Communication Disorder. A major part of my practical and research agenda focused on providing such individuals with multiple means of expressing and representing themselves, especially when challenged by the exclusive use of verbal and written communication. Short, Kauffman and Kahn (2000) assert that individuals need to be able to select the mode that best optimizes the complexity of their meaning making. Upon learning about the Paint and Fiber Studio, the site of my MDes research project, I became intrigued with their program where adult artists with developmental disabilities have opportunities to engage in various mediums of visual arts and creative writing. After making an initial visit to the Studio, where I conversed with the staff and saw the artists engaged in their art making, I decided to pursue the possibility of conducting my research there on user-centered design and the body biography practice, a life-size multimodal narrative by which individuals express their experiences in relation to a particular event or issue. Eventually I was given approval to begin.

While articulating the complexities of written expression, Dillard (1989) refers to the groundwork laid down by the writer and advocates that surely the reader needs it too. In this chapter I provide you, the reader, with the groundwork for my research. More specifically, I include my statement of the problem and rationale, summary and purpose of the study, interdisciplinary connections, research questions, and the highlights of each subsequent chapter.
1.1 Statement of the problem and rationale

Recently, artist studios have become places to enhance the personal and professional quality of life for artists with developmental disabilities. Focusing on a content analysis of social media in relation to pertinent research literature, I carried out a preliminary study and found that such art studios provide a variety of medium offerings, quality materials, professional staff support, opportunities for personal advocacy as well as connections to the community (Morawski, 2019). Although best practices have been associated with these art studios, there appears to be a gap in pertinent literature on obtaining feedback directly from the artists themselves whose means of communication may not always fit with conventional methods of collecting data. In their research on community art centers for artists with disabilities, Wexler and Derby (2015) emphasize the need to expand the means of valid communication “beyond traditional speech and writing” (p. 137).

Personas have provided designers with valuable information on commonalities associated with particular groups of users (Adlin & Pruitt, 2010; Chang, Lim & Stolterman, 2008; Silva & Teixeira, 2019). Rather than considering the unique needs and characteristics of each individual within a group, designers create a composite character that they can think about when designing and marketing. Pertinent literature, however, has revealed potential problems with personas from hindering creative thinking (So & Joo, 2017) to stereotyping (Turner & Turner, 2011).

Furthermore, because artist studios tend to place emphasis on client-centered services, personas, with an emphasis on commonality instead of individuality, would not be in an optimal position to access and provide the studios with the best knowledge needed to personalize their programs. Although identified as developmentally disabled, the label belies the uniqueness of each artist’s situation, including their abilities, talents, interests, backgrounds, and preferred
modes of communication—the knowledge of which would prove advantageous in pursuing best practices for their studio. Narrative inquiry, both method and methodology, has the capacity to capture such knowledge multimodally in relation to an individual’s lived experiences regarding a particular event, product or service (Leggo, 2008; Schultz and Ravitch, 2013). Hence, the application of narrative inquiry could provide artist studios with a viable means to access important knowledge for meeting the personal and professional needs of their artists.

1.2 Summary and purpose of the study

My qualitative study, which featured the body biography practice, was theoretically and practically grounded in narrative inquiry and multimodal literacies in relation to accessibility via user-centered design. To obtain additional theoretical perspectives and practical approaches, I considered my study through the lens of interdisciplinarity, especially considering the interrelationships among the disciplines of design, education, and the arts, with the latter 2 representing my own background.

The purpose of my study was to investigate the role of the body biography practice, (i) to help studios become more informed about their artists with the view to incorporating best practices into their programs, (ii) to address design process implications of the body biography practice for online application, and (iii) to help individuals who are designing with people with disabilities.

To address these three considerations, I engaged 4 artists in 5 and 1/2 one-hour on-line body biography sessions. As a result of the government COVID-19 lockdown, I needed to move my sessions from the studio to the screen via the Zoom platform. The body biography in this case was carried out via wearable art which the artists created using both manufactured and natural found materials, always keeping the elements of design in mind. For example, to express their thoughts about themselves as artists, they used found materials to create bracelets. To
communicate their feelings about themselves as artists, they repurposed hats to reflect their own unique styles. At the end of the final session, the artists participated in a fashion show to share the wearable body biography narratives that they had created during each session.

1.3 Research questions and highlights of subsequent chapters

The overarching research question and the sub questions, which came to guide my study are as follows:

1. Overarching question: How does the application of the body biography practice help studio facilitators to become more aware of artists with disabilities both personally and professionally as a way of contributing to the practices in their art studio?

2. What are the contributions of the body biography practice for design research methods, especially in relation to designing with people with disabilities?

3. What are the design process implications for the on-line implementation of the body biography practice stemming from the government COVID-19 lockdown situation?

It is important to point out that at the outset of my study, the original wording of my overarching research question read, “How does the application of the body biography practice help artists to become more aware of themselves both professionally and personally, while contributing to best practices in their art studios?” As my research evolved, so did the wording of my overarching research question which came to better represent one of the purposes of my study (See #1 in the above list).

In each of the following chapters, I set out specific content which contributes to answering my research questions. Chapter 2 provides a review of relevant literature, while Chapter 3 sets out my methodology, related information and process of analysis. Chapter 4 presents the analysis and synthesis of findings, while Chapter 5 contains the discussion and implications for research
and practice, followed by concluding comments in Chapter 6. As I moved through the chapters, each one provided important knowledge to answer my 3 research questions. In particular, the overall focus was on the use of the body biography practice as a multimodal form of narrative inquiry. The main goal was to place the 4 artists at the center of the design process, especially in relation to informing practices at the Paint and Fiber Studio.
Chapter 2: Review of the Literature

One of the wonders of art is its multiplicity of powers
(Rosenblatt, 1970, p. vii)

A review of the literature “…requires first choosing the literatures that are relevant to the study to limit its scope, and then analyzing critically and conceptually what others have said and done” (Butler-Kisber, 2010, p. 28). The following section contains a review of literature bounded specifically by the theoretical and practical aspects of my study. First, I concentrate on user-centered design, accessibility, and the possibilities of their connections to each other. Next, I address multimodal literacies and the body biography practice itself, followed by a summation of the literature review in relation to my proposed research.

2.1 User-centered design

According to Patton, Griffin, Tellez, Petti, and Scrimgeour (2015), “the gulf between a designer’s intended meaning and a user’s actual understanding is an enduring problem” (p. 81). Since the introduction of Norman and Draper’s (1986) book on user-centered design (UCD) in the mid-eighties, however, the user has steadily become an integral part of the design process in most steps of development. During the same time period, Gould and Lewis (1985) emphasized the need for the design team to be user driven and have “direct contact with potential users, as opposed to hearing or reading about them through human intermediaries, or through an examination of user profiles” (p. 301). Rather than having users test an existing product, which usually results in fixing 10%-12% of its problems, Holzblatt and Beyer, 2017 claim that UCD can reveal what will really improve and transform users’ lives. Furthermore, Keinonen (2010) posits that with a UCD approach, designers can learn about their users’ needs while they also become aware of constraints and roles that they encounter in the environment. In sum, “User-
centered design enables developers to focus on the users as the heart of the design process” (Newell and Gregor, 2000, p. 40).

For example, Black and Toriei (2013) reported on a case study involving a UCD approach to designing a flexible-use hospital gown from a nurse’s perspective. After involving nurses in 5 feedback sessions, and visiting hospital wards including intensive care, the design team arrived at a gown that features a single piece of fabric that can be transformed to meet the unique needs of dressing each patient. The design was sparked by a head nurse who wanted a gown that could be easily modified and then discarded. One of the team members, a fashion designer who was unfamiliar with working with end-users, found the UCD process incredibly valuable: “it gave context to the discussions and helped to see what they were working towards” (p. 155). They settled on a design that, when cut, transforms from flat into three-dimensions through the process of dressing the patient. It even has the potential to be more cost effective than cloth ones that necessitate laundering.

Noel (2015) employed UCD to develop a visual tool to facilitate the diagnostic process for individuals with aphasia—a communication disability. Five participants with aphasia were asked specific questions, with each one supported by visual materials. Despite different responses among the 5 participants, they all emphasized the importance of incorporating color in images for easier and less stressful impact on working memory. Conclusively, Noel stated, “…the evaluation of the visual material by people with aphasia helps identify and reduce problems, leading to an improvement in the quality of materials” (p. 76).

To research museum learning, Levent and Reich (2013) consulted local disabilities groups to ensure that varied levels of vision loss, background, and museum experiences were represented in their focus groups where approximately twelve blind and low vision visitors provided candid
accounts of their visits. During the course of the focus group sessions, the researchers found that the visitors’ vision did not prevent their involvement in the art world. Additionally, findings emerging from visitors’ responses provided a broad range of recommendations such as offering a variety of programs to accommodate visitors’ interests, training staff members to give verbal descriptions, and involving the end-users in program design and outreach.

Luck (2018) reported on 2 cases in which the users’ bodily experiences and voice became integral elements in solving two design problems in relation to their everyday environments—creating an assistive device to help don an overcoat and adapting a wheelchair to play football. In the wheelchair case, the problem was mechanical. That is, the user, who could not attach a bumper to the wheelchair in preparation to play football, became an expert in the design process, knowing what would and would not work for him. Working together, the designer and user ultimately reached a satisfactory solution, allowing for independence and recreational enjoyment.

In reference to the coat challenge, the designer invited the user to try out the prototype of the coat lifting device and provide feedback. After numerous attempts to hone the device, the user was finally able to leave home without anyone else’s help. Though the study involved a limited number of participants, it still underscored the importance of a more personalized approach in addressing design problems that involve challenges users encounter in their daily lives. According to Holmes (2018), “We can learn from people whose exclusion expertise could be the key to unlocking some of our toughest challenges” (p. 141).

As valuable as UCD is for making the user an integral part of the design process, recent literature suggests that designers need to take various considerations into account, from available financial resources to the weight given to the judgement of the user versus the evaluation capacity of the designers themselves. For instance, when Tian, Lei, and Li (2021) conducted
research on functional footwear for older adults, they found that the users’ most important concerns were aesthetics and comfort, but not safety. Furthermore, they found that the designers lack of experience evaluating footwear necessitated the inclusion of professionals in the design process, such as rehabilitation doctors who brought safety to the forefront, when other team members had not done so.

As a result of using UCD research, Patton et al. (2015) found that they had made important strides in designing interactive and animated icon tools for helping people and even saving their lives during life-threatening emergencies. More specifically, the researchers made more than 250 new icons for the tools, a dry erase booklet, and two mobile applications for cell phones. During the process of their development, a limited number of users who had communication challenges, as well as professionals, were selected to provide feedback by way of in-depth interviews, focus groups, and usability tests. However, it was not possible to actually field-test the tools during actual emergencies, and more importantly, budget constraints limited the number of users who participated in the design process. Nevertheless, the researchers found that they “…have helped push forward what designers can achieve using icons as a form of communication for a broad audience” (p. 8).

Oygur and McCoy (2011) studied how fourteen interior design students came to understand the role of the user through the different stages of the design process when they collaborated with a rural town to design an interactive structure representing the history of the community. After the students created their designs working in teams, they invited residents, visitors, and community leaders to provide feedback. Students were surveyed about how they obtained and used their knowledge about the users in the design process. Findings indicated that the students came to see the user in two ways—as an inspiration and as a constraint. In the end, meeting a
deadline necessitated the students to concentrate “…on addressing the constraints rather than following the inspirational information that might have caused delays in the submission of the final design proposal.

Design has the potential to either exclude and disable people, or include and empower them (Clarkson, Coleman, Keates & Lebbon, 2003; Waller, Bradley, Hosking & Clarkson, 2013). According to Pullin (2009), UCD has broadened from traditional ergonomics into cultural knowledge and personal identities, thus opening up a much larger range of considerations to address in the design process. More recent attention has been directed at inviting the aging population and those with disabilities into the design process, with a focus on ameliorating circumstances or conditions, rather than the people, in creating a design solution.

In sum, UCD can greatly contribute to the creation of products and services, but various conditions, from time, financial, and production constraints to the collected information that designers can actually use in the final design, may require compromise among the variables to reach the full potential in the design process. In the next section, I review the literature on accessibility, touching briefly on its history and then providing related research representing various areas of design, from health care to the arts.

2.2 Accessibility

The initial push for accessible design—design that is usable for people with physical-sensory and cognitive disabilities, surfaced to ensure barrier-free access in public spaces in the 1940s and 1950 with a special emphasis on disabled veterans and those affected by the polio epidemic (Holmes, 2018; Williamson, 2019). During the following decades of the twentieth century, significant social changes, such as the feminist and civil rights movements to the emergence of activism in the disability communities, began to have an impact on all areas of society, including
accessibility and design. Activism continued to question and change societal norms, and policies. For example, students who were usually placed in self-contained situations, were now being integrated into regular classrooms to acquire free and appropriate public education. The notion of sheltered workshops, where those with disabilities deemed unfit to work by mainstream standards performed work designed to develop their vocational skills, was being revisited and challenged as viable options for the people with disabilities (Cimera, 2011; Galer, 2014; May-Simera, 2018). A more recent development, the establishment of Disabilities Studies degree programs in postsecondary institutions, had considerable influence on strengthening the rights and policies regarding persons with disabilities. The makers of more accessible products and services were now being joined by policy makers, medical specialists and a host of commentators and observers, with particular importance being given to the people who used, adapted, and outright rejected some of the makers’ artifacts (Williamson, 2019).

For example, Zitkus and Libanio (2019) conducted an ethnographic study on the accessibility of the Brazilian public healthcare system from the perspective of a user diagnosed with liver cancer and his family. More specifically, the researchers followed the user while he and his family faced the challenges of obtaining and understanding information from the doctor, outside the clinic, and his own store of knowledge on the subject. The researchers found that obtaining the information, which was vital to the user’s next healthcare steps, was hindered by several issues such as a reliance on auditory cues to capture the patient’s attention at reception, unclear signage for scheduling future appointments, and no referrals to resources to obtain more specific information on the patient’s disease. Mapping an individual patient through their illness narratives can provide valuable information that could otherwise be missed with a greater number of participants.
Focusing on accessible computing, Wobbrock, Kane, Gajos, Harada, and Froehlich (2011) set out principles of ability-based design, which were informed and inspired by a series of projects such as the invisible keyboard guard, steady clicks for mouse pointing, and slide rule for blind users. The centerpiece of their work was ability-based design that “concentrates “…on the users’ abilities throughout the design process in an effort to create products, services and systems that leverage the full range of human potential and not just their disabilities. After considerable iterations and extensive input from the users, the researchers noticed “…genuine delight by many of the users when they could use “normal” devices…tailored to their abilities” (p. 19). The researchers concluded by predicting that all software, and maybe even hardware, will eventually be made with the users and their abilities in mind, rather than trying to design something for everyone, which too often results in only a few people being able to fully use the product.

Moving into the area of the arts, Penketh (2017) employed crip theory to explore ableism in relation to accessibility in art education for children and young people. In particular, she carried out a multimodal text analysis of two triennial subject reports on art, craft and design issued by a regulatory body for standards in England and Wales. Except for a boy experiencing clay solely through the sense of touch, she found that the majority of images depicted an ableist view of art education where students engaged in various mediums via fine-motor skills, visual dominance, and the capacity for independence in creating and learning about art. In response, Penketh asserts that art education should be made more accessible for learners with disabilities by first considering expansive definitions of learners’ physical, sensory, cognitive and emotional aspects, and then bringing their creative capabilities and interests to the fore in curriculum planning and delivery. Finally, Penketh maintained that the notion of independence should be expanded to include interdependence between learners and their teachers.
To provide individuals with disabilities greater access to cultural events in a midwestern college town, Milligan, Nieuwenhuijzen, and Grawi (2014) carried out 4 different focus groups with thirty-nine stakeholders—cultural organization staff, health care providers, individuals with disabilities, and politicians, to obtain their feedback on critical problems in the planning and delivery of the events. Three key issues identified during the focus group and supported by the literature included raising awareness about disabilities, establishing policies on accessibility, and a need for a central clearing house on accessibility, as well as the enactment of pertinent municipal policies. The researchers concluded that accessibility changes will depend on the stakeholders’ commitment to take the findings from information to policy and practice.

Young (2008) reported on a pilot study in which 7 adult learners with disabilities were the main participants experimenting with computer technology and software with the view to making the creation of their art work more accessible. The charitable organization sponsoring the project used technology that was affordable and available for the learners’ use. Evidence collected from observations, individual tutorials, individual interviews and group discussion and questionnaires indicated that the learners could benefit from the technology in various ways. For instance, one learner with childhood arthritis found that she could merge photography and art and experiment in colorful layers. Another learner with cerebral palsy appreciated the accessibility that she had to so many virtual materials such as different size canvases, while having the option of discarding part of the work or starting all over again. In particular, the artists did not have to waste time waiting for someone to tape paper to their board, replenish paper, or change brushes attached to a head pointer.

While conducting a content analysis of mainstream search engines in relation to visual art programs and practices for adults with disabilities (Morawski, 2019), I discovered that such
programs, from as close as southeastern Ontario and as far away as Singapore and Australia, also support their artists in numerous ways. For instance, at Creative Growth (n.d.) in Oakland, California, artists can choose from ceramics, painting, wood working, fibre arts, print making, and digital media and high-quality materials. The artists’ work is placed in national and international major institutions and collections, while also receiving recognition at annual art fairs. Tangled Art and Disability (n.d.) in Toronto, Ontario promotes artists in community and on-tour exhibits where they encounter the public including potential patrons. In addition to providing professional development and networking, artists can apply for a grant worth $1,000.00. ActionSpace (n.d.) in London, United Kingdom supports neurodivergent artists within the contemporary visual arts sector by selling and exhibiting their art work among other creative projects. The main goal of the program is to make professional careers in the arts a viable option for their artists by nurturing their talent and ambition. Arts for Livelihood and Employment (n.d.) in Singapore offers artists with disabilities a large platform to showcase their artistic talents, including making connections for corporate commissions. Artists have access to art workshops organized to offer them new skills, as well as training opportunities to become craft artists.

2.3 Interdisciplinarity.

McMullen, Banu, & Adams (2018) refer to interdisciplinarity as a “Joining together of disciplines to work on or identify common problems” (p. 334). Furthermore, Aboelela, Larson, Bakken, Carrasquillo, Formicola, Glied, Haas, and Gebbie (2007) posit, “As scientific knowledge in a wide range of disciplines has advanced, scholars have become increasingly aware of the need to link disciplinary fields to more fully answer critical questions, or to facilitate application of knowledge in a specific area” (p. 330) In the field of design, interdisciplinarity has become recognized as an integral part of addressing a problem that more
often than not would benefit from the perspectives, methods, concepts and expertise from more than one discipline (Dykes, Rodgers, and Smyth, 2009; Kaygan & Aydmoglu, 2017).

Interdisciplinary possibilities abound in elementary school where learning usually takes place in one classroom. As students move into middle school and beyond, such opportunities are curtailed by multiple factors, from the implementation of separate subject scheduling to the subject-specific preparation of teachers. In universities, which organize departments by disciplines, space for interdisciplinary work is usually sparse, hindering opportunities for collaboration (Friedman and Worden, 2016). With designers increasingly being faced with the challenge of finding solutions to complex problems, industrial design programs have begun to emphasize the benefits of incorporating interdisciplinarity into their curricula (Baskan, & Curaoglu, 2017; Chou & Wong, 2015). Hopefully, with the recent STEM (Science technology engineering math) and STEAM (Science technology engineering arts math) movements occurring at both the elementary and secondary school levels, students entering design programs will be more familiar with interdisciplinary learning (Keane & Keane, 2016).

In many ways, artist studios share many elements of smaller schools such as mission statements, arrangement of physical spaces, staff members, curricula, and program delivery. At the center of these elements resides the artists who come to the studio with a range of individual differences, in relation to such factors as learning styles, interests, and primary means of communication (Layton & Lock, 2003; Manochehr, 2006; Medaille & Usinger, 2019; Stanford, 2003; Townsend, 1998). According to Jager, Denessen, Cillessen and Meijer (2021), literature on research and practice has increasingly placed emphasis on recognizing these differences when planning educational programs.
As beneficial as an interdisciplinary approach can be, challenges can emerge when researchers from different fields collaborate. According to Blevis and Stolterman (2009), people may have differing views about the worth of their contributions in relation to such considerations as skills, tools, knowledge, and ways of thinking about a solution to a problem. Chou and Wong claim that each discipline has its own language and means of communication. Furthermore, Barnes and Melles (2007) point out that within each discipline, such differences exist without stable definitions of the discipline itself. Moreover, Blevis and Stolterman (2009) posit that interdisciplinarity places an individual in a position of being spread too thin, or sacrificing rigor to breadth. Despite its potential challenges, interdisciplinarity continues increasingly to play an integral role in advancing design research in such areas as wellness in relation to design education and public health (Rider, 2017); the creation of sport and recreational facilities in relation to active living; environmental psychology and architecture (Hijort, Martin, & Troelsen, 2019); fashion, textile design, and science (Coulter, 2018).

2.3.1 Education and the arts. The disciplines of education and the arts can also play integral roles in the design process, thus furthering opportunities for contributing to pertinent research and practice. For example, a prime factor in the education process is the centrality of learners who come to the learning process with a range of individual differences, in relation to such factors as learning styles, interests, and primary means of communication (Layton & Lock, 2003; Manochehr, 2006; Medaille & Usinger, 2019; Stanford, 2003; Townsend, 1998). According to Jager, Denessen, Cillessen and Meijer (2021), literature on research and practice has increasingly placed emphasis on taking these differences into account in the planning and implementation of educational programs. Each one of these factors has the potential to also play an integral role in the design process, from data collection to the discussion of findings. For example, studies on
quiet learners identified by their teachers as seemingly uninvolved in the classroom activities, were carried out to obtain the learners’ perspectives and experiences (Townsend; 1998; Medaille and Usinger, 2019). When interviewed, the researchers found that the learners were actually quite involved in their education but needed time to reflect on other students’ comments, formulate a response or understand a question, and take notes in preparation for the upcoming tests. Users in the design process who tend to have the same traits as those learners who are quiet, could unknowingly be misconstrued as apathetic or having no new or valuable knowledge to share. A learning preference or style, such as auditory, visual, or kinesthetic, is another factor that could complicate the participation of a user in the design process (Layton and Lock, 2003). For instance, a user who prefers to see or read interview questions before answering them, may be stifled by having them presented verbally, potentially resulting in the loss of what could have been valuable knowledge.

The elements of what is considered necessary for implementing an engaging and effective lesson plan (van Diggele, Burgess & Mellie, 2020; Lika, 2017) could also apply to the execution of the various data collection sessions in the design process (Hannington & Martin, 2012). For instance, having a lead-in exercise that captures learners’ attention would prepare them for the main activity of the lesson. Including time to experiment or play with the concepts or materials being studied would allow for further reflection and alternative considerations to foster creativity. Time for individual and whole group instruction and conversation, feedback, and a conclusion that brings the session to a close, as well as preparing for the next one, would all also need to be considered.

2.4 Multimodal literacies

Although art studios established for individuals with disabilities strive to emulate best practices in providing services for their artists, there appears to be a gap in relevant literatures
regarding engaging these artists themselves directly in the process. In addition, the artists’ means of communication may not always fit with more conventional means of collecting data. Fortunately, accessibility comes in many forms, including the multiple ways in which people convey their thoughts, feelings, beliefs, and needs.

In 1994, a group of ten educators known as The New London Group (1996) met to address the need to formally recognize and promote the multiple literacies by which people can communicate within their local and global worlds. Numerous proponents continue to build on their work today. Siegel (2012), a current leader in the area of education, defines multimodal literacies as a social practice of making meaning by way of multiple applications. In particular, she claims that such literacies have the potential to play an integral role in expanding individuals’ options of communication, including those that do not match the more conventional ways of making meaning such as the spoken or written word. For example, Stewart, Tucker, Williams & Haaheim (2017) reported on two performances using “Adaptive Use Musical Instrument” (AUMI), which allowed differently-abled participants to collaborate, to imagine and form new communities of users. The researchers concluded, “Among the many things that a more complete range of artists of all abilities has to offer is an expanded palette of unique ways of looking at, sounding in, and moving through the world” (p. 21). Research continues to contribute to the promotion of multiple literacies as ways of expressing and representing individuals’ ways of making meaning in the world.

For example, Sivenius and Friman (2020) carried out an arts-based research project at a youth workshop with the mandate to prepare adolescents and young adults for employment. More specifically, they engaged the participants in creating communal art to share life stories in the hope that the experience would lead to greater intrapersonal awareness and growth. Over the
course of 8 weeks, the participants produced both written texts and acrylic paintings, while keeping working diaries. Through ethnographic observations and interviews, the researchers found that the participants were able “…to personalize experiences and communicate their shared situation with their peers” (p. 9). The use of color, symbols, and other elements of design helped to make their stories come alive. For instance, one participant exclaimed, “When I got to painting…I paid so much attention to detail” (p. 13). Another participant intimated, “There it is…a nice tingling feeling in your stomach when your handiwork was presented to everyone” (p. 14). The researchers came to recognize that a communal artistic project offered the participants the opportunity to be respected, heard, and appreciated by themselves and their peers.

Juntunen (2020) investigated how the learning of seventh-graders was enhanced by their participation in a project using tablets to make music videos featuring movement compositions. Student interviews and reflections, as well as researchers’ field notes, were used as the subject matter of analysis. After 4 weekly classes of introductory activities and exercises related to music and movement, the students used tablets to compose their 30-60-second long co-constructed videos. First, students selected previously recorded music extracts, and then created a movement composition with beginning, middle, and end sections. After combining the 2 components and carrying out further editing, the students showed their videos to the class, followed by them engaging in both peer- and self-assessment. An analysis of data identified different aspects of learning via movement including awakening perception, mind-body unity, body movement for musical learning, social space, and tablet use. For instance, one student’s comments represented social space; “…the group activities intensified the group spirit.” (p. 15). Another student’s remarks echoed body movement for musical learning; “My sense of rhythm got much better” (p. 14). According to Juntunen, “Embodied learning was promoted by
integrating all of the different exercises, actions, feelings, and thinking in a meaningful way so the learning process would form a continuum (p. 18).

Taylor (2005) carried out research investigating the role that visual arts education played in college students’ perception of themselves in relation to their physical and sensory disabilities. Interviews with these students indicated that they felt negativity because of the social interaction and oppressive perceptions of others. For instance, one BFA student created a series of works expressing his thoughts and emotions as bleak and uncomfortable six-foot high skeletal drawings and abstract paintings of his breathing and use of a ventilator shown as vertical bars. Another student, a wheelchair user, began by first making self-portraits of his head, moving to images considerably larger in scale and finally ending in a full-length nude, confident about his own identity. Taylor concluded, “The arts as a visual “voice” can facilitate students, disabled and non-disabled, in the expression of human diversity and can promote an inclusive approach through the recognition that we are all part of a spectrum of difference” (p. 777).

Using action research, a method that seeks transformation via action and research, Rust and Ballard (2016) conducted a study in which a high school English teacher asked the members of her senior class to compose narratives about a personal changing event represented by way of visual, digital, and bodily art, all in relation to a recently read novel. After engaging in discussion of a relevant article and then drawing timelines of their lives, students then segued into writing their narratives which eventually included various modes of both written and visual texts. Students commented that each mode of expression provided a different perspective on their chosen narratives. For example, one student turned to ballet to convey her story, complete with voiceover and music. She exclaimed that putting both words and image together made her story come alive. Another student, whose video showed her transformation from a timid child to a
confident adolescent, hoped that her narrative reached others to encourage them to remain positive despite their life challenges. As a final activity, all of the students collaborated to form tableaus, which portrayed spontaneous performances of the different story lines generated by their narratives. Rust and Ballard concluded, “…making meaning for an authentic audience with a wide range of materials is key for young people to gain portfolios suitable for success defined in multiple ways.

In their research on multiple ways of providing a listening space for artists, Macpherson, Fox, Street, Cull, Jenner, Lake, Lake, and Hart (2016) declare that the arts have been shown to be beneficial for communicating and conducting research with individuals who have distinctive and complex communicative styles and needs. However, Macpherson et al. (2016) posit, “Unless we also develop an appreciation of how both the facilitator and their choice of particular materials and techniques really matter, we risk a limited understanding of what arts-based forms of engagement can achieve” (p. 385). Fortunately, recent research has been conducted with the view to increasing a facilitator’s capacity to listen and hear the voices of the individuals while they express and represent themselves by way of multiple means. For example, as a result of a workshop offered to help teachers counter special education’s ableist notions imposed on art education, Penketh (2020) encountered teachers who went from having their students draw photocopies of architectural forms to including other options such as performances of cityscapes with soundscape backdrops.

As part of a study on investigating issues of cultural representations, Kanari and Souliotu (2021) invited thirty-three teacher candidates to visit a temporary art exhibit of artists with disabilities. Based on the teacher candidates’ responses to questionnaires, the researchers found that the museum visit helped to enrich and broaden the teacher candidates’ perceptions regarding
disability. For instance, one teacher candidate stated, “As teachers we realize how many things children with disabilities can do and we should provide them with opportunities to express themselves” (p. 110). Another teacher candidate shared, “I was impressed by the artworks of Deaf artists when seeing their language” (p. 108). Still another mentioned, “The message is that we can all participate in our own way” (p. 110). To better prepare art education students to understand and feel more confident working with persons with disabilities, Carrigan (1994) invited them to partner with an artist with a disability while they both drew and painted in a small group setting at the ArtWorks Studio during a fifteen-week period. As a result of the relationships that they had formed with their partner artists, students had acquired more knowledge regarding people with disabilities, while changing their attitudes toward them.

2.5 The body biography practice

Employing multimodal literacies, the body biography, a life-size multimodal composition of an individual’s narrative in relation to such issues as physical differences, learning styles, and mental wellness, has demonstrated support from pertinent research literatures for providing and applying valuable knowledge on enhancing quality of life. Although the body biography has a range of variations in application, it essentially involves tracing an outline of an individual’s body that is filled in, in concert with the area around the outline, during a guided process to express a multimodal composition of their experiences. During the process, individuals are encouraged to make use of multimodal literacies from written words such as poems and quotes, to visual expressions such as symbols and drawings.

Underwood (1987) first created the body biography to motivate his middle school students to express their evolving identities as adolescents and revisit what it means to write. By using an array of souvenirs, early memories and descriptive poems strategically placed on life-size tracings of their
bodies on large sheets of paper, the students were able to capture insights and awareness of themselves as teenagers. One student opted to make a “personal believe it or not” list in which he included wild parrots flying over Australia in his eyes and a big dipper out of moles covering his back. Another student used poetics to describe herself as the Big Apple of New York with all the noise, pushing and shoving, yet still retaining the characteristics of soft yellow buttercups that move quietly in the wind. The researcher concluded that the body biography compositions “were achieved through the arrangement of words, collages, snippets, epigrams, snapshots, and the like, a kind of folk art quality…at their best a vibrant visual and written metaphor for a life” (p. 48).

O’Donnell-Allen and Smagorinsky (1999) studied an adaptation of the body biography that O’Donnell-Allen implemented in her senior English class to allow her students to make meaning not available through more typical school assignments. Working in teams of 4, and arranging an array of expressions such as pictures, words, and key quotes on a life-size outline, students represented significant aspects of a chosen character from Shakespeare’s *Hamlet*. In one group, students went from the literal to the figurative while discussing symbolism and themes in relation to Ophelia. For instance, the students drew a river at Ophelia’s feet to represent the way she died, and wove words into her brown hair regarding how she obeyed her father. Drawing from the completed body biographies and transcripts of students while they worked, O’Donnell-Allen and Smagorinsky found that students came to achieve an unusual power in their ability to portray characterization through their original use of multiple modes of images and words.

Inspired by the above implementations of the body biography, I carried out several studies on different adaptations of the practice. For example, to expand teacher candidates’ ways to engage their own future students in the study of characterization and its influence on a plot line in the novel *True Confessions of Charlotte Doyle*, I (Morawski, 2010) conducted an action research study in my
language arts methods class. Coming together in groups of 5, the teacher candidates used life-size body outlines drawn on oversized paper, along with a myriad of common materials, such as fabric, pens, and paint, to experience and express the transformation of Charlotte, the main character, from boarding school student to the captain of a mutiny at sea. Once completed, teachers taped their biographies to the wall in the format of a gallery and addressed questions and comments from class members. A close reading of their responses to semi-structured questionnaires indicated that teacher candidates were able to reach a more holistic portrait of Charlotte, while enriching their own instructional repertoires. More specifically, the teacher candidates’ own multi-dimensional transactions with the body biography encouraged them to expand the educational opportunities of students regarding creativity, critical thinking, multiple signs of expression, collaboration, and content area learning. To quote one teacher candidate, “I would use this activity because it incorporates a more holistic approach to education and uses creativity to teach a novel by stimulating our senses.”

As part of another action research study, my co-author and I (Morawski & Rottmann, 2016) offered 6 teacher candidates a variety of multimodal activities, including the body biography, to help them inquire into their teaching narratives both aesthetically and efferently. In the case of the body biography, the teachers first participated in preliminary exercises. Then, working in pairs, they used a variety of supplies and found materials to fill in life-size body outlines drawing from their feelings, thoughts and physical reactions, while striving to be creative, analytical and informed. The teachers then taped their respective biographies to the wall and invited discussion while presenting their completed biographies. Data analysis, which involved a content analysis of the teachers’ journal entries and transcripts from their participation in a focus group conversation, indicated that the body biography was a viable vehicle for learning and teaching. Identifying the activity as one of
her favorite exercises, one teacher articulated, “It was a creative way to get at what a teacher really is...I can see myself using this in class sometime. Creative activities like this tend to stick in a person’s mind, so this would theoretically be beneficial to the memories of students” (p. 15).

To fulfill the requirements for her Master’s thesis, Lummiss (2017) focused her research on the lived experiences of 8 post-secondary students labeled with a double diagnosis—gifted and learning disabled. Taking a qualitative case study approach, Lummiss used demographic questionnaires as well as the body biography practice in concert with semi-structured interviews to collect her data. For the body biography, each student drew life-size outlines of themselves, and then, using a variety of found materials, markers, personal items and photographs, they expressed the complexity of factors that influence their self-perceptions. Factors such as educational placements, social identity, group membership, and self-concept emerged as key issues in the students’ everyday lives. Consequently, the body biography compositions, which generated much information regarding alternative ways of self-reflection and self-description, played pivotal roles in gathering data to construct case studies and cross case analysis. In sum, the findings from this study, generated greatly by the body biography practice, support the notion that each student is unique and that identification methods and placement options continue to be a concern with respect to the development of self-concept for students labeled learning disabled and gifted.

2.6 Personas

In UCD, personas, “…which are archetypes or composites based on real user goals and behaviors” (Tempelman-Kluit & Pearce, 2014, p. 616) have the potential to play a major role in the design process. Furthermore, personas put a face on the user—”a memorable, engaging, and actionable image that serves as a design target…and conveys information about users to [the] product team in ways that other artifacts cannot” (Adlin & Pruitt, 2010, p. 1). That is, rather than
drawing from a long laundry list of requirements, personas provide knowledge in the form of a
“real” person, with the potential to generate more empathy in designers.

As an example, to assist adults in preparing for their secondary school equivalency exam, Baaki, Maddrell and Stauffer (2017) created 6 personas that represented adults without diplomas. In particular, they wanted to develop empathy in the designers who would be creating open education modules for the adult learners. Going through several rounds of design and referring to multiple resources, they addressed such elements as first person versus third person stories, the number of personas made, narrative versus bullet form of presentation, and selection of images to represent different personas in real situations. Online conferences with the designers allowed the researchers to provide input on incorporating the personas into the development of the education modules. In turn, the designers provided positive feedback on considering the resulting personas while developing open education resources. Designers commented that the personas appeared realistic, reminding them of actual people that they could keep in mind while designing the learning modules. The researchers concluded, “Together we worked effectively and efficiently to embrace stakeholder perspectives and design and develop six personas” (p. 122)

In order to provide designers of technology with a deeper and more holistic view of the abilities and talents of users with Autistic Spectrum Disorder, Silva and Teiseira (2019) used an interdisciplinary team approach to pursue the development of a set of personas, a primary one for users and secondary ones which included family members and educational professionals. By creating a “family” of personas, the motivations of stakeholders could then be separated from each other, especially from the primary user. In addition, the personas were presented in story form, rather than a listing of behaviors, abilities, and limitations, allowing an easier dialogue among multidisciplinary team members who could now share a common language instead of resorting to
their field’s more technical language. Additionally, the use of a “family” of personas supported the dissemination of the context, stakeholders and approach more easily, thus contributing to a clearer picture of application contexts, design decisions and research outcomes. Although a “family” of personas could not possibly address all the circumstances of other projects, such an approach could provide a solid starting point for the design team to become better acquainted with the user and related stakeholders through a more comprehensive lens.

According to Holmes (2018), “When we design for one person who experiences mismatches in using a solution, we can then extend the benefits of that design to more people by asking who else might want to participate but is excluded on a temporary or situational basis” (p. 108). While personas can play integral roles in the design process, they have also been criticized for fostering stereotypes that “…use a shorthand which is necessarily missing the very detail designers are trying to capture or include” (Turner & Turner, 2011, p. 39). That is, instead of inviting users to be team members in the different phases of the design process, personas have the potential to engage users as potential consumers, a contradiction of UCD. Furthermore, stereotyping could result in reinforcing the one-size fits all phenomenon of passive recipients of products and services. In addition to stereotyping, So and Joo (2017) conducted a study involving thirty-two international business students to find if using personas to prime for brainstorming increases originality of ideas. A major premise upon which they based their research is that personas have the capacity to evoke empathy. More specifically, they compared performance between an experimental condition with persona priming to a control condition with a neutral statement without priming. Keeping in mind that their research was carried out with a relatively low sample size, So and Joo (2017) concluded that although the personas generated creative ideas, it was attributed to priming and not empathy.
As artist studios tend to place emphasis on client-centered services, personas, with an emphasis on commonality instead of individuality, may not be the optimal method for capturing and providing the studios with the best knowledge needed to personalize their programs. As stated by Holtzblatt and Beyer (2017), “Personas should be broad—they are not identity elements” (p. 229). Rather, Hook (2018) claims that the whole selves of people, including their emotions, feelings, and bodily movements, should take a front-row seat in the design process. Although artists may be identified as disabled, the label belies the uniqueness of each one’s situation, including abilities, talents, interests, backgrounds, and preferred modes of communication—the knowledge of which would prove advantageous in addressing practices for their studios.

Narrative inquiry has the capacity to capture such knowledge, especially when carried out multimodally, in relation to an individual’s lived experiences regarding a particular event, product or service (Leggo, 2008; Schultz and Ravitch, 2013). Hence, the application of narrative inquiry could provide artist studios with a viable means to access important knowledge for meeting the personal and professional needs of their artists. In the section that follows I furnish the reader with a more robust account of narrative inquiry, as both methodology and method. In addition, I include my means of analysis and information pertinent to my research on accessibility via UCD in relation to multimodal literacies featuring the body biography practice.
Chapter 3: Methodology, Related Information, and Means of Analysis

The arts...have provided a long tradition of ways of describing, interpreting, and appraising the world (Eisner, 1998, p. 2)

In this chapter, I set out the methodological landscape of my research project, mapping the terrain within which I answered both my overarching and sub questions: How does the application of the body biography practice help studio facilitators to become more aware of artists with disabilities both personally and professionally as a way of contributing to the practices in their art studios? What are the contributions of the body biography for design research methods, especially in relation to designing with people with disabilities? What are the design process implications for the on-line implementation of the body biography practice stemming from the government COVID-19 lockdown situation?

First, I provide a glimpse into the background and perspectives that I bring to my research. Next, I identify the location of the study and recruitment of participants, followed by Ethics certification and the challenges of rescheduling and moving the study online. I then inform the reader about my methodology—narrative inquiry, as well as the methods used to collect my data, including a summary of the body biography practice and artist kit. Finally, I provide the ways in which the data analysis occurred.

3.1 Relevant background of researcher.

As Butler-Kisber (2010) asserts, “…the researcher must examine carefully what she brings to and contributes to the process” (p. 65). Being the one carrying out the research, I felt the need to provide relevant information on my own background and perspectives. A former special education teacher in both Canada and the United States, I have extensive experience working with children and adults identified as having developmental disabilities. I also have both undergraduate and graduate education related to learning differences, special education,
counselling, as well as curriculum and instruction. Additionally, I am a visual artist who specializes in upcycling and mixed media, and has a practical and academic background in arts education. Throughout each phase of my research, I drew on all of my above-mentioned experience and expertise in such ways as planning and managing the sessions for individuals with different learning styles, interests, and skill sets; actively listening to participants while maintaining a sense of flexibility and adaptability in delivering the activities of the body biography sessions, and taking advantage of my group process training during the staff focus group.

3.2 Location of study, participants, and related information

3.2.1 The Paint and Fiber Studio. The studio, located in a major city in southeastern Ontario and identified as a pseudonym, has as its main goals the personal and professional growth of artists with developmental disabilities. In particular, the artists can select from a variety of visual arts and creative writing programs while developing self-advocacy and establishing cultural and commercial connections within the community. Approximately 50 artists are enrolled in the studio, with each one attending, on average, once a week. Artists have access to a large studio space, quality materials, as well as a professional staff and visiting artists. After several meetings with staff, I eventually obtained permission to carry out my research project at their Studio. As it turned out, however, the government Covid-19 lockdown necessitated the programs to move from studio to screen using an on-line Zoom platform. The regular studio staff then became hosts and co-hosts of an impressive on-line studio with sessions ranging from virtual tours of the local art gallery to weekly wellness check-ins to workshops on specific art projects and techniques.

3.2.2 Participants. In addition to staff members involved in various phases of my research, from helping to recruit artists to co-hosting my sessions, my study involved 4 artists from the
Paint and Fiber Studio. To recruit my participants, I first submitted my information sheet to the Paint and Fiber Studio for circulation among the artists. I then received a message from a member of the Paint and Fiber administration that 4 artists would like to hear more about my project. Consequently, the same administrator and a colleague hosted a Zoom session for me to meet with the 4 artists. After spending time for us to briefly get to know each other, I provided details of the wearable body biography practice, emphasizing that they would be learning about new ways of creating art, while also being in a position to contribute to the practices of art studios. I also shared examples of wearable art that they would be creating during the sessions. I answered questions, and participated in general conversation with both the artists and the co-hosts. Soon after, I was delighted to hear from the Studio that all 4 artists—Celeste, Eva, Hanna, and Alina, all pseudonyms, accepted my invitation to participate in the project. Generally identified as having developmental disabilities, each artist’s disability is manifested differently, ranging from difficulty with verbal expression to challenges with the execution of fine motor skills. For ethical reasons, I could not obtain nor reveal more specific information on each artist.

3.2.3 Ethics certification, and challenges of rescheduling and moving the study online. I applied to the Carleton University’s Research and Ethics Board and eventually received approval to proceed with my research on-site at the Paint and Fiber Studio. However, because of the government COVID-19 lockdown, the Paint and Fiber Studio had to move to an online platform, which directly affected my study in several ways. First, I needed to adapt the body biography practice and its implementation to an online format, considering such elements as how to demonstrate a specific skill, create a conducive environment for art making, provide materials to the artists, carry out participant observation, collect the necessary data, and, generally learn the technology used by the Studio. Subsequently, these changes required me to go through the
challenging process of rewriting and resubmitting a second Ethics application, which was finally approved after providing various pieces of information including the location of the Studio’s Zoom server. After the second Ethics approval, I then had to move my study to Fall 2020 to best fit into the studio’s already full schedule. Consequently, much time had elapsed from my first Ethics application to finally beginning my research at the Paint and Fiber Studio.

3.3 Narrative inquiry and related perspective

Focusing on artists in the “natural setting” of the Paint and Fiber Studio, I employed narrative inquiry, a qualitative methodology, (Butler-Kisber, 2010; Denzin & Lincoln, 2005) to investigate their experiences to answer my research questions. Narrative inquiry, which is both method and phenomena of study that cuts across disciplines and professions, involves the reconstruction of a person’s experience participating in a particular setting or event, or in relation to a specific issue (Clandinin & Huber, 2002; Clandinin & Rosiek, 2007; Pinnegar & Daynes, 2007). Furthermore, “Narrative is the way humans account for their actions and events around them and shape their everyday experience (Butler-Kisber, 2010, p. 63). Recognizing that humans have multiple ways of being, Hendry (2010) commented, “…narrative has the potential to remind us of the complex and multiple ways in which humans make meaning” (p. 78).

With the notion of human meaning making at the forefront of my narrative inquiry, I made use of a constructivist philosophical perspective, which emphasizes that individuals develop their knowledge of the world based on their own meaning making experiences and reflection of these experiences (Yoo, 2021; Tomljenovic & Vorkapic, 2020). According to Butler-Kisber (2010), “constructivist-oriented researchers, situate themselves in their work,…develops close relationships with their participants in order to explain greater detail the particular experience or phenomenon under study” (p. 5). While working with the 4 artists to obtain their stories of
personal and professional experiences in the body biography sessions, I kept the notion of a
shared power relationship between us—a key principle of constructivism. As Wiggins (2015)
stated, “From a constructivist perspective, art learners need to engage in an art form in ways that
are authentic to the ways artists in that field actually work and feel empowered enough in the
situation to be willing and able to bring their own ideas to the process (p. 116). Although,
Hollingsworth & Dybdahl (2007) point out that the researcher most often has more power in
determining the narrative topics, the 4 artists had the power of being in a known environment of
their online studio setting. In addition, they used mostly familiar materials and tools, with the
opportunity to individualize how and what they created to represent and express themselves via
their wearable art items.

Leggo (2008), an ardent proponent of narrative inquiry in relation to multimodal literacies,
maintains that narratives can be told in many different genres, from cartoon to clothing, from
illustration to journal, from waxworks to yarn. Having conducted research on how multimodal
narrative inquiry can enrich the school curriculum, Symeonidou (2018) concluded that the arts
are “infused with autobiographical elements that make [them] unique and valuable in challenging
dominant stereotypes about disability” (p. 2). According to McKenna (2015), “Artists often draw
upon their own lived experiences in creating works of art, but they transform their stories
through the process of recreating the experiences into narratives…” (p. 90).

For example, McGarrigle (2018) employed narrative inquiry to encourage early childhood
teacher candidates to represent their emerging identities with self-portraits and masks, which
became the focal point of his interviews with them. Of special interest was the way in which he
used font sizes and styles as well as the space of the page to generate a performance of the
teacher candidates’ subsequent narratives in relation to his own perspectives. Using narrative
inquiry in tandem with multimodal literacies for their research, Schwind and Lindsay (2016), provided nurses with a variety of modes, from collage making to sculpting, to inquire into the relationship between their personal and professional lives, and the subsequent effect on their clients. Schwind and Lindsay reported, “Nurses told us that by engaging in artful activities their reflection on practice was enhanced through the tangible manifestation of their thinking (p. 483).

When Sulewski, Boeltzig, and Hasnain (2012) studied the personal essays of 47 emerging artists with disabilities chosen as finalists for the VSA arts/Volkswagen arts competition, they found that the artists identified an increased capacity to communicate both intrapersonally and interpersonally as main outcomes. As one finalist stated, “I felt safe to explore and to be who I am, by being able to work on a piece of art without ever feeling like I was doing or saying something wrong” (p. 10).

Born in the latter part of the 1800’s, James Castle was deaf and had difficulty expressing himself verbally. A former teacher told his family to make sure that he did not have access to art supplies. Instead she encouraged them “…to teach him to speak, read, and write” (Trusky, 2008, p. 22), Fortunately, James discovered that he could create 2- and 3-dimensional assemblages out of a found materials, which eventually found their way into such highly regarded institutions as American Folk Art Museum in New York City, National Museum of Modern Art in Tokyo, and Smithsonian American Art Museum in Washington, D.C.

More recently, Kim Miller, a woman with autism, found that visual arts permitted her to voice her emotions and share her lived experiences. Kim’s powerful drawings, sculptures, and other works of art were eventually memorialized in the moving book entitled The Girl Who Spoke with Pictures (Miller, 2008). According to Kim, “After many years of creating, I realize that I have become a liberated autistic individual not confined by mere words” (p. 205).
Finally, Danko, Meneely, and Portillo (2006) maintain that the use of narrative inquiry encourages designers to relate better on a more personal level to their users. For example, embracing an authentic learning framework and real users, Reiger and Rolfe (2021) provided design students with various multimodal methods, such as reflective journaling, sensory exercises, and creating questionnaires, to learn about designing for individuals with disabilities. The students ranked listening to individuals’ disability narratives as the number one source of information that allowed them to understand better their design needs. As one student shared, “I learnt about the types of experiences that people with disabilities have on a daily basis” (p. 368).

In sum, Connelly and Clandinin (1990) assert that narrative is a way of characterizing the phenomena of human experience and its study, while Rosiek and Atkinson (2007) specify that genres, by way of contrast, make possible a more vigorous assertion of the value of difference in narrative research representation. In the following sections I set out the details of the means and methods of data collection that I used to answer the research questions of my study. I begin with participant observation and end with the follow-up staff focus group.

3.4 Participant Observation.

The primary approach of participant observation is to observe the culture-sharing group and become a participant in the cultural setting (Jorgensen, 1989; Tedlock, 2005; Tranter & Malone, 2005). In particular, Jorgensen (1989) claims that participant observation furnishes researchers opportunities along a continuum from insider to outsider status. To become acquainted with the program and staff at the Paint and Fiber Studio serviced by Zoom, I spent 3, 2-hour sessions as a participant observer. My intention was to come to know better vital pieces of information including the following: (i) the staff’s ways of working with the artists such as supporting an artist’s work, helping the artists select materials at home to use for their sessions,
and helping the artists arrange a work space at home, (ii) the various activities of the staff including the pathways they take to accomplish things, including specific actions and processes, (iii) physical elements such as materials (e.g., what is available for the artists at home, where the artists carry out their art related activities), (iv) particular occasions and meetings, (v) the way the staff and artists communicate, and (vi) how the staff used technology to run the sessions. At all times during my participant observation session, I was cognizant of respecting the work of the staff and their interactions with the artists. In the following sub-section, I discuss my use of the researcher’s journal during the participant observation.

3.4.1 Researcher’s journal. As reported by Borg (2001), the journal furnishes a permanent account of specific aspects of the research process which can be referred to at any time. Serving as a repository for all my notes gathered during the different phases of research, the journal was divided into three sections. In the first section, I included notes arising from my participant observations. In the next section, I recorded any notable actions, interactions or reactions that occurred. Drawing on my reflections from the second section of the journal, I used the third section to prepare for the upcoming body biography session. I date-stamped each page and expressed my observations in both words and images. In sum, maintaining a journal can contribute to critical reflection as the researcher moves through each stage of the study (Maharaj, 2016; Ortlipp, 2008).

3.5 Body biography

The body biography, the centre piece of my study, is a multimodal portrait of an individual’s experiences related to a specific issue or more general representation of their lived life. In its original form, each body biography is created using a life size body outline drawn on a large sheet of paper. Using a variety of manufactured and natural found materials along with standard
supplies, individuals fill up both the inside and outside of the outline with words, phrases, quotes, symbols, images, and objects that best represent their experiences. Elements of design, such as color, shape, and line play important roles as well. For example, the area around the heart could be reserved for expressing affective considerations. The area at the top of the head could be considered for including individuals’ thoughts regarding a specific topic. At their completion, the body biography compositions are displayed on the wall as a gallery show with individuals presenting their work and encouraging conversation.

To adapt to the needs of the Paint and Fiber Studio, I modified the original version of the body biography to one that featured wearable art and jewelry. Over the course of 5 weekly online sessions of one hour each, with a ½ hour extra one, the artists created their wearable body biographies, focusing on one item each week. Instead of displaying their wearable art and jewelry in a final gallery exhibit, the artists modeled them during a fashion show the second half of the fifth session. The first four sessions were devoted to repurposing and embellishing items to

![Figure 2: Example of t-shirt and scarf](image)

represent different aspects of themselves as artists at the Paint and Fiber Studio. Session 1 focused on bracelets to represent their strengths, while session 2 concentrated on hats to express their thoughts. Session 3 centered on t-shirts to display their feelings, and finally, in session four, artist had the choice of a scarf or a necklace to highlight their future aspirations. For

![Figure 1: Example of hat](image)
each wearable project, I supplied an example, especially for those artists who processed
information visually. (See Figures 1, 2 and 3).

The first half of session 5 was devoted to finishing projects, while the second half featured a
rehearsal and the final fashion show in which the artists modeled their wearable art. A sixth
session became necessary to accommodate one of the artists who could not attend the fifth
session and still wanted to participate in the fashion show. The
sessions were video recorded via the Studio’s Zoom service and
co-hosted by the same staff member. Throughout the sessions, I
facilitated conversations with the artists to engage them in their art
work. Examples of questions are as follows: What does the color
you selected represent to you? I noticed that you included a
quote on the sleeve of your t-shirt. Could you please explain
the reason for placing it there? Why did you select this quote?
I see that you seem to be hesitating about what to select for decorating your hat. Can I help?
Perhaps, you might want to move to another section, and then come back to this part. Have you
thought about using textures to represent your strengths as an artist? In the following subsections
I include 3 elements of the body biography sessions—(i) the artist kit, (ii) the artist journal, and
(iii) semi-structured interviews with the artists.

3.5.1 Artist Kit. Having already visited the Paint and Fiber Studio on several occasions, I was
familiar with the kinds of tools and materials that the artists were using as I assembled the artist
kits which consisted of two components divided into large freezer bags. The first contained an array of natural and manufactured found materials such as pine cones, whimsical images from past calendars, string, and remnants of wrapping paper, which I had amassed in anticipation of my research. The second included a variety of selected supplies such as staplers, markers, glue sticks, glue guns, scissors, and crayons, which I purchased from a local office supply store. To add a personal touch, I also included a note to each artist. (See Figures 4 and 5). Originally, I had sourced unused boot boxes from a local shoe store in which I placed the two freezer bags and journals. For practical reasons, the boot boxes were replaced by large mailing envelopes because the kits had to be delivered to the artists due to the government issued lockdown. Consequently, I met with a staff member in the parking lot of the studio building where we safely transferred the kits from the trunk of my car to that of the staff member. It should be noted that the artists did not incur any expenses in receiving the kits.

3.5.2 Artist journal. For the purpose of reflecting, jotting down notes, and doing preliminary sketches, I also included journals which I had made from found materials. (See Figure 6). My intention was to provide the artists with another means of planning and engaging in the creation of their wearable art. My goal was to provide various prompts to which artists could respond in the mode that best expressed their responses. Examples of the proposed prompts are as follows: As you touch this object (e.g., rock, pine
cones, feather, wrapping paper), what words come to mind? What is a symbol? Can you think of symbols that you encounter every day? What symbol represents you as an artist? Why did you select that particular piece of fabric to represent your feelings? Due to the government COVID-19 lockdown, I could not retrieve hard copies of the journals, but instead had photos taken of them during the sessions via the Studio’s Zoom service.

3.5.3 Semi-structured interviews with artists. Interviews, according to Fontana and Frey (2005) are not merely the objective interchange of asking questions and obtaining answers. Rather, interviews are creative collaborative exchanges between two or more people. My intention with the interviews, which were carried out and recorded in the same sessions as the fashion shows, was to obtain additional information to supplement what I discovered in the earlier body biography sessions. Examples of statements and questions used are as follows: Tell me about your body biography wearable items. How do they represent you? Why did you select (e.g., color, fabric, shape) to express yourself as an artist? Would you recommend the body biography to other artists who did not have the opportunity to participate in the sessions? Which part of the body biography was your favorite? Explain. Did you find any part of the body biography challenging? Explain. What recommendations would you make for future implementations of the body biography? The co-host of my sessions with the artists played a supportive role in the interviewing process. According to MacPherson et al. (2016) and Hall (2004) a support person familiar with the participants, especially ones with disabilities, could help them express themselves and establish trust. However, Young (2008) commented that care must be taken to ensure that assistants do not unconsciously influence participants’ responses.
3.6 Follow-up focus group with staff

Focus groups, “often produce data that are seldom produced through individual interviewing and observation and that result in especially powerful interpretive insights” (Kamberelis & Dimitriadis, 2005, p. 903). After the body biography sessions were completed, I carried out a semi-structured focus group with the co-host and 2 administrative staff members. The focus group was video-recorded via the Paint and Fiber Studio’s Zoom service. Examples of questions and prompts included the following: Tell me about your responses to the body biography sessions in relation to the artists participation in them. Would you recommend the body biography to other artists at the studio? What changes would you recommend to make it more accessible in future body biography sessions? What specific changes would improve future implementations of the body biography sessions? What information about the artists did you learn as a result of their participation in the body biography sessions? Would you use this information for future practices at the studio? Explain.

3.7 Data analysis

Taking an inductive approach for data analysis (Hendricks, 2009; Mertler, 2009), I used an adaptation of Saldana’s (2016) coding and categorizing process. Instead of turning to a software program, I opted for a more hands-on and organic approach, which allowed me to access more closely the nuances found in the data. Saldana states, “There is something about manipulating qualitative data on paper and writing codes in pencil that gives you more control over and ownership of the work” (p. 29). To analyze the pages of data for each of the three data components, (i) participant observation, (ii) the body biography (sessions themselves, artist kit, artist journal, interviews with artists) and (iii) staff focus group, I moved through the following steps:
1. First, I transcribed all video recordings.

2. Before beginning to analyze the data generated by each method, I carried out several close readings of the corresponding texts and soon discovered that I needed to make some modifications, as is often the case with research. As it turned out, the artist journals and the interviews with the artists, which were both carried out and video recorded during the session times, did not yield enough additional data to warrant analyzing them separately.

3. Consequently, I considered the data from the artist journals and the interviews with the artists as part of the other data collected from the body biography sessions. In addition, I felt that it also made sense for me to incorporate into the same analysis the portion of my researcher’s journal in which I recorded any notable actions, interactions or reactions that occurred during the sessions.

4. Next, I divided the data to be analyzed into the following data components: (i) participant observation component, including relevant entries of the researcher’s journal, (ii) the body biography component which includes the body biography sessions, the artist journals, semi-structured interviews with the artists, and pertinent entries of the researcher’s journal), and (iii) a staff focus group component.

5. Then, I carried out several close readings of all the pages of data that I had amassed from each of the data components.

6. To begin the analysis of data, I created a 20-point font chart with the following headings; session, name of participant, comments/actions, and initial practice/theory connections.

7. Using the chart headings as my guide, I then, for each component, divided the contents of the pages of data into meaning units which ranged from a brief phrase to almost a whole
page—229 chart pages of meaning units for the body biography component, 5 pages for the participant observation component, and 23 pages for the focus group component. (See Figure 7 for an example of a chart).

<table>
<thead>
<tr>
<th>Participant</th>
<th>Session</th>
<th>Comments and actions</th>
<th>Practice/theory Implications, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session 1: October 13, 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>That one (holding up her journal)</td>
<td>I need to hold up (visual, MM). Interpersonal connections. Organization.</td>
</tr>
<tr>
<td>Me</td>
<td>1</td>
<td>This one C.</td>
<td>I need to hold up (visual MM)</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>This one C (holding up her journal again)</td>
<td>MM, peer support, social</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>There are no lines on it.</td>
<td>Learning Style/Approach</td>
</tr>
</tbody>
</table>

*Figure 7: Example of chart*

8. In preparation for categorizing the pages of resulting meaning units, I next cut them apart for each data component, arriving at 322 for the body biography component, 39 for the participant observation component, and 32 for the focus group component.

9. Next with lumping and splitting coding in mind (Saldana, 2016) I went through multiple iterations, arranging and rearranging the meaning units, component by component.
10. Next, I divided them among poster boards as follows: body biography component—one for each artist, the body biography practice itself, the artist kit, and the co-host; participant observation component—one poster board; and the focus group component—one poster board. Occasionally, I assigned the same meaning unit to 2 or more boards for the body biography component and noted the overlap in meaning unit numbers. (See Figure 8).

11. For each poster board, I then consolidated the meaning units into sub categories, represented by different color post-it notes, all of which I posted on the corresponding poster boards.

12. For one final step, I consolidated the sub categories into overall categories or themes, again posting them as different colored post-its on corresponding poster boards. See figure 7 for overview of data.

According to Pinnegar and Daynes (2007), “Numbers through formulas, charts, graphs, and tables, provide limited ways of representing the understandings that emerge in inquiry involving humans and human interaction” (p. 20). After having carefully transcribed and analyzed the data numerically, in Chapter 4, I provide details of the categories and themes that emerged from the analysis of the data, while giving voice to the numbers.
Chapter 4: Four Artists and Their Studio Narratives

The focus is not on capturing facts, but rather on the articulation of meaning of experience (Thomas, 2012, p. 211)

In her writing on narrative research, Butler-Kisber (2010) remarks that finding the story is like a “...slow realization that something important was percolating beneath the surface of things; these tiny threads of evidence that were sprinkled across months of videotape, transcripts, field texts, discussions, documents, etcetera, need to be pieced together” (p. 72). To create a context for the subsequent presentation of the artists’ narratives, I first provide the reader with the information gleaned from the participant observation sessions of the staff in the online studio as they conversed with artists about their current art work, upcoming art workshops, recent studio news and business, needed supplies, while also including chair exercise breaks. Next, in keeping with narrative analysis in relation to an individual as well as across participant basis, I then present the analysis of data obtained from the transcripts of the body biography sessions, which also included the artists’ journals, interviews with the artists, and pertinent entries of my researcher’s journal (Riessman, 2011; Butler-Kisber, 20120; Chase, 2005). In particular, I draw from the artists’ stories of experience as they created their wearable body biographies of t-shirts, bracelets, scarves, hats, and fashion shows amidst conversations, questions, friendships, comments, materials, journal entries, and much more. To illustrate their narratives, I intersperse selected pieces of their wearable art work. While absorbed in the telling of their individual and blended stories, I heeded Sanders and Stappers (2012) who stated, “It is important to keep in mind that the participants are the experts of the topic, and you, the facilitator, are there to help them express themselves” (p. 170). Next, I include the data related to the actions and comments of the co-host, a facilitator at the Paint and Fiber Studio, who played an important role in the implementation of my sessions. Then, I address the data related to the body biography and its
implementation, including the artist kits. Finally, at the end of the chapter I include the analysis for the staff focus group. For each of the data sets included in this chapter, I provide affinity diagrams—visual representations of data and the relationships among them.

4.1 Participant observation

Any initial feelings of trepidation that I had when considering carrying out my research in an on-line format on Zoom, began to slowly dissipate with each observation session. The co-hosts made me feel welcome while I carried out my participant observation in three two-hour on-line sessions during which I became more familiar with the programs and practices of the studio. I now elaborate on my observations in the following 3 sections.

4.1.1 Data analysis. For ethical reasons, I was not allowed to tape the participant observation sessions, but I did keep detailed notes in my researcher’s journal that emerged in the following categories: (i) practical concerns (logistics, organizing, providing information, and housekeeping concerns), and (ii) facilitation and related functions (reviewing work, providing instructions, promoting wellness, facilitating, and building background on the arts). (See Figure 9). In the following two sections, I elaborate on the categories and provide specific examples to represent them.

4.1.2 Practical concerns. The staff, almost always working in pairs, acted as facilitators for the two-hour sessions. After they opened the on-line studio room to the artists, informal conversations ensued while everyone gradually joined the session. Next, the facilitators
presented and reviewed the session’s agenda, inviting artists to include other business, offer comments, or ask questions. For example, a facilitator shared an email address with which artists could contact the studio while also informing the artists about the technology that they would be receiving in the near future. Another facilitator shared information on upcoming visual arts workshops as well as a new platform established to allow artists to share stories behind their work at the studio. After a 5-minute break, and before proceeding with the other items on the agenda, the facilitators brought everyone back together again to ensure that everyone had the opportunity to fully participate in the remainder of the session.

4.1.3 Facilitation and related functions. It soon became apparent that the artists were familiar with the open-ended structure of each session in which the hosts acted as facilitators, supporting a respectful and comfortable back and forth rapport among the artists and hosts. During the sessions, the artists and facilitators came together and remained as a group in the online studio, not making use of break-out rooms. After covering the practical concerns of the session, the facilitators checked in with each artist to see the progress they had made on their artistic works since the last session a week ago. During this time both artists and facilitators provided encouraging comments and questions pertinent to supporting the artist’s work.

The facilitators followed up with what the artists had produced during previous workshops, particularly asking and fielding questions on such things as materials used and needed as well as any messages contained in their creations. To provide the artists with background knowledge and provide possible inspiration for their future artistic endeavors, the facilitators showed and then discussed videos of artists such as Robert Rauchenberg, Marcel Duchamp, and Georgia Webber, a comics artist. They asked such questions as: What did you learn about the artist and their work?
Would you consider the artist’s work when creating your own? Did you take away any new techniques to use in your current and future art pieces?

A body break involving video-supported chair exercises always came half way through the session. Most of the artists participated, while a few either sat back, or went off-screen during the exercise time. In sum, upon completion of the participant observation sessions, I came to know such vital pieces of information as the staff’s ways of working with the artists and materials, how the staff engaged with the online studio space and related socially with the artists. Consequently, I was in a more advantageous position to plan and carry out the body biography sessions with the artists.

After an initial conversation with the co-host who had just invited me into the online studio, we welcomed the artists who flooded the room with eagerness, excitement, and artistic flair. Celeste showed me an assortment of her jewellery. Hanna rose to her feet and held up her Snow White Disney gown. Alina displayed her collection of wedding-themed art pieces. Eva presented her sock puppet and talked about its many meanings. After the artists all gave a thumbs up signal, we came together in our online studio and began the creations of their wearable body biographies, which I now present in the following sections, beginning with Artist Celeste.

4.2 Artist Celeste: I was born to be an actor. That is my future.

4.2.1 Data analysis. In the unfolding of Celeste’s narrative told within her engagement in the body biography practice, 3 overall categories emerged from 12 sub categories: (i) intrapersonal connections (self-advocacy, expressions of appreciation, need for approval, independence, and personal), (ii) strengths and interests...
(background, interests, creativity, skills and abilities, talents), (iii) and multiple literacies (multimodal representations and written expression). (See Figure 10.) With these 3 overall categories in mind, I now move from numeration to narration to bring Celeste’s lived experiences to the reader.

4.2.2 Intrapersonal connections. Celeste impressed me as a determined, respectful, and thoughtful individual who took her work as an artist seriously, putting in extra effort to complete projects with her high standards at the forefront. In fact, at the beginning of our first session she was eager to show me a bracelet that she had already made from found materials as part of our body biography wearable art. She had taken the time outside of our sessions to find materials that featured color and shape and fashioned them into an aesthetically pleasing piece. (See Figure 11). Also, soon after our first session, it was apparent that Celeste valued organization. An entry from my research journal noted, “Celeste had her t-shirt from the last session ready on a hanger with her scarf draped around the neck.”

When confronted with a challenge in the sessions, Celeste persevered, always seeming to want to maintain a semblance of independence. For instance, during one of our sessions, Celeste needed to clarify steps regarding the instructions for an activity. Despite finding speaking aloud challenging, Celeste maintained her composure, took a deep breath and confidently asked her question. On other occasions, Celeste displayed signs of self-advocacy. One time, she obtained my attention by holding up her journal to show me an entry she had just completed. Celeste had filled the page with an outline of a t-shirt in which she drew 6 squares, with each one having a
different color and word associated with a feeling. For example, a blue square contained the
word kindness, a red square framed the word energetic, and happiness was positioned in a yellow
square. (See Figure 12). By being proactive and sharing the entry, Celeste conveyed her
awareness of the use of color and symbolism as she brainstormed her way through an initial plan for one of her pieces of wearable art. In one of my entries in my researcher journal, I noted, “Her journal entries were quite expressive and informative and resembled an artist’s thoughts, feelings, and plans.” However, when Celeste first wanted to write down her entry on a piece of paper before transferring it to her journal to maintain neatness, I had to explain to Celeste that her journal was a working document, and not a final publication. That is, she could be more informal with entering her responses, allowing her to concentrate on her ideas, and not technical issues.

Several times during our sessions, Celeste asked for confirmation by usually holding up an item and asking “Are you proud of me?” Upon hearing my response, and invariably from those of the other artists, she would react with a big ear-to-ear grin or pretend to hide her smile behind her hands. Not only did Celeste seek approval for herself, but she would also convey appreciation for the efforts of others. I would often hear such phrases as “I want to say thank you” or “The workshop is beautiful.” Celeste also acknowledged the value she derived from working in groups. In an excerpt from her final individual conversation with me she stated, “I liked the views of other people.”
4.2.3 **Strengths and interests.** Celeste came to the sessions with numerous talents, interests, skills, and an obvious capacity for creativity. As it happened, Celeste declared, “My ancestors sewed and gave it to my Mommy and she gave it to me.” Celeste’s interest in clothing and jewelry emerged in her many designs and creations from hats to bracelets to tunics and dresses. In each one of these items, Celeste displayed her knowledge of the elements of design. For one of our sessions, she cleverly used the physical contents of a candy box to fashion a necklace of elongated oval shapes in muted colors of pink and blue, strung with a yellow chord. (See Figure 13). To revive a gently worn oblong scarf, Celeste used a sewing machine and “lots of thread” to embellish the ends with different textures and colors of ribbon. (See Figure 14). She teamed the scarf with a zebra striped tunic with a shark bite hem, which she had sewed for one of our articles of wearable art. To further show her interest in clothing she showed us a yellow gown she associates with the story entitled *Beauty and the Beast.* Celeste also likes to read books, and even enjoys the art of book making. She considers herself to be a storyteller and takes pleasure in walking in nature.

As previously mentioned, Celeste entered the sessions with an abundance of creativity. As she stated during a session, “I am creative and funny.” Once when she wanted to obtain feedback on an idea she was considering in her journal, Celeste held up two journal entries, one after the other. For the first entry, she had staged a series of figure cut-outs joined by their hands across
the page with the words “Circle of family” underneath them. She had interspersed red and yellow suns and words among the parts of the scene. In the next entry, which was double-sided, Celeste used a backdrop of primary and secondary color blocks for two hands coming together in the center of the image. (See Figure 15). In still another brainstorming session with her journal, Celeste presented me with a miniature image of what she would wear to an opening night of her art work. After drawing an outline of herself in a gown, she filled in the garment shape with remnants of yellow fabric saved from previous sewing projects—a picture fit for a special frame. (See Figure 16).

4.2.4 Multimodal literacies. Celeste’s range of artistic expression included multiple means of representation. On an especially memorable occasion, Celeste was in the midst of struggling with both written and spoken words to celebrate the completion of repurposing a straw sun hat with a vibrant red fabric featuring green cacti. Suddenly, without notice, Celeste jumped up from her chair, put on her hat, and performed a Mexican folk dance, in the end
bowing to us, the audience. It was a delight to watch Celeste bring her thoughts and feelings to life as an embodied performance. (See Figure 17). For the fashion show, Celeste also drew from her repertoire of multiple literacies as she confidently modeled her wearable art with the movements of a professional model on a runway, walking, turning, and posing, seemingly proud of the work that she had accomplished. When complimented by me, she emphatically stated. “I was born to be an actor. That is my future.” (See Figure 18).

When I encouraged the artists to begin personalizing their journal covers, Celeste used the time between our sessions to use her talents in still another way. Turning to the computer, Celeste printed out “Celeste’s Artist Log” with stylized letters which she glued to the cover of her journal. To highlight her name further, she selected silver stars included in her artist kit and grouped them at the top, giving the impression of a sky in the middle of the night. (See Figure 19). Although, Celeste appears to find the physical act of writing challenging, she still seemed to enjoy making entries in her journal by combining the printed word with images. For instance, when she was invited to share her “strengths as an artist” in preparation for designing a wearable piece of clothing, Celeste printed out words such as “writing stories” and “making jewelry” which she illustrated with detailed images of an open book and a necklace strung

Figure 19: Celeste’s journal cover, session 3

Figure 20: Celeste’s journal entry, session 4
together with colorful translucent beads. In fact, she completed most of her entries with multiple means of expressions. (See Figure 20).

4.3 Artist Eva: *Don’t be a cardboard box of somebody else.*

**4.3.1 Data analysis.** While examining Eva’s body biography narratives captured in the pages of transcriptions, research journals as well as pictures, 3 overall categories became apparent. Although the overall categories were the same as Celeste’s, their corresponding 12 sub-categories were not, as follows: (i) intrapersonal connections (independence, identity, self-advocacy), (ii) strengths and interests (creativity, talents, skills, interests, strengths), and (iii) multiple literacies (verbal expression, learning approach, play). (See Figure 21). With these 3 overall categories in mind, I now take the reader from category to curation as I narrate Eva’s lived experiences in the wearable art activities of the body biography practice.

**4.3.2 Intrapersonal connections.** From the beginning, Eva came across as a confident, thoughtful and respectful individual. Of the four artists, she was the most verbal, often appearing to take the time to find the best words to convey her thoughts and feelings. Over the course of 5 sessions, Eva always advocated for herself, maintaining a sense of independence. For the first session, although Eva acknowledged what we were doing and sometimes joined our conversations, she chose to almost always remain off-screen, while she worked on a sock puppet project already started. For example, when I asked Eva if she had recorded her responses in her artist journal as a lead-in to making bracelets, she appeared on the computer screen responding,
“I didn’t do that, but I was listening to the concept. I have made a series of sock monkeys that have feelings stitched on to the sock monkeys. I am going to keep working on the sock monkeys.” Although Eva continued to often work off-screen during subsequent sessions, she did begin to join us in wearable art activities, creating some impressive pieces. Her choice of working off-screen represented her need to concentrate without any distractions.

Eva’s own way of participation, including her capacity to self-advocate, also surfaced when I invited her to share her progress on one of our body biography wearable items—a baseball cap accented with bunny ears. Although she showed us the part that she was currently sewing, Eva asked, “Can I wait until the other ear is attached and then take a picture? She preferred not to display her items until “you can see the full effect.” Another time, Eva appeared on the screen to explain that for the next step, “I am probably going to pick a character and add the character to the hat.” She always seemed to have a long-range plan for each of her activities. For still another wearable art activity, Eva repurposed a tank top, embellishing the neckline with crystals which she purchased herself from a local craft store, stating, “To jazz it up so it matches my personality. I am the Bling Queen.” (See Figure 22). However, these comments only partially reveal Eva’s story of her character; as part of an exercise during a session, she proclaimed, “I am determined, focused, dedicated, and loyal.”
4.3.3 **Strengths and interests.** Cotton stuffing, felt, ribbon, beads, crystals, stretchy material and more… During the course of our sessions, Eva displayed her creativity and sense of humor using fabrics, related embellishments, and hand sewing to create her work. According to Eva, “I usually start with an idea, and then I just play with it.” Furthermore, she believes, “Everybody has their right to play, and has the right to be creative. An artist doesn’t define you by age. Artist defines you by spirit.” For Eva, beads turned plain material into smiling faces. A piece of green ribbon accented the back of a baseball cap and coordinates with the ribbon on a refurbished tank top. (See Figure 23).

Eva is obviously skilled in the art of sewing and taught herself to employ a variety of stitches. For example, to mimic the inside of bunny ears, Eva added a layer of dark brown fabric which she attached using a series of consistently spaced whip stitches. She used a few layers of a basic basting stitch to attach cloth labels to her sock puppets. Eva, who enjoys the process of sewing and finds it relaxing, prefers to take time to finish her projects, and occasionally takes one of her “lazy days” to recharge her energies.

4.3.4 **Multimodal literacies.** For the fashion show, I had originally composed individual scripts, based exclusively on the sessions, to read while each artist modeled their wearable items. In the end, however, Eva readily accepted to narrate and spontaneously script her part, even volunteering to forego a rehearsal. “No, I’ll be good,” said Eva, who opted to sit in front of the screen and talk about her wearable art pieces—a repurposed baseball cap with humorous details,
and a matching tank top adorned with ribbon and an array of colored crystals. (See Figures 24 and 25).

A few of her excerpts from the show are as follows:

The hat and the tank top are both symbols. If you take your time and you make something, you can make something you can be proud of. You can often open people’s perspectives. Cause if they only see what’s on the racks in the normal stores, they forget that when you are creating, sometimes the creativity can help you choose what you want in the stores, like on the rack. So, in my feelings about it, it’s important to express who you are. Don’t try to be a cardboard box of somebody else. Be who you are, no matter what you are. And those ears [referring to the bunny ears on her baseball cap]. It says don’t take yourself so seriously. Let’s have a laugh once in a while.

I made this hat because I find that people now a days are so uptight, don’t even realize if they step back, shrug their shoulders, take a deep breath in, take a deep breath out, and they realize that problems can be solved over time. It doesn’t have to be right that moment. And many people forget that what makes us all unique around the world are our traditions, our customs, our creativeness, our need to express ourselves.

Although Eva has an extensive vocabulary and expresses herself well verbally, she shies away from writing because, as stated by Eva, “…my writing doesn’t come out as well as it used to.” Despite her reluctance to communicate in writing, Eva has resourcefully discovered many other ways to express her thoughts, feelings, and ideas. For instance, when she creates fashion,
Eva attempts to awaken people’s memories and emotions with textiles, images, colors, and shapes. More specifically, when she incorporated a ribbon into an article of clothing, she claimed “it might make somebody feel like maybe somebody 80 years old, and she might have a memory of something meaningful from her youth. I try to think of other people’s needs ahead of my own when I do fashion.” See figures 26 and 27. In sum, Eva’s considers her pieces of wearable art to be multidimensional creations textured with symbolism, aspects of the human condition, and elements of design.

4.4 Artist Alina: You can do anything you want to learn.

4.4.1 Data analysis. Delving into the numerous slips of paper representing Alina’s conversations, journal entries, wearable art emanating from the body biography sessions, I arrived at the same overall categories as those of the first two artists, drawing on both similar and different subcategories: (i) intrapersonal connections (encourager, self-advocacy, community, needs structure, intrapersonal, non sequiturs, interpersonal, requesting feedback, needs guidance), (ii) strengths and interests (creative, likes, interests), (iii) multiple literacies (self-expression, dramatic arts, fashion show,...
modeling). (See Figure 28). Beginning with the overall category, interpersonal connections, I now begin narrating Alina’s stories of experiences related to designing and making wearable art as part of the body biography practice.

### 4.4.2 Intrapersonal connections

When I first met Alina, she greeted me with a friendly smile. I soon found out that she had a wonderful sense of humor, a contagious laugh, and never hesitated to offer the other artists an encouraging comment regarding their accomplishments during the body biography sessions. Comments such as “Fantastic Celeste”, “That’s awesome Hanna”, and “That is wonderful”, are common occurrences threaded through our many layered conversations of visual art, friendship, and everyday life. In fact, Alina was the first one to acknowledge the note that I had included in the artist’ kits by holding it up to the screen, thanking me for it. Displaying actions of self-advocacy numerous times, Alina asked me what I thought about her work, commenting, “Are you OK with this?” or “What do you think?”. She also often shared celebrations and events that were occurring in her life. In one of our interactions, she wanted me to know, “My birthday is in August. Get my hair done. Do my nails. It was amazing.” She also talked about taking a trip to Florida and frequently reminisced about New York City. For example, when I invited her to share her work from our last session, Alina, with enthusiasm, displayed a diorama of skyscrapers. In short, Alina appeared to really enjoy the social aspect of the sessions and would often initiate interactions with one or more of us. She tended to gravitate to other topics of interest when the instructional part of the
session became more open-ended. For instructional purposes, Alina seemed to work best within a structured setting that still allowed for self-expression.

4.4.3 Strengths and interests. Alina frequently featured New York City, especially locations in midtown Manhattan, in her art work. In one piece, she depicted a fashion show in Times Square with groups of people enjoying the atmosphere. To personalize the cover of her artist journal, Alina used a black marker to outline a cityscape of New York City accented with shades of green. (See Figure 29). When contributing to our session conversations, Alina often refers to Disney, giving special attention to the characters and their clothing.

One of Alina’s obvious strengths is her capacity to be creative. For instance, while speaking with Alina as she poured through the bag of found materials from her artist kit, she selected a piece of silver garland laced with stars. With a dash of style, Alina made the garland into a halo, placed it on her head, folded her hands under her chin, and with an endearing smile, posed like an angel in front of the screen. It was a magical moment sparked by spontaneity and cleverness. (See Figure 30). On a few occasions, rather than actually making wearable art items, Alina opted instead to don her own items to respond to the goals of the body biography activities. For example, Alina held both of her arms up to the screen to display a series of bracelets that she had previously made, while she exclaimed, “Here we are guys!” Another time, she wrapped long multi-colored garlands of flowers around her neck while two of the artists revealed scarves to express their aspirations. Still, another time, Alina positioned a pink tiara embedded with crystals on her head, commenting, “Yes, for sure.” Although Alina did not actually create the items, she
did search out ones of her own that she felt fulfilled the requirements for completing the wearable art pieces.

4.4.4 Multimodal literacies. Despite the supportive comments that Alina offered to the other artists, she sometimes had difficulty communicating her thoughts and feelings verbally.

Fortunately, Alina, a resourceful individual, made effective use of multiple means of conveying her artistic talents. For instance, Alina had envisioned herself in a fashion show in New York City. So, in one of her art pieces, Alina created a line drawing in which she posed on a stage constructed among tall buildings with the year 2020 emblazoned on a banner hung above the entire scene. (See Figure 32). Wanting to provide the full details of her experience related to a Disney cruise, Alina drew a picture showing a ship with large stacks, making effective use of shapes and lines to depict the details of the whole setting. Still, in another journal entry, Alina created a double-sided representation of Times Square with the words “Times Square, New York City” on the right side, and a towering structure with two individuals positioned at the very top. (See Figure 31). Through these two entries, Alina exhibited her awareness of perspective and the importance of color to capture interest and establish atmosphere. Some of her pieces included words and

Figure 31: Alina's Times Square drawings, session 4

Figure 32: Fashion show in NYC, session 3
phrases, such as “my shape is blue and light blue”, “true princess “, and “Disney world”. For the fashion show, Alina spontaneously assembled an outfit—a cardboard visor and a badge with the words “piloce [police] girl”. At one point in the show, she added her angel garland, as she displayed her bracelets and held a black and white 3-dimensional work of city buildings at night. With her usually sense of élan, Alina finished her part of the show with a dramatic salute to the screen. (See Figure 33).

4.5 Artist Hanna: Open your eyes…to see inside your future, there is magic.

4.5.1 Data analysis. My immersion in the data associated with Hanna resulted in the same overall categories as the first 3 artists. I found, however, that the sub categories that comprised each of these three categories were different as follows: (i) intrapersonal connections (identity, self-advocacy, independence, interpersonal, assertiveness, confidence, appreciation), (ii) strengths and interests (creativity, strengths, skills, talents), and (iii) multiple literacies (multimodal expressions, drama). (See Figure 34). In the following three sections, I elaborate on each of the three sub sections to arrive at a portrait of Hanna immerging from the body biography sessions.

4.5.2 Intrapersonal connections. When asked about the feelings she associates with being an artist at the Paint and Fiber Studio, Hanna read from her i-pad, “Love, sweet, nice, good, my heart. I have a warm heart, comes from my heart to have and show feelings for each other, all
about love.” In addition to identifying herself with such qualities, Hanna is an established and confident artist. She frequently makes fairy tale characters the subjects of her art work. In particular, she treasures Cinderella and owns a gown just like that of the character.

In a page in her notebook, Hanna used colored markers to draw an image of a princess and prince under which she wrote captions highlighted in pink. When Hanna showed us the entry she announced, “It’s taking my breath away. That is my prince.” (See Figure 35). At the time Hanna donned a black baseball style hat that she selected to represents her thoughts associated with being an artist, she commented, “I will be a government of Canada friend. And an office lady I will be. This hat is very special for me. You know why this is special for me?” Pointing to the front of the hat, Hanna stated, “Like a princess, there is a crown on there.”

Besides her infatuation with fairy tale characters, Hanna identifies strongly as a member of a “big happy” family, which includes her cats, and specific members who routinely surface in her artistic creations. In particular, her sister figures predominantly either as a focus of her art, or someone who provides Hanna with materials that she uses in her artistic creations. For instance, Hanna’s sister gifted her with a colorful lei, which Hanna used for the wearable art activity on repurposing materials to make hats. (See Figure 36). Her sister also gave her a much-cherished adult-size Cinderella gown that Hanna proudly displayed during one of our wearable art sessions when she made a miniature 2-dimensional version of it.
(See Figure 36). Even when she returns to taking on the role of a princess in front of a castle in her art work, Hanna refers to her “big and happy” family. In fact, Hanna shared that she dreams about having her own family someday.

Throughout our sessions, Hanna remained independent and did not hesitate to advocate for herself. On several occasions, when she was in the midst of presenting one of her wearable art pieces, she stopped and with a definite “SHHH!” coming from behind a finger pressed to her lips, demanded quiet from those artists who were talking in the background. On the other hand, she would often interject her voice in the middle of conversations of other artists with comments such as, “OK, I got one for you guys.” She would also take the initiative to get my attention to obtain feedback on her art work asking questions such as “Do you want to know why I chose red and gold, why I did that?”

When engaged in the body biography activities, Hanna strove to perform to the best of her ability. As I worked with other artists, she kept herself busy either by making entries in her sketch book, or sifting through found materials in her artist kit. At the same time, Hanna maintained awareness of what was occurring in our sessions, and continued to respond to recently introduced instructions, or asked questions to begin or complete a project. She also expressed appreciation for the sessions saying, “Thank you for everything.” Regardless of her independence and instances of self-advocacy, Hanna works best in a semi-structured environment, where she has opportunities for putting her own stamp on her artistic creations.

4.5.3 Strengths and interests. As previously mentioned, Hanna adores Disney’s Cinderella, and enjoys entering into the world of princes and princesses through her drawings and articles of clothing. She not only owns an adult-size Cinderella gown, but also has a smaller-scale one which she used to dress a puppet. According to Hanna, “I cannot make a dress. I have a dress.”
She also values her family and friends, and brings them into her conversations and related art work. One of Hanna’s strengths is her capacity to be inventive, making creative use of found materials, especially hats; “I have many hats. I have lots.” She seems to always have a well-stocked trove of items that she can access in record time. A lace shawl became a bride’s veil. (See Figure 37). A black top hat became the perch for a baseball cap. A string of flower-like shapes became a colored boa. In the middle of one of our final conversations, Hanna insightfully responded to our comments on feelings by displaying a red t-shirt with the words, “Be happy, be brave, be honest, be kind, be Canadian”. She had thoughtfully encapsulated our remarks with the shirt’s phrases and said, “You will see what you are talking about.”

4.5.4 Multiple literacies. Hanna makes use of various literacies to express and represent her thoughts, feelings, beliefs, and ideas. For example, using both images and words, sometimes needing assistance with her spelling, Hanna told stories, sometimes even injecting herself into the plot. Again, the princess and prince theme came to the fore with depictions of a wedding or a glamorous event highlighting castles, hearts, crowns, and cone-shaped princess hats. Through these pieces, she expressed her vivid imagination and her capacity to create characters and give life to them. For some of these pieces, Hanna remarked that she borrowed from some of the scenes performed in her drama class; “So, we did dress up. I will show you. Here is the Cinderella one.” (Shows what appears to be a photo of herself in an aqua outfit.)
For one of our wearable art activities, Hanna first drew the outlines of the front and back of a t-shirt. On the front of the t-shirt, Hanna used a blue marker to write down a list of key words starting with “Down Syndrome” at the top, and other words such as “Prom Night” “Ballroom Dance”, and “Romance” lower down. On the other side of the shirt, she drew a young couple who both seemed to be smiling for a camera. (See Figure 38). When I asked Hanna if she would be transferring those images onto an actual t-shirt, she replied, “I have a t-shirt here at my house. For next time I will show you. I will put the design of me and my man.” She also mentioned that she had used screen printing to add designs to clothing. As it turned out, Hanna wore her t-shirt as part of her overall outfit, which also included the baseball cap cleverly placed over her lace shawl. As well, she donned bracelets that she made from found materials in her artist kit.

For one of these bracelets, Hanna thoughtfully surrounded the bracelet base, an empty tape roll, with heart-patterned ribbon which she encircled with a silver strip upcycled from a self-seal envelope. She commented that the bracelet reminded her of Valentine’s Day. For the second bracelet, Hanna enclosed a similar bracelet base with a rich red ribbon with gold trim. Together, the bracelets looked like items from a designer’s collection. (See Figure 39). Obviously, Hanna understands the impact that color, line, and shape has on a viewer’s eye. To complete her fashion ensemble, Hanna added a colorful string of cloth flowers around her neck and wrists. Although she was seated as she modeled her wearable items

Figure 38: Hanna’s t-shirt, session 3
Figure 39: Hanna’s designer bracelets, session 2
during the fashion show, Hanna seemed to move to a regular and flowing rhythm that she was composing in her own head. Her movements created a dramatic atmosphere for displaying her wearable items. In keeping with her propensity to use multiple modes of expression, Hanna selected some of her drawings to intersperse into her part of the show.

4.6 Across the participants: Narrating together

The four artists participating in my research project revealed that they had unique characteristics, talents, interests, and approaches to a task. I now return to the overall categories to present an across-case analysis of the artists’ experiences.

4.6.1 Intrapersonal connections. The sub categories that I assigned to each of the four artists all came together within the one overall category entitled interpersonal connections and emerged numerically as follows: Celeste (11), Eva (11), Alina (31), Hanna (36). (See Figure 40). As I already mentioned, numbers alone do not tell the whole story. Rather, it is the characters’ individual points of view, thoughts, feelings, and actions that contribute to the overall unfolding of its plot. The four artists were not just individuals with generic interpersonal connections. Instead, each brought her own uniqueness to the narrations of our sessions. For instance, among all the artists, Alina was the most vocal when it came to making an encouraging atmosphere with her numerous compliments. In fact, among all her assigned sub categories, “encourager” combined with “community” was by far the most frequently noted at sixteen times.
Hanna with 11 sub categories and Eva with 6 were the ones most often heard advocating for themselves. Hanna would not hesitate to request feedback and interject comments, while Eva set boundaries for herself regarding the pace and content of her art work. Eva preferred to work off-screen where she could complete her projects by herself, before sharing them with the other artists. Although Celeste did seek approval for her work as evidenced by 2 sub category counts, she was not as vocal as the other artists. Nevertheless, she did take the lead with her highest sub category count of 3, “expressing appreciation” for what she received or encountered during our sessions.

Although all 3 artists gradually shared background information about themselves, whether through their art work or our conversations, Hanna was the most forthright about her identity via a sub category tally of twelve. More specifically, she not only talked about her relatives during our discussions, but also often made them the subject of her drawings and paintings. That is, she seemed to identify strongly as someone’s sister, cousin, or daughter. Furthermore, Hanna worked best within a semi-structured setting where instructions were direct and specific. However, she did display many signs of independence such as completing her wearable art bracelets and selecting head coverings to represent her wearable art hat, both on her own. Her count for independence was a 6, the third highest of all her sub categories. In contrast, Alina’s second highest was a combination of needing structure and guidance when receiving instructions for completing her wearable art items. On several occasions, Alina appeared to mistakenly share work that was not directly related to our then current activity. When informed, she would happily redirect her efforts to begin preliminary plans for making the actual item. One time when I encouraged Alina to get back on course with her art work she came back saluting and showing 3 bracelets while saying, “Here we are guys!” While I selected the sub categories with the highest
counts to consider in this section, the information that they provided highlighted the fact that each artist came to our sessions with their own unique characteristics, qualities, and points of view—ones that would need to be considered in an instructional setting.

4.6.2 Strengths and interests. As it happened, the highest sub category for all four artists was “creative”, with Celeste having a count of 7, Alina and Hanna 4, and Eva 3. During all the sessions, each artist’s creativity emerged in different ways. (See Figure 41). Through her wearable art items, such as a t-shirt, hat, and scarf, Celeste displayed an obvious knowledge of the use of color, texture, fabric, line, and shape. She also had the capacity to convert found materials into jewellery and embellishments for clothing. Her artist journal entries incorporated both word and image to effectively convey specific concepts such as friendship, feelings, and accomplishments. Celeste often used the sewing machine to bring her ideas to fruition. In contrast, Eva simply opted for needles and thread to help her attach a set of floppy bunny ears to an otherwise plain baseball cap, or affix a bow made from green organza ribbon to renew a tank top from last summer. Eva also used her imagination to transform a piece of fabric into adorable animal characters, on to which she would sew ribbons labeled with words representing feelings. As Eva said, “I just write whatever feeling there is on a ribbon and then I stitch it on to the back side of the monkey.”

Hanna’s creativity emerged in detailed depictions produced with markers and paint and embedded in fantasy, especially in relation to Disney characters. An advocate for people with
Down Syndrome, Hanna incorporated pertinent messages into her wearable art and pictures. Although Hanna used her sketch books and journals to process ideas and make plans for her art work, she also often displayed instances of spontaneity, especially when repurposing and refashioning a lace shawl and various types of hats to represent herself as an artist. In addition to her line drawings and 3-dimensional scenes of New York City, Alina’s creativity surfaced in times of improvisation when she would make use of found materials to portray herself as an angel with a silver-starred garland halo, or a police girl, complete with a badge and visor. It is also apparent that the artists’ specific interests influenced their creations and performances.

4.6.3 Multiple literacies. Throughout our sessions, all 4 artists utilized multiple modes of expressions and representations in the creation of their art work, with the tallies of the sub category for each artist turning out as follows: Celeste (11), Eva (7), Alina (11), and Hanna (9). Variations in the literacy modes, however, appeared in each one of the artist’s applications. (See Figure 42). For instance, Celeste’s wearable art was associated with sewing, drawing, modeling, designing, drama, jewelry making, and sculpting. Challenged by the physical acts of writing and speaking, Celeste often created colorful images to convey her ideas. Drawing on other modes of expression, Celeste, who wants to be an actor, incorporated dramatic movements, as well as dance, into the presentation of her wearable art pieces. A prime example was the time Celeste suddenly arose from her chair to perform a Mexican folk dance to celebrate a hat that she repurposed with red fabric patterned with green cacti. Another time when I asked what she would wear to an opening night of an exhibit of her
art work, Celeste held up a miniature version of a yellow gown that she made while she said, “What I would wear.” Eva, who also declared that she did not embrace writing, did welcome opportunities to communicate verbally. For the fashion show, she readily agreed to narrate her own segment, demonstrating a rich array of vocabulary from “loyal” to “courageous.” Competent with a needle and thread, Eva used color and the texture of fabrics to communicate her sense of humor and imagination in the form of amusing cartoon-like characters. Eva promoted the notion of serious play as an integral ingredient of her art work, claiming that everyone needs to consider their ideas from a variety of different perspectives.

Alina was another one of the artists who represented her ideas, thoughts, and feelings through multiple modes. During our sessions, it was Alina’s voice that we most often heard, providing comments and compliments to the other artists. Often sharing her thoughts and feelings, and ideas verbally, Alina also liked to express herself dramatically mimicking different characters such as an angel or a police woman—the center pieces of two wearable art items. When not performing or sharing comments with the other artists, Alina used markers to draw black and white city scenes, which she often accented with blocks of color. Hanna enjoyed creating her art work by way of many different modes of expression. Drama, drawing, painting, sculpting, and jewelry making were all incorporated with various degrees into the creation of her art work, which also highlighted Hanna’s effective use of color, line, shape, and texture. Showing one of her wearable art items, Hanna declared, “Yep, that’s right…those are great colors.” Additionally, Hanna did not shy away from using her voice to communicate with other artists or request feedback from me. During our sessions, she seemed to draw from prior experiences, such as a print making workshop, or a drama class production.
4.7 Co-host of the sessions

For ethical and practical reasons, I ran my sessions with a co-host who was a facilitator at the Paint and Fiber Studio. As it turned out, there were many advantages associated with having a co-host who knew the artists and had experience using the technology to run online sessions.

4.7.1 Data analysis. Upon carrying out an analysis of the data associated with the co-host, eleven subcategories surfaced and merged into 4 categories—(i) implementation support (reinforcing instructions, prompting and questioning), (ii) briefing researcher (clarifying and providing information), (iii) recognizing the artists (acknowledgement, encouraging), and (iv) technical assistance (handling technical difficulties, fielding interruptions, taking photographs, music for fashion show). (See Figure 43).

4.7.2 Implementation support. While carrying out the activities with the artists, the co-host played an important role by supporting the instructions that I had provided as well as prompting the artists and asking them questions. For example, when one of the artists seemed to be hesitating about making an entry in her journal, the co-host noticed and said, “We’re working in the journals and writing about what you think about yourself as an artist.” On another occasion when the artists were sharing their work, the co-host gently motivated an artist by saying, “We would love to see what is in your book.” One time when an artist appeared to be struggling with part of an activity, the co-host said, “You could also draw something and show it.” During the
hat activity, the co-host remarked to an artist pondering about her wearable art, “Maybe you will have to add something to that hat.”

Another way in which the co-host supported the implementation of the sessions was in the form of prompts or questions. For instance, in the bracelet activity the co-host provided extra guidance for an artist with the questions, “Have you finished writing in your artist journal?” and “Are you writing down what you see as your strengths?” At the beginning of another session, an artist who seemed to be having difficulty contributing to the discussion was asked by the co-host: “Did you have anything from last week? Can you show your first page? At other times, the co-host prompted the artists with such comments as “If you want to take a second to work on the item for today and then we will come together to see what you have done” and “Looks like you have something to share”.

4.7.3 Briefing the researcher. Having already worked with the artists, the co-host provided relevant background knowledge on the artists while also clarifying the artists’ responses. Periodically, I was not always able to discern the artists’ words and could have missed obtaining valuable information from their responses. Fortunately, the co-host was able to discreetly repeat what the artists had said. For instance, the co-host let me know that one of the artists mentioned “looking forward to visiting Florida”, while another artist said that “she likes the things another artist made and they would be great for Halloween.” I also came to know the artist better by way of the co-host’s knowledge of their involvement in other workshops and classes. For example, I discovered that two of the artists attended a special accessible dance class, another adored Cinderella, and still another created a magazine for the Studio’s at-home project.

4.7.4 Recognizing the artists. A vital ingredient of our sessions was the encouragement offered to the artists who seemed to respond positively to being acknowledged for their
accomplishments. The co-host was generous with motivating comments and words of recognition. “Wow! Mixed media!”, “The top hat is cool!”, “They are so good Celeste”, and “You did a good job today” are a sampling of the encouragement he conveyed to the artists. In addition, the co-host would, from time to time, recognize an artist’s particular area of specialty or work of art. For example, he acknowledged Celeste’s jewelry that she designed, or Hanna’s larger scale drawings.

4.7.5 Technical assistance. Although a minimal number of technical problems arose during the sessions, when they did the co-host calmly handled them with ease. For example, when Alina was having trouble with her audio, the co-host worked it out with her saying, “There we go!”, informing me, “I think Alina missed the instructions.” When two of the artists were talking while I revisited another artist’s wearable art item, the co-host put them on pause to eliminate the background noise. When Hanna wanted to obtain our attention, the co-host said that he would spotlight her. For those artists who accidentally joined us, thinking it was a different session, the co-host would tactfully respond to them with such comments as, “No Sasha, this is something else.” or “Thanks for stopping in Tommy”. To capture the photographs of the artists’ body biography wearable art items, the co-host used the Studio’s on-line technology. When doing so, he would often position the artists to get the best picture by either getting a close up or moving them out of the glare of a light source. Either I would request that the photo be taken, or the co-host would volunteer to take one on his own. For the fashion show, the co-host offered to add background music. For technical reasons, however, it was not possible to include the music in the show.
4.8 The Implementation of the Body Biography Practice

The center piece of my research was the body biography practice, a multimodal form of narrative inquiry in which the artists conveyed their experiences as artists at the Paint and Fiber Studio with wearable art. While planning and implementing the body biography sessions, I strove to consider such instructional elements as the artists’ approaches to learning, their interests and strengths, session management, and building an atmosphere conducive for risk-taking, an essential ingredient of creativity. As well, I wove the study of artistic design and the process of upcycling into the sessions. The purpose of my study was to investigate the role of the body biography practice (i) to help artists become more aware of themselves both personally and professionally, (ii) to help studios become more informed about their artists with the view to addressing the practices in their programs, and (iii) to help individuals who are designing for people with disabilities.

4.8.1 Data analysis. Downey and Clandinin (2010) posit that narrative inquiry “…seeks to understand and explore the layers of complexity involved in living a life” (p. 388). In the sections presented below, I present my analysis of the body biography practice which resulted in the sub categories as follows: (i) facilitation (needs guidance, clarification, general instructions, lead-in, flexibility, feedback), (ii) multiple literacies (multiple modes, providing examples, play, learning approach), and (iii) session management (organization, general management), and (iv) on-line considerations (technical difficulties, on-line interruptions). (See Figure 44).
4.8.2 Facilitation. Engaging the artists in the implementation of the body biography was a complex process. It is no wonder that the overall category, facilitation, garnered the greatest number of sub categories. I used the term facilitation because I considered the body biography sessions to be a collaborative venture between me and the artists. To first bring the artists together as a group, I would ask them to give me a thumbs up, which they did, sometimes with their actual thumbs, other times with an emoji. I usually started off each session with a lead-in exercise, such as a general question or a journal entry to prepare the artists for the main activity. For example, as a lead-in for the session on making bracelets, I invited the artists to write down up to five things that are their strengths. Another time I invited them to browse through the found materials in their artist kits and identify materials that represented those strengths.

Next, when giving initial instructions and directions to the artists, I set out to make them as succinct and direct as possible. As a case in point, I would ask each artist to write down a number at the top of each journal entry page to help them identify which entry went with the planning and making of each wearable item. Each artist, however, responded differently to my instructions. For instance, when I asked everyone if they had the cardboard tube from their artist kit to begin constructing their bracelets, I immediately saw that Celeste had hers. Celeste, who always had her materials at hand, generally appeared to have no problems following my instructions. Eva, although not initially working on the same wearable items as the other artists, always seemed to be aware of what was occurring around her. Although Hanna usually followed my instructions when creating her wearable items, at times I needed to provide her with more specific details. Of all the artists, Alina often gave the impression that she misinterpreted my instructions. Yet when I met with her individually, she would turn her attention to the task at hand and begin to follow the suggested steps to complete the wearable art item.
As each artist had her own unique approach to participating in the body biography sessions, I needed to be flexible. One time, for the sake of neatness, Celeste wanted to first do her entry on a separate sheet of paper before rewriting it in her journal. After explaining that the journal was a working document, I suggested that she staple the first sheet of paper into her journal mentioning that it would provide texture and character. Another time, Hanna did not bring a t-shirt to a session, so instead I recommended that she take out her large sketch pad and draw a t-shirt and then fill it in with how she felt about herself as an artist.

In the spirit of flexibility, I also wanted to provide guidance to the artists when needed, rather than direct them in a lockstep fashion. I would often encourage their work by way of reminders or comments such as “Does everyone have their artist journals?”, “Would you like some extra time to work on that?”, “Sounds like you have something to share.” and “Are there any things in the found materials that you could use to show your strengths?” For instance, for the later question, Alina, who seemed distracted at the time, returned to her work on the hat, successfully completing it by the nudge my question offered. When I invited Eva to share the progress she had made on the creation of her repurposed hat, she seemed to hesitate until I asked if she would like more time. I soon found out that she preferred to bring her works of art to a certain level of completion before displaying them in front of others. Celeste, who tended to remain quiet during our sessions, would oftentimes hold up to the screen either a journal entry or an item that she was in the midst of completing. At these times, I would first acknowledge her prompt and then would ask her to provide some details, rather than just assuming what she wanted.

Clarification is another key aspect of engaging the artists in the body biography sessions. Checking directly with each artist to ascertain that I had understood her request or correctly acknowledged her communication was key to supporting them in our sessions. For example,
when Alina showed me the front cover of her artist journal instead of joining us in preparing for the first stage of a wearable item, I encouraged her to continue. As it happened, Alina was not actually off track. She was sharing the way she had personalized her journal cover, a task that I had suggested the artists do in between sessions. On another occasion when Alina showed me a drawing of herself on stage at a fashion show in New York City, I asked her to describe the setting which included skyscrapers, signs, and crowds, as well as some palm trees. Rather than challenging her choice of tree for the scene, I learned that to her, Hawaii, “was a great idea” and she was looking forward to taking a trip there.

One time when Celeste had a puzzled expression on her face, I asked her if she would like me to clarify the instructions I had just delivered to the 4 artists. After doing so, Celeste graciously thanked me saying, “I understand completely now.” All artists, at different stages in the sessions, needed me to be more specific when delivering instructions or messages about upcoming events. A prime example is the confusion that I detected from the artists regarding the date and preparations for the upcoming fashion show. I had been speaking in general terms about the event which was still a few sessions away from the actual date. The artists, however, requested that I convey more specific information with questions such as: “Is the fashion show next week?” and “What do we wear?” The next time when I mentioned the fashion show, I was more explicit with what the artists had to have ready. Hanna, for one, said, “I can do that for next week.” Knowing that misunderstandings create confusion that can lead to incorrect beliefs or actions, I strove to remain aware of the artists’ words and facial expressions and the possible meanings behind them.

Furnishing the artists with both individual and group feedback seemed to play an integral role in encouraging them personally and professionally as well as building a supportive environment.
During each session, I reserved time for artists to share their work and offer complimentary and useful comments to each other. For instance, when Hanna modeled the different ways she draped a lace shawl on her head, Alina stated, “Hanna, you look like a beautiful princess.” When Celeste displayed the bracelets that she had just completed that week, Alina said, “That’s beautiful Celeste.” When Celeste told me that our sessions were “beautiful”, I responded by saying that the beauty came from the artists themselves, specifying “…all the creativity that you bring. The imagination that you bring.”

In addition to offering feedback on a group basis, I provided each artist with specific observations and suggestions regarding their work. Just after Eva showed me a necklace that she was in the process of making, I complimented her on the use of her color combination of green, beige and brown. I also remarked on how she had a talent for hand sewing as evidenced by the evenly-spaced whip stitches she used to secure a set of bunny ears to a baseball cap. I even praised her on her knack for including humor in her art work. For Celeste’s first wearable item, a bracelet, I readily acknowledged her informed use of color and shape, as well as a creative use of found materials including ribbon and the covers of coffee pods. Alina enjoyed drawing with markers and constructing 3-dimensional scenes. Responding to one that she made of a modified fashion show with her as the lead model, I commented on how she had effectively applied the elements of line and shape to highlight details of her clothing—round shapes for the collar and a triangle for the skirt. For another scene of New York City, I mentioned to Alina that the details of her work were enhanced by her use of color, such as the blue surrounding the skyline. I let Hanna know that her color choices of red and gold were perfect for showcasing her strengths via a creation of a bracelet. After seeing several drawings of her jewelry and clothing designs, I commented that she “…certainly has a definite style and a strong sense of the aesthetic”
expressed by her creative arrangement of different kinds of lines from zigzag to diagonal to spiral.

4.8.3 Multiple literacies opportunities. The body biography supported each artist’s distinct ways of expressing themselves via the wearable art items. One of the main factors contributing to this uniqueness is learning style. For instance, Eva preferred to work on her own, occasionally requesting feedback or sharing different stages of her wearable items. Like Eva, Celeste and Hanna appreciated completing their art work in a quiet environment, but also valued receiving comments and occasionally interacting with the other artists. Unlike the other artists, Alina seemed to welcome conversation while she worked, offering her own comments, even when I was meeting individually with an artist.

As a group, the artists came to the sessions with experiences in such literacies as dramatic arts, dance, drawing, painting, sewing, textiles, writing, and sculpting. The experiences came to enhance the making and presentation of their wearable art items. The way in which Celeste performed the presentation of her repurposed hat with a Mexican folk dance underscores the importance of moving the boundaries of communication beyond the written and spoken word. Rather than grappling with the challenge of writing down her thoughts on paper, Celeste danced her thoughts with joy. Her journal entries also reflected her appreciation of harnessing multiple modes to take her ideas from thoughts to a plan. By contrast, Eva, welcomed opportunities to express herself verbally as evidenced by her own narration during the fashion show where she represented herself with a rich range of vocabulary. Shying away from writing, Eva effectively expressed her sense of humor, insight into human behavior, and her own interpersonal awareness through her wearable art items and fiber sculptures of animal characters.
For Hanna, her primary modes of communication during our sessions were her drawings, which contained detailed images accented by words. Although Hanna confidently conveyed her thoughts and feelings verbally, I learned the most about her from her drawings, which featured her interests, intrapersonal qualities, and artistic potential. She would transfer many of these details on to clothing such as the time she wrote Down Syndrome on a t-shirt to represent her ongoing support for individuals identified by this condition. In addition to her drawings, Hanna made generous use of dramatic movements to model her wearable art items in the fashion show. She even showed us a t-shirt with words such as “be happy” and “be kind” written across the front to make connections to the subjects we mentioned in our session conversations. By far, Alina was the most talkative during our sessions, inserting positive comments and making connections with the other artists. Yet, she most effectively communicated her ideas by way of her drawings and 3-dimensional scenes of New York City with some incorporating glimpses of other locations such as the palm trees of Hawaii seen from a cruise ship.

As emphasized by Eva, play is an integral ingredient of the creative process. Throughout our sessions, I always incorporated opportunities for the artists to play with materials or spend time tinkering with their ideas via drawings or mock-ups of their wearable art items. All the artists seemed to like to explore the found materials in their artist kits, rummaging around for a certain color, shape, or texture to include in their creations, or just simply looking for something to inspire them. For instance, when Celeste first received her kit, she methodically pulled out different fabrics, and held them up for closer observation. A piece of black and silver material, a rainbow of colored tissue paper, and a shape of a heart, all caught her attention. To indicate that she appreciated the possibilities that such objects could play in her art work, Celeste held up her hands and made the shape of a heart with her fingers for all of us to see. Of all the materials,
Celeste appeared to be fascinated by a piece of wrapping paper decorated with red birds positioned among bright green foliage. While looking through her own found materials, Alina immediately spotted a silver garland garnished with stars, which she converted into a head piece to represent an angel, her version of our first wearable art item, a hat that shows her strengths. Hanna not only picked out specific colors and textures of red, gold, silver, and black, but skillfully recast them as the decorations on designer bracelets made from empty cardboard tubes left over from rolls of tape.

To remain within the territory of multiple literacies, I showed the artists visuals from my own journal as well as examples of the wearable art items that I had made. As I presented them to the artists as part of the information for creating the wearable art items, I provided explanations for my choices. Green felt and shells to represent my love of nature expressed in a set of bracelets. Magenta tissue paper fashioned into flowers embedded in a cowl of silver garland recasts as a black t-shirt from a previous decade. A white visor topped with enormous pink petals with tropical birds perched on a cascade of green netting draping down from the back. While sharing these and others examples, I let the artists know that some of my creations were inspired by their use of found materials. I also emphasized the importance of using one’s imagination to find potential in a found object for creating a piece of art work, and in our case, wearable art: the suitability of the silver strip protecting the adhesive for self-stick envelopes for accenting a necklace. Empty pieces of brass-colored lamp sockets for embellishing a cuff. A tied-dyed scarf long forgotten comes to life with the help of a colorful fringe of silver and colored paper. With these examples and so much more, we actually inspired each other with comments such as, “That’s so cool” and “How imaginative.”
4.8.4 Session management. Having taught before, I recognized that session management was a key component of facilitating my work with the artists. Planning a session in concert with the debriefings of the previous ones helped to provide continuity and identify any need for revisions. Although I encouraged the artists to put their own stamp on the creation of their wearable items, I also found that organization and structure helped them to achieve their artistic goals. Each session had a general structure—a greeting, a lead-in, the main component related to the wearable item of that day, individual and group meetings, and a closing including plans for the following week.

I found that organization and structure were particularly important when it came time for the highlight of all the sessions—the fashion show. The event required preparing the artists for the “runway”, managing a dress rehearsal with a tailormade script, and then carrying out the actual show. Questions such as, “Next week are you going to have all your wearable art items ready so we can show what you have done? and “Will you have your t-shirt fully decorated for the show? are just examples of the myriad of questions circulating around preparations for the final event. It was only Eva who declined a rehearsal, but volunteered to script and narrate her segment of the show, after I had introduced her to the audience.

4.8.5 Online considerations. As previously mentioned, due to the government lockdown, it became necessary to move all the sessions from on-site at the Paint and Fiber Studio to a Zoom online platform. As a result of the move, I needed to address a variety of considerations regarding technical aspects as well as interruptions. I found it necessary to make sure that I first captured the attention of all the artists, especially to make sure that they could hear me and I could hear them. Such prompts were especially relevant for Eva who tended to work off-screen, and often waited until her work was completed prior to sharing it with us. Consequently, I
needed to ask such questions as “Can you hear me?” and “Are you there, or perhaps have you stepped away?” In the case of Hanna’s situation, lighting sometimes made it difficult to view her work, especially all the details. At these times, capturing her work in photographs would require Hanna to make some adjustments with such a comment as, “Can you hold it still so we can take a picture.” If an artist came into the Zoom room late, or experienced challenges with her audio, I would have to repeat information: “Can you hear me? There we go! It is working now. I think Alina missed the instructions.” Although infrequently, Celeste would encounter problems with her technology. A few times her audio cut out, and for the fashion show, Celeste had to move around her own room until we could see her modeling all her wearable art. Also, her audio needed to be readjusted so she could hear the script. Like the artists, I also faced technical challenges when my screen would momentarily freeze and I would have to recover bits of conversations or an artist’s question.

In addition to technical difficulties, interruptions emerged as another challenge, though much less frequently within our group. For example, Hanna requested the attention of the other artists with a definite “Shhhh!” reinforced by placing her finger to her lips. More regularly, interferences came from artists outside of our group asking such questions as, “Is this the coffee tour?” or “Is this the workshop at 3:30?” After receiving answers to these questions, apologies would always follow with statements such as “Sorry for confusing this with another session.”
4.8.6 Artist Kit. My analysis of the artist kit resulted in three sub categories: (i) materials and supplies, (ii) artist journals, and (iii) logistics. (See Figure 45). The artists received their kits the morning of our first session. For part of that session, I built in time for the artists, who appeared to be intrigued by the kits, to become acquainted with the contents. For example, Celeste unpacked the kit, paying the most attention to the bag with the found materials, as she methodically examined the contents piece by piece. At the end of the segment Alina, referring to her kit, exclaimed, “For sure. It is amazing.” I also encouraged the artists to add materials to their bags, either ones they had in their homes, or others they could find in nature.

Except for Eva, all the artists used their journals to begin to identify ideas for their wearable items, or make more detailed plans for them. Celeste, however, was the one who composed her multimodal entries most in line with our weekly activities pertinent to the body biography practice. Although she soon filled up her journal with both in-session and out-of-session entries, Hanna eventually turned to her stock of sketch books which allowed her to work in a larger format. Between sessions, Alina also filled in some of her pages with drawings of city scenes.

4.9 Focus Group with Staff

After all the previous data presented in this chapter had been analyzed, I was able to arrange
an approximately 30-minute focus group with 3 staff members—the co-host of the body biography sessions and 2 other staff members. Although the co-host was the only one who had direct contact with the artists during the body biography sessions, the 2 other staff members did have contact with the artists and me in other ways such as co-hosting the recruitment session, distributing the artist kits, arranging the Zoom meetings, and meeting with me in preparation for the body biography sessions. In addition, the co-host and the 2 other staff members obtained feedback on the body biography sessions when they conducted weekly Zoom check-ins with Paint and Fiber’s artists.

4.9.1 Data analysis. After transcribing the focus group session, I divided the contents of the document into forty-eight meaning units representing the staff members’ responses. I eliminated such parts of the conversation as our intermittent friendly banter, my lead-in to the session, and when I posed the semi-structured questions. I ended up with thirty-two meaning units which I initially arranged into sixteen categories, and after 6 iterations, arrived at 3—(i) staff responses to the implementation, (ii) carryover to other areas, (iii) recommendations for future implementations. (See Figure 46).

4.9.2 Staff responses to the implementation. The smaller group size, unusual for the Paint and Fiber Studio, emerged as an important feature of the body biography practice. As a result of the smaller group size, artists were able to receive more one-on-one attention from me and the co-host, while having opportunities to carry out informal conversations with each other without interfering with the session activities. As a staff member commented, “…I think that it was really
neat because it was a smaller group…and it has been rarer for us to be able to offer that kind of
group. So, it seemed like a strength.” In fact, having a smaller group size allowed the co-host to
discover new information about an artist: “I definitely didn’t know about her sewing and her
interest in fashion. That wasn’t something that she had shared before in the calls.” The co-host
continued, “And that clearly was something she was really proud of and felt connected to it even
the modelling aspect of it that she likes to perform. That clear enjoyment and fulfillment.”

Openness and flexibility emerged as valuable features that encouraged artists to draw from
their own talents, interests, and abilities to personalize their wearable items. As the co-host
reported, “Although you did give them a lot of guidance, and demonstrated what that could look
like, it felt like each week the artists went away and came back and just came back with
interpretations that were completely their own.” The co-host added that the artists, some of
whom already had an interest in mapping out their artistic voice through wearable things, were
able to bring “…their own passion, fabrics, materials, and things they had around them. It felt
really personalized.” For example, the co-host remarked that one of the artists seemed to
gravitate to the bracelets which she made right away.” The co-host member commented further
that another artist put everything together with what she had around her.

All 3 staff members agreed that in addition to creating wearable items, the artists often
engaged in presenting them as a performance. For example, the co-host who claimed that the
sessions gave artists the space to model and perform their wearable work, mentioned that one
artist in particular “was very gestural in the ways she shared the garments and the features. That
was definitely new.” Still another staff member claimed that the performance aspect “…was a
neat element that was present in your project that would not have been otherwise.”
4.9.3 Carryover. Outside of the sessions, it appeared that the artists liked to share their experiences and creations from the body biography sessions. One staff member pointed out that an artist showed her drawings and clothing that she had made, seemingly wanting to share it with everyone during a check-in session. Another staff member, during a different check-in session, took note of the enthusiasm that the artists displayed when sharing their enjoyment of participating in the body biography sessions and showing their wearable items in progress. The co-host mentioned seeing one artist in particular, “…wearing a lot of the work that I think started in the calls with you. She had her own supplies and liked seeing her work in your sessions with you. It seemed like it was really a space to expand that. Yes, it seemed like it had an impact.” In fact, the notion of empowerment arose in 2 of the staff members’ comments. One staff member remarked, “…I think that action between creation and wearable items is like the power that has continued to echo through the programming and in the artists’ work.” The other staff member observed, “It sort of went through different activities for creating pieces and I think that it seems to be really empowering.”

In the next chapter, I provide the readers with a discussion of my findings with special attention given to recommendations and implications for future research and practice.
Chapter 5: Interpretation and Discussion of Findings and Recommendations

Careful listening through art making can create...new possible worlds—where one person can meet another through a material, be listened to and both transform...through the process. (Macpherson, Fox, Street, Cull, Jenner, Lake, Lake, & Hart; 2016, p. 386)

According to Keinonen (2010), “Understanding users’ fundamental needs in UCD seems to require taking up a holistic non-reducing view of users and allowing them to behave autonomously in the roles and situation that they have assumed” (p. 21). With Keinonen’s statement in mind, I turned to narrative inquiry which gives voice to individuals’ lived stories of experiences in relation to specific events or issues, which, in the case of my research project, focused on UCD in relation to accessibility. Over the course of 5 ½ one-hour on-line sessions, I engaged 4 artists in the body biography practice to facilitate their individual and shared narrations of personal and professional experiences at the Paint and Fiber Studio to answer my 3 research questions included below.

1. Overarching question: How does the application of the body biography practice help studio facilitators to become more aware of artists both personally and professionally as a way of contributing to their art studio practices?

2. What are the contributions of the body biography practice for design research methods, especially in relation to designing with people with disabilities?

3. What are the design process implications for the online implementation of the body biography practice stemming from the government COVID lockdown?

I now return to my research questions. In particular, I approach the questions as part of an ongoing process to suggest contributions to practices for art studios for artists with disabilities, along with implications for related research and practice. First, in sections 5.1 to 5.4, I present an analysis of the process in relation to (i) personas, (ii) multimodal literacies,
(iii) interdisciplinarity, and (iv) online logistical and practical considerations. Next, in sections 5.5 to 5.7, I return to my 3 research questions, the core of the thesis.

5.1 From personas to multimodal narrative inquiry.

When examined in relation to personas, narrative inquiry brings its own unique contributions to UCD. Such contributions become more apparent when the commonalities and differences between the two are examined in reference to 3 main considerations—(i) personalization of users, (ii) investment of resources, and (iii) disabilities.

5.1.1 Personalization of users. Personas provide designers with archetypes or composites of their targeted user groups’ goals and behaviors (Adlin & Pruitt, 2010; Tempelman-Kluit & Pearce, 2014). Personas have been used in designing for a broad range of purposes from the creation of open-education modules for adults preparing for their high school equivalency exam, to developing a set of personas to make better use of technology to actualize the abilities and talents of users with Autistic Spectrum Disorder (Silva & Teiseira, 2019). That is, rather than referring to a long list of user characteristics and needs, personas convey composite information about a number of users (e.g., twenty-something female users with Cerebral Palsy) in the form of a “real” person with the potential to generate more empathy in designers. However, Sanders and William (2003), claim “By putting people in narrow categories, we limit their ability to contribute creatively” (p. 138).

Narrative inquiry, on the other hand, provides information on actual individual users, rather than making collective representations of them. As a result, individual users have the possibility of playing a more central role in the design process, which could lead to a more personalized and empathetically oriented service or product. Examples of such personalization vary from using narrative inquiry to assist early childhood candidates in examining their emerging identities
(McGarrigle, 2018), to encouraging designers to inquire into their own narratives to relate better on a more personal level to their users (Danko, Meneely, & Portillo, 2006).

The body biography practice, an application of narrative inquiry, has the capacity to play an integral role in building a more holistic portrait of intended users. For example, I came to realize that Eva’s initial approach to working off-screen eventually indicated that she appreciated a quiet space on her own, preferring to share her creations only after they had been completed. Although it sometimes appeared that Alina had decided not to participate fully in our activities, I discovered, with the insight of the co-host, that she simply needed more specific instructions. Celeste, always committed to producing her best work, liked to begin tackling a wearable item, even before I formally introduced it during our sessions. In fact, at the very outset of our sessions, Celeste had already completed a bracelet from found materials, exhibiting her skills and creativity. As these observations indicate, each one of the artists brought her own unique ways of engaging in the body biography sessions.

5.1.2 Investment of resources. Providing a persona as a composite has the advantage of requiring less investment in time, people, and physical resources, especially when designing for greater numbers of users associated with the needs of larger organizations (Miaskiewicz & Luxmoore, 2018). Contrastingly, narrative inquiry is better suited for designing for smaller organizations where personalization would be more of a priority, especially in relation to such considerations as customizing the delivery of a program’s curriculum or creating more accessible tools specific to the particular tasks of an educational facility. Furthermore, in smaller organizations, it could be speculated that users, with the potential of having a stronger presence, could play a much more central part in its continual development.
During the focus group in my study, a staff member at the Paint and Fiber Studio revealed that what she had learned about the artists’ participation in the body biography sessions could be used in planning for other activities. In fact, the co-host of the sessions mentioned that he himself had learned new information about the artists. In addition, it could be speculated that the staff who appear to be eager to support the artists and practices at the Paint and Fiber Studio would have the necessary experience and interpersonal skills to implement the body biography practice as part of the Studio’s program with the view to obtaining valuable feedback from the artists.

5.1.3 Disabilities. The third consideration is especially pertinent to my current study. Although personas have the potential to reach more users without having to invest greater financial and human resources, there is the potential risk of designers relying on their own acquired or perceived information necessary to complete the design process. Such a situation, especially in relation to designing for people with disabilities, could lead to inaccuracies or stereotyping in the final version of the persona (Turner & Turner, 2011). In his publication on design meets disability, Pullin (2009) states that differences “…should be recognized within any disability, whereas people with the same disability are often stereotyped as a homogenous group” (p. 101). For example, in the field of education, a diagnosis is needed to obtain services for a student with a disability. In practice, however, such a diagnosis could lead to more universal-like learning strategies that could actually overlook the presence of a student’s intrapersonal qualities and hinder their individual potential to benefit from education plans (Lauchlan & Boyle, 2007). Furthermore, Baaki, Maddrell, and Stauffer (2017) state, “…relying on traditional descriptive information (i.e. demographics) about the intended audience does not help designers develop empathy toward the audience” (p. 110). Each of the 4 artists identified strongly with her disability and would occasionally express related instances of activism either in words or images.
As I worked with the artists, I soon realized that concentrating exclusively on the official diagnosis and characteristics of their disabilities would have provided me with limited knowledge from which to consider the practices of their art studio.

**5.1.4 Summary.** Holmes (2018), an advocate of placing the user at the center of the design process, asserts, “Rather we need new tools to represent human diversity and challenge entrenched habits of designing for the average” (p. 99). More specifically, the knowledge that materialized from my narrative inquiry of the 4 artists helped to provide me with more holistic user profiles to consider, while addressing the practices associated with their studio. Rather than making assumptions based on general knowledge regarding the artists’ disabilities, the narratives revealed that each artist possessed her own distinctive store of strengths, interests, intrapersonal qualities, and multiple literacies. In sum, narrative inquiry and particularly the body biography application, suggests that it has the potential to be an effective process to use when working with a smaller, yet diverse population of individuals, such as the Paint and Fiber Studio.

**5.2 Multimodal literacies**

In the latter part of the 20th century, researchers began to place more emphasis on the importance of recognizing people’s capacity to express and represent themselves beyond the limits of conventional means such as intelligence tests and standardized testing (Coreil, 2003; Gardner, 1999; New London Group, 1996). At the same time that sheltered workshops were being questioned about meeting the needs of individuals with disabilities, the arts emerged as viable options for recognizing and nurturing the full range of their abilities (Cimera, 2011; Derby, 2011, 2013; Galer, 2014; May-Simera, 2018). As Comte (2009) stated, “The arts, indeed, allow all of us to represent our reality in ways that words are often unable to do” (p. 60). When used as part of narrative inquiry, users are afforded more options to express themselves in such
forms as sharing communal art stories in preparation for employment (Sivenius & Friman, 2020), creating works of self-expression regarding individuals’ perceptions of themselves in relation to their physical and sensory disabilities, and examining personal changing events by way of numerous means such as dance, drama, and film (Rust & Ballard, 2016). By making multiple means of intrapersonal expression available, narrative inquiry has the potential to capture a more robust picture of an individual’s representation of self in relation to a specific issue or event.

5.2.1 Body biography practice as multimodal narrative inquiry. The body biography practice is one such means of self or intrapersonal expression. Originally employed in teaching language arts in relation to studying the continuing formation of adolescent identities (Underwood, 1987), the body biography practice came to be used for such purposes as examining characterization in adolescent literature (O-Donnell & Smagorinsky, 1999), providing pre-service education to secondary school English teachers (Morawski, 2010), facilitating teacher narrative inquiry (Morawski & Rottmann, 2016), investigating women’s stories of surgical traumas (Morawski & Irwin, 2008, 2011), and researching the lived experiences of post-secondary students labeled as gifted and learning disabled (Lummiss, 2017).

The body biography practice has a range of variations in application, depending on the individuals and the nature of the subject. In essence, it encompasses tracing an outline of a person’s body which, in concert with the outer area, is then used as a blank canvas on which the individual is guided through a process of expressing and representing themselves multimodally in relation to a particular experience. Some applications include the use of words, quotes, poetics and visuals to complete their body biographies, while others have included found materials such as string, fabric, and paper, to add such elements as texture and dimensionality
5.2.2 Current version of the body biography. My version of the body biography practice for the current research project moved the mostly 2-dimensional application to a 3-dimensional one that involved the 4 artists creating wearable art using found materials to express themselves as artists at the Paint and Fiber Studio. Each session had a general structure, with enough flexibility for the artists to put their own stamp on the process of creating their wearable items. Although I offered the artists the chance to talk with through individual interviews, it was during the sessions while the artists created their artwork that I garnered the most information about their personal and professional experiences as artists. With the introduction of wearable art items, such as hats, t-shirts, and scarves, the artists were now able to actually perform their representations, instead of simply talking about them. For example, during the sharing times in our sessions, each artist had an opportunity to present and wear her item while discussing its features. During the fashion show, each artist modeled her wearable items while I read a related script about each one—a summarization of her representations and expressions of self as an artist at the Paint and Fiber Studio. A special outcome was each artist’s opportunity to wear their items after they had completed all of our sessions.

For example, Celeste, with aspirations to be an actor, often represented herself performatively. She also enjoyed the process of expressing herself via designing and making clothing. Eva, an ardent activist of people with disabilities, attached meaningful life messages to her items that she would verbally convey, drawing on her eloquent use of vocabulary while modeling them. Through her wearable items and the conversations that transpired around them, I found that Hanna valued her relationships with both family and friends and the support that they gave her. Alina, the self-appointed cheerleader of the group, approached the modeling and making of her items with a flair for spontaneity and an endearing sense of humour. Having the
option to model or perform their wearable items was especially valuable for those challenged by verbal expression. That is, they had another means by which to express themselves, and I had another means by which to learn more about them. That is, each of the 4 artists in my research study had her own unique ways of conveying her personal and professional strengths. Having a series of sessions, as opposed to one or two meetings using more conventional means of data collection, provided the artists with more time to express themselves, and furnished me with more time to deepen my knowledge of them to contribute to practices at their studio.

Furthermore, it could be speculated that extra sessions and more means of expressions lowered the possibility of the artists providing responses that they perceived the researcher wanted.

Although I already had extensive experience working with individuals with disabilities, my participation in the sessions with the 4 artists further enhanced my awareness of their professional and personal strengths. I strove to recognize and actively listen and attend to the significance of their communications. As Macpherson et al. (2016) assert, “Listening in an extended sense is a skill and body of expertise where understanding the alternative vocabularies, tactile knowledge and visual grammars that arts-based interactions create with people takes time” (p. 385). Existing research on the use of multimodalities for self-expression and representation provides support for my findings (Juntunen 2020; Sivenius and Friman, 2020; Sulewski, Boeltzig Hasnain, 2012; Taylor, 2005; and Trusky, 2008). In sum, the use of multimodalities increases users’ options to communicate their personal and professional experiences, thus opening up more opportunities for contributing to best practices.

5.3 Interdisciplinarity

In keeping with the research literature (Dykes, Rodgers, and Smyth, 2009; Kaygan & Aydmoglu, 2017) that emphasizes the importance of interdisciplinarity in finding a solution to a
design problem, I drew from my practical and theoretical background in education and the arts to answer my research questions. In the sections that follow, I elaborate on the connections among the disciplines of design, education, and the arts to underscore the role that each one played in my research study.

5.3.1 Design and education. My past experiences as a teacher, particularly in the areas of special education and the arts, and my current research on learning differences and multimodal learning, put me in an advantageous position to design and deliver the series of body biography sessions. To maximize opportunities to capture the artists narratives, I designed and implemented each session with what I would consider important elements of a lesson (van Diggele, Burgess, & Mellis, 2020; Lika, 2017). For example, to first capture the artists’ attention, while setting the stage for creating their wearable items, I would open the session with a relevant lead-in exercise such as the impact of color, or the use of found materials. I incorporated opportunities for the entire group to come together for instruction and general conversation, while also reserving time for one-on-one consultations to address questions, consider progress, and provide specific feedback. To foster creativity, I built in the necessary time for them to play with materials and consider design possibilities. I also considered other elements such as time management, flexibility, review, and closure, as well as the awareness of the artists’ interests and styles of engaging in the sessions. Rather than acting as a teacher who simply delivers information to students, I acknowledged the artists’ central role in my research, and became a facilitator who supported them as they narrated their personal and professional artist stories by way of their wearable art creations. As a consequence of incorporating the important elements of a lesson into my sessions with the artists, an environment was created whereby they were able to effectively
convey information about themselves on both personal and professional levels—an integral ingredient of working material for contributing to practices at their studio.

5.3.2 Design and the arts. My education in the arts, along with maintaining my own art practice allowed me to offer the artists guidance as they created their wearable items. For example, the artists and I explored the elements of design as they made decisions about such concerns as color, texture, shape and line (Sivenius and Friman, 2020). We also addressed the use of found materials and how they could be transformed into a second life by being upcycled as part of their art work (Emgin, 2012). For example, Celeste made effective use of the tops of coffee pod lids and ribbon to create a designer bracelet, for which she carefully considered such elements of design via circular shapes, contrasting colors, and textures from different kinds of ribbons. To underscore her identity as the “Bling Queen”, Eva upcycled one of her tank tops, placing closely spaced rows of different colored crystals along the neckline. To create texture on the rabbit ears that she attached to her baseball cap, she used different fabrics to make the illusion of fur. My review of the literature in Chapter 2, especially in relation to multimodalities, underscored my decision to use an interdisciplinary approach, which incorporated practical and theoretical aspects of education and the arts into the design and application of the body biography practice. Consequently, I was able to expand the artists’ capacity to share their experiences as artists at the Paint and Fiber Studio, and as a result, place them more centrally in my research on contributing to the creation of practices at The Paint and Fiber Studio. In addition, the insights gained from my findings can inform other art facilitators on how to address practices in their own studios for artists with disabilities. In sum, by approaching my study from an interdisciplinary position, the research process was supported by theoretical perspectives and practices from other fields of study strengthening resulting contributions and recommendations.
5.4 Online, logistical and practical considerations

As a result of the government COVID-19 lockdown, I needed to conduct my research using the Paint and Fiber’s online studio supported by their Zoom account. Using a different service provider would have caused hardship to the artists who had already set up their devices and become technically acquainted with the Zoom platform. The three 2-hour participant observation sessions allowed me to become acquainted with the online studio’s operations, including such considerations as interacting with the artists both individually and as a group, incorporating instruction via short videos, providing exercise breaks, and sharing information on activities pertinent to the Studio and related communities.

Recently, qualitative literatures, from refereed publications to online discussion platforms, have been emerging to address researchers’ and practitioners’ concerns to move their work from on-site locations to virtual spaces. A major consideration has been the use of technology for such tasks as data collection, presentations, and communicating with colleagues and research partners in relation to such issues as travel restrictions, learning new digital formats, and revisiting research and practices from new vantage points (Dahwan, 2020; Lewington, 2021). I also experienced a major change in conducting my research having to suddenly move from the Paint and Fiber’s on-site studio to their very recently established online one. Although this substantial change in research plans opened up new opportunities for conducting my research, it also produced various challenges.

5.4.1 Advantages of online. Initially preferring to carry out my research on-site, I found out that there were several advantages to using the Paint and Fiber’s online studio. First, instead of having to obtain and set up equipment for data collection at the Studio, each session was video recorded and password protected, along with opportunities to take stills for documenting the
artists’ work. In-person use of technology might have caused some discomfort and distractions for the artists, along with the possibility of technical difficulties, which I would have had to most likely address myself. With the Studio’s permission, I was able to access the videos and photographs numerous times at my convenience for transcription and documentation purposes.

In addition, the artists, who regularly participated in the Studio’s other online sessions, were already comfortable with the technology as well as working within the parameters of an online setting. Reason (2021), who was conducting research in collaboration with 2 arts programs for people with disabilities, found that working remotely had its advantages, including equal physical online space, enacted turn taking, improved hearing, less distractions, increased possibilities for creativity, and elimination of transportation issues. One artist associated with the Nurturing Independence through Artistic Development (NIAD) in Richmond, California commented that she could stay home and take care of her health issues while still doing her art work with the support of her studio (Bloom, 2021). In addition to not having to travel to the on-site Paint and Fiber Studio myself, conducting my research online allowed me to see its potential for carrying out the body biography practice in collaboration with artist studios in other parts of the country, or even the world.

5.4.2 Disadvantages of online. Despite the positive aspects of using online sessions, I did find some disadvantages. First, to facilitate the process and defer the cost of delivering the kits to the artists’ homes, I resorted to dividing the artist materials into two large freezer bags, which I then placed into a larger padded mailing envelope for each artist. Consequently, I had to give up my original plan to use new boot boxes sourced from a local business for the actual container for the artist kits. As it turned out, the artists seemed to require additional means of organization as
their materials were sometimes not readily at hand, or being used for other projects. In addition, sometimes an artist did not have the basic garment, such as t-shirt or hat to upcycle.

To create more organization and accessibility for the artists, I would recommend assembling individual bags of materials for each wearable item activity, including the garment of focus, allowing artists to using their own or the one contained in the bag. To defray the cost of materials and address the process of upcycling, I would also encourage the use of found materials, both natural and manufactured. Many other art programs developed similar strategies. For instance, when schools switched to remote learning, a secondary school responsible for teaching fashion courses, prepared kits of materials and tools which were mailed to their students. (Lewington, 2021). To support their artists at home, the NIAD artist studio in California used mail art—art materials that could fit into an envelope to send to their artists to create (Bloom, 2021). During the focus group with the staff at the Paint and Fiber Studio, one staff member also concurred that the garment option would be preferable and, more importantly, would dovetail with their Studio initiative on decorating ready-made garments for their on-line store.

Second, although the artists were familiar with the materials and could carry out their work independently, I would occasionally want to introduce a new skill, such as sewing by hand. At these times, I would find that one of the artists could not manipulate the material or misunderstood the directions that could be immediately rectified with a quick on-site demonstration. However, these times also became opportunities for creating adaptations and alternatives. For example, larger plastic needles, easier to manipulate with larger eyes for threading, would be easier to use for some artists. When one of the artists did not realize that she needed to bring a t-shirt to one of the sessions, I suggested that she use one of her large sketch pads to draw an outline of a shirt which she could then personalize with markers and other
materials. Again, having a separate bag of materials for each wearable art session would help to prevent such a situation.

5.4.3 Practical considerations. In the section on interdisciplinarity, I addressed such considerations as having formal yet flexible plans and providing multiple means of expression and representation while implementing the body biography sessions. In the current section, I consider such factors as size of the group, and the presence of support people. With the average number of sixteen artists in each of their online sessions, the staff at the Paint and Fiber Studio initially preferred that I include a similar number in my research project sessions. As it turned out, I ended up working with 4 artists, and consequently felt in a better position to obtain the knowledge regarding their professional and personal experiences as artists. In her review on the essential elements of narrative inquiry, Butina (2015) emphasized that individuals and smaller groups offer the researcher more opportunities to collect relevant data, and try out methods beyond conventional interviews. Moreover, research indicates that smaller groups offer greater opportunities for participants to communicate what they know, and to receive feedback from the group facilitator and each other (Vaughn, Wanzek, & Murray, 2012).

Having a co-host who knew the artists and had already co-hosted other sessions at the Paint and Fiber online studio, also proved to be advantageous. While carrying out the activities with the artists, the co-host played an important role by supporting my instructions as well as tactfully prompting the artists and asking them questions. During our debriefing sessions, the co-host provided integral information regarding relevant background knowledge on the artists, while also clarifying the artists’ responses. MacPherson et al. (2016) also recognized that an individual familiar with the artist could play a supportive role while the artist participates in data collection sessions. When Hall (2004) conducted a focus group to learn about the social exclusion
experiences of individuals with disabilities, a support person well known to the group, helped individuals to express themselves, while also establishing trust. As Young (2008) commented, however, care must be taken to ensure that such assistants do not unconsciously enter into the creative process and influence the artists words and works.

Finally, the importance of carrying out my research with the artists in the familiar environment of their online studio, with materials and tools they often use, helped to facilitate the implementation of the body biography sessions for obtaining the artists’ personal and professional experiences as artists at the paint and Fiber Studio. Authentic experiences, such as the body biography sessions, are those that are personally relevant from the individual’s perspective and situated within appropriate and social contexts (Wilson & Schwier, 2009). According to recent research that addressed authentic learning in undergraduate design projects, students benefitted in many ways, from developing an understanding of the abilities of users unlike themselves, to creating connections to potential clients (Rieger and Rolfe, 2021; Wilson & Schwier, 2009). In sum, I found that there were both advantages and disadvantages that I needed to heed while implementing the body biography sessions. Not only were these considerations of a technical nature, but they also concerned such factors, from the possible influence of having a co-host in the sessions, to the size of the group, to the distribution of art materials to the artists.

In the following sections, framed by my 3 research questions, I look back on the findings and previous discussion on the body biography practice to present recommendations for future application and research, always with UCD and accessibility in mind. More specifically, I address theoretical perspectives and methodological approaches that provided structure and alternative procedures for implementing the body biography practice. I also consider the
numerous factors needed to create optimal conditions for users to benefit from engaging in its application and for researchers to access the information that they need.

5.5 How does the application of the body biography practice help studio facilitators to become more aware of artists both personally and professionally as a way of contributing to the practices in their art studios?

5.5.1 Personal and professional awareness of artists. To a large extent, artist studios and smaller schools possess similar elements such as mission statements, organization of physical spaces, staff members, curricula, and program transmission. As indicated in the review of the literature on interdisciplinarity, at the center of the above-mentioned elements resides the artists who come to the studio with a range of individual differences, pertinent to such factors as learning styles, interests, and primary means of communication (Layton & Lock, 2003; Manochehr, 2006; Medaille & Usinger, 2019; Stanford, 2003; Townsend, 1998). In the case of the 4 artists’ participation in the body biography sessions, their distinct and unique differences gradually emerged, allowing me to plan and deliver current sessions and make recommendations for future implementations and research.

According to Sanders and Stappers (2012), the designer and researcher may, in fact, be the same person. The facilitators at the Paint and Fiber Studio, may not be formally educated as researchers or designers. They do, however, carry out many tasks associated with designing and researching, from observing artists use of tools that may need modifications, to planning and carrying out a workshop to introduce the artists to new possibilities for their work. The body biography practice could offer a viable means by which the staff could learn more about the artists and their experiences, while revisiting and revising the studio’s practices. Of particular relevance is the possibility that the body biography practice can be carried out by the Studio’s
staff with a limited amount of in-service education. Furthermore, because found materials are used in the body biography’s implementation, less resources, both material and financial, are needed.

5.5.2 Recommendations. For future implementations of the body biography practice, it would be important for studio facilitators to be aware of the possible differences that the artists, both incoming and current, would bring to the sessions. For example, knowing their interests would help to plan activities or projects to include in the studio curriculum. Understanding each artist’s learning style would help to plan and carry out each session, from including time to meet with each artist, to providing time for artists to respond to a question, contribute to conversations, or just engage in their art work.

The studio facilitators would also want to consider the impact of their own individual differences in planning and implementing the sessions, especially in relation to the artists’ approaches to engaging in the art activities. In a study on the effect of the match between the learning and teaching styles of secondary school mathematics teachers and students’ achievement, Ovez and Uyangor (2016) found that teachers design the learning environment depending on their own learning approaches. Furthermore, Ovez and Uyangor discovered that there is a close relationship between teachers’ learning styles and the level of achievement that students attain. That is, the closer between the two, the higher the level of achievement. Similar findings have emerged in a broad range of areas from technical studies in post-secondary learning (Thompson, Orr, & Thompson, 2002) to teacher pre-service education (Rosenfeld & Rosenfeld, 2008). To quote Rosenfeld & Rosenfeld (2004), “Having teachers focus on their own ILDs seems to make them more sensitive to the diverse learning needs of their students” (p. 482). In her study on what enables art students to pursue their work, despite encountering anxieties and
uncertainties, Carabine (2013) emphasizes the encouraging function that tutors or facilitators can provide as a major support. In particular, she advocates for facilitators who have the capacity to be reflective and thoughtful while encouraging artists to explore, experiment, and learn from experience. Carrying out similar tasks, it would follow that the facilitators at the Paint and Fiber Studio could benefit from acknowledging their own learning styles or approaches with regard to their planning and implementing the sessions for the artists. As an option, studio facilitators could create their own body biographies while guiding the artists to fashion their own versions. At the end, facilitators and the artists could both model their wearable art items and have a conversation around them. Not everything has to be perfectly aligned, but having an awareness of such differences would place artists in a better position to reach their potential both personally and professionally, while placing facilitators in a better position to support the artists in the process.

For example, although Eva enjoyed the company of other artists and supported their work, she preferred to remain quiet when concentrating on her own art. On the other hand, when it came time to share her finished pieces, Eva was quite verbal and used rich vocabulary to talk about a variety of subjects. She mentioned, however, that writing was not one of her better skills, noting that it has been slowly declining in recent years. Celeste, although challenged by verbal communication and the physical act of writing, thrived when she was engaged with creating her wearable items. She communicated that she enjoys designing and making clothing and jewelry, and writing stories and making books. Celeste has a rich family history associated with sewing. In fact, she and some of her family members often work on sewing projects together. In addition to dedicating her time to visual arts and creative writing, Celeste also participates in dramatic arts and has even considered becoming an actor.
5.6 What are the contributions of the body biography practice for design research methods, especially in relation to designing for people with disabilities?

<table>
<thead>
<tr>
<th>Body Biography</th>
<th>Narrative inquiry, interdisciplinarity, multimodal literacies</th>
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<tr>
<td>Expanded expressions of user experience</td>
<td>Individual portraits rather than composites</td>
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<tr>
<td>Upcycled materials and facilitator led</td>
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Figure 48: Body biography and disabilities

5.6.1 Design research and people with disabilities. Looking through the lenses of different disciplines provides alternative ways of finding a solution to a problem. Narrative inquiry, which is the study of people in their natural settings, helps to make sense of the meanings people express and represent in relation to events and issues in their lives. Providing multiple ways of
making meaning allows individuals more opportunities to communicate their thoughts and feelings. While planning and implementing the body biography practice, I drew from my background in education, the arts, and design to provide the 4 artists with access to multiple means of narrating their personal and professional experiences as artists at the Paint and Fiber Studio. Actually, it was during the body biography sessions that I was able to capture their thoughts and feelings as they designed, made, and presented their wearable art items.

5.6.2 Body biography practice. According to Sanders and Stappers (2012), users, who are considered experts of their experiences, can play integral roles in generating knowledge, generating ideas, and developing concepts. In order for them to take on these roles, however, they “…must be given appropriate tools for expressing themselves” (p. 24). When working with individuals such as the artists at the Paint and Fiber Studio, who come to the sessions with a broad range of intellectual and physical disabilities, it is even more important to provide tools that can support the expressions of their contributions to the design process, especially when more regularly used ones such as interviews and questionnaires would not suffice. That is, Sanders and William, (2001) point out that “say” methods are embedded in verbal communication and used in situations such as traditional focus groups, whereas “make” methods are distinctive in their capacity to encourage creative expression from everyday people, especially for “…accessing people’s unspoken feelings and emotional states” (p. 3). Make methods, seem especially appropriate for studios such as Paint and Fiber, where artists regularly express and represent themselves and the world around them via the arts. In fact, artists have long been using the arts to convey their own emotional, cognitive and kinesthetic commentaries on life experiences. For example, Marinkovic (2021) describes painting as a “…dynamic
multimodal thinking process, integrating visual perception, material actions and expressive ways of thinking” (p. 389).

Although the artists were provided with opportunities to convey their thoughts and feelings in their journals, as well as during final individual interviews with me, it was during the times that they were designing, making, and presenting their wearable art items that the artists seemed to best express and represent themselves via multiple means, from modeling their wearable art items to conversing about the meanings of their work. For example, the artists made decisions about the choice of color for a wearable art item. They also shared, talked about and even performed their delight at completing the plan for the wearables. The sessions had a general structure, yet latitude for the artists to interpret my instructions to create their own versions of wearable art. I would speculate that such information could not have been accessed by say methods alone. It seemed to be mostly through the act of making that the artists made connections to both known and newly-discovered knowledge regarding their own thoughts and feelings, from tacit, “things we know but are not able to verbally communicate”, to explicit, “what can be stated in words, and is relatively easy to share with others” (Sanders & Stappers, p. 52, 2012). At the same time, I came to know them better as individuals, not just with disabilities, but artists with talents, aspirations, interests, needs, and the capacity to make important contributions to the practices at the Paint and Fiber Studio.

For example, I found that Hanna, an established and confident artist, often features her family members and friends in her art work. She also has a special interest in Florida as well as fairy tale characters. She is a capable writer and often incorporates words and phrases into her works of art. Although she has experienced a number of different art techniques and tools, Hanna usually uses markers, brushes, paint, an iPad, and an array of different format sketch books and
journals. Although preferring to work independently, she also welcomes opportunities to interact with other artists and receive guidance on her art projects. Alina was a creative and expressive individual who always welcomed guidance when taking her art work from initial ideas to finished creations. She appreciated the company of her fellow artists and often encouraged their art work with positive feedback. Alina enjoys building both 2- and 3-dimensional works of art, especially of New York City, which she embellishes with symbols and bright colors. In view of my interactions with the artists during the body biography sessions, I would speculate that the making process allowed them to express and represent valuable information that would have been missed in interviews or focus groups.

Of particular interest is the relatively limited amount of new materials and in-service education that would be needed to implement the body biography at Paint and Fiber Studio, and potentially at other similar studios. That is, facilitators, already familiar with the materials and practices at the studio would require minimal instructional time to use the body biography, which could be easily incorporated into the program’s curriculum as another activity for the artists. Of equal importance is the emphasis placed on using upcycled materials which would help to defray the cost of implementing the body biography. Implementing the body biography practice with both incoming and longer-term artists could furnish a broad range of knowledge to inform practices at their studio.

5.6.3 Recommendations. While considering the data to answer my research question on designing for people with disabilities, several recommendations emerged as follows: (i) limiting the number of participants to 3 to 6 for each group; (ii) following and adapting the elements of a lesson plan to deliver the body biography sessions; (iii) providing structure, yet room for flexibility to allow the users to put their own stamp on the activity; and (iv) preparing for
unexpected circumstances, such as absences or lost materials. Having a background in the arts, or collaborating with those who do, would help to guide the users as they make decisions regarding the creation of their wearable items. In fact, it was a staff member at the Paint and Fiber Studio who recommended focusing on wearable items for the implementation of the body biography practice. Emanating from my findings were also recommendations for practices in college or university design classes. For example, teaming up with one or more artist studios as part of the assigned activities for a course could provide design students with opportunities to insert their own disciplinary perspectives and practices into the implementation of the multimodal narrative inquiry via the body biography practice. A potential result could be the discovery of findings for revisiting and revising the body biography practice and adapting it to other situations and users with, or even without, disabilities.

Generated by my findings were also recommendations for practices in college or university design classes. For example, teaming up with one or more artist studios as part of the assigned activities for a course could provide students with opportunities to insert their own disciplinary perspectives and practices into the implementation of the multimodal narrative inquiry via the body biography practice. A potential result could be the discovery of findings for revisiting and revising the body biography practice and adapting it to other situations and users with, or even without, disabilities. Another recommendation would be to encourage design programs to incorporate a semester-length field placement experience teaming up students with users with disabilities. During the placement students would keep a journal for field notes and reflective entries, and would have weekly or bi-weekly classes in which they and their classmates would meet to report on their experiences and insights they have gained for the design process. Such a placement could help the students become more empathetic, while expanding their impressions
and knowledge regarding disabilities. Situations such as schools, senior communities, rehabilitation centers, and the university’s student academic assistance programs could act as sites for such placements.

5.7 What are the design process implications for the online implementation of the body biography practice stemming from the government COVID-19 lockdown?

![Figure 41: Online implementation practicalities](image)

It was unlikely for people to envisage the extensive reliance on web platforms and technology in an emergency situation brought about by government responses to COVID-19 which moved our ways of communication to online modes (Busuttil & Farrugia (2020). In essence, it was almost overnight that everything shifted radically and moved into unchartered territory, “…where there are no guidelines and where much of what works in person may not work online” (Winter, Costello, O’Brien, & Hickey, 2021, p. 235). As previously mentioned, the government COVID-19 lockdown required artist studios to make alternative online arrangements for their artists. Paint and Fiber was no exception. All of the artists, who seemed to have access to devices that would connect them to the Studio’s Zoom platform, now attended online sessions. It was via Paint and Fiber’s Zoom platform that I engaged the 4 artists during the body biography sessions.
Moving my research study from the on-site location of Paint and Fiber to its online studio resulted in a number of implications for the design process as follows: (i) participant observation, (ii) online data collection, (iii) artists online, (iv) artist kits, (v) session plan, (vi) group size, (vii) flexibility, (viii) and (ix) co-host.

5.7.1 Participant observation. Prior to implementing the body biography, it is important to participate in several observation sessions to become acquainted with the artists, the routines of the studio, the way that the staff and the artists interacted with each other, as well their use of technology and the online platform provider.

5.7.2 Online data collection. Having to use equipment to gather data on-site could pose some challenges such as creating distractions for the participants, spending time and funds obtaining and using the equipment, and contending with the potential for technical difficulties. After becoming familiar with its technology and connecting to its service, the online platform allows video-recording of the sessions as well as the capacity to take still photographs, convenient for documenting the artists’ work. Sessions, which are password protected, are stored for a period of time and can be accessed to carry out transcriptions and analyses.

5.7.3 Artists online. Artists can connect to the online platform with either a cell phone, computer, or i-pad. When online at the studio, the artists each have the same physical online space with opportunities to learn online etiquette and technologies without having to consider the challenges of transportation or the implications of possible health care issues. It is important for the researcher to make sure that the screens of the artists’ devices are well-positioned and away from any glare, and the sound is adjusted for optimal participation in the session. Having their own page on the studio website would allow the artists to include the progress of their work,
along with commentary and performances involving their wearable art or related items, and even a fashion show.

5.7.4 Artist kits. According to Sanders and Stappers (2012), “Creating a toolkit that is fit for the study is a key skill and key factor to success” (p. 70). To avoid duplication, it is important to first consult with artists and staff regarding what materials and tools they already have in their possession. Then, dividing necessary materials and tools for each body biography session into separate bags would help with organization and prevent lost or misplaced items. Using as many natural and manufactured found materials as possible would help to foster sustainability and defray costs. Artists could also be encouraged to locate such items themselves, either in their home or outside in the neighborhood. To prepare for the possibility that artists may not have a wearable item to upcycle, include one in the corresponding bag. Delivering bags to the artists as needed, just before the corresponding session, would be the ideal arrangement. If this is not possible, combing the bags into one larger package and then delivering them to the artist would be a viable alternative. In this latter case, artists would be responsible for storing the package in a location that they can easily retrieve the necessary container when needed. It would also be important for each artist to have a large sketch pad for such purposes as making drawings of their wearable art, sketching out some designs, and brainstorming in general.

5.7.5 Session plan. As already mentioned in the section on interdisciplinarity, it is imperative to follow a definite plan, much like a teacher’s lesson plan, that has several distinct steps, with one built upon another to activate the main objectives for each session. For example, a definite lead-in would prime the artists for the main activity or creation of the wearable item, while a closure would recap what had been already done and prepare them for the following session.
Including a time to reflect on one session after its completion would help in planning and implementing subsequent sessions.

**5.7.6 Group size.** A group of no more than 6, and no less than 3, is preferable for establishing an environment that is conducive to both one-on-one work and smaller group process. With a smaller size group, individual artists can get the attention they need, conversations among the group can take place more easily, and the possibility of distractions should be lower. Also, if an artist is not available one day, there are still enough artists to continue with the session.

**5.7.7 Flexibility.** To accommodate for unexpected circumstances, such as an artist’s difficulty with acquiring a new skill or carrying out specific instructions, having alternative plans would be critical. For example, if an artist has misplaced the wearable item, the artist can draw an outline of the item in a large sketch pad as a way of continuing to engage in the session. If an artist finds it challenging to express oneself verbally, the artist can turn to other means of communication, such as drawing pictures, using gestures, or even dancing. Also, it is important to provide time for the artists to play with the materials and their ideas to foster creativity during the sessions.

**5.7.8 Co-host.** It is important to have a co-host from the studio who is familiar with the artists as well as the workings of the on-line studio. The co-hosts can help to support instructions by tactfully prompting the artists, rephrasing questions or statements. The co-host, who would have already used the studio’s technology and online platform to communicate with the artists, can also assist with technical support when needed.

**5.8 Limitations**

A research report is not complete until the limitations of the study have been addressed. According to Ross and Zaidi (2019), “Regardless of the format scholarship assumes, from qualitative research to clinical trials, all studies have limitations” (p. 261). The first limitation of
my study on the body biography practice is the limited number of participants—4 artists. Although in-depth knowledge regarding each of the 4 artists was obtained, the knowledge could not be extended to other artists with disabilities or even wider populations. Expanding the participant pool of artists has the potential to include representations from a broader range of such considerations as gender, learning styles, and interests, all of which could influence the findings of the body biography practice. The second limitation pertains to the newness of the subject matter of the study, which resulted in a minimal number of directly-related research studies from which to draw. Conducting further studies on the body biography practice with artists with disabilities and their studios would help to add to the research literature. The third limitation was my own background and experiences, especially in education and art, which influenced the direction of the research both theoretically and practically. Providing opportunities for other researchers, such as students in design or related fields, would bring new perspectives with the potential for different outcomes. A fourth consideration, the changes associated with having to move from an on-site studio to an online one, though not necessarily a limitation, could have also had an impact on the research. Studying an on-site implementation of the body biography practice might yield different findings. Finally, while data collection that focused on the use of multimodalities, particularly the arts, appeared successful for accessing the artists experiential narratives, the transferability of using the same methods may not necessarily fit in other situations.
Chapter 6: Conclusion

*Through the doing of creative arts, people with learning disabilities can transcend the exclusionary landscape and begin to reimagine and transform understandings of learning disability and difference in society.* (Hall, 2013)

The art of artists with disabilities has the potential to be a valuable vehicle for accessing their individual differences of strengths, talents, interests, aspirations, learning styles, and ways of making meaning. Such knowledge has the potential play an integral role in contributing to practices for art studios for individuals with disabilities. To provide artists at the Paint and Fiber Studio with opportunities to convey their personal and professional experiences as artists there, I conducted a research project on the body biography practice, which drew from the fields of education, the arts, and design. The practice, which featured the creation of wearable art, placed the artists at the center of the data collection design process in which they had multiple opportunities to make and narrate their experiences. In addition, I, the researcher, had multiple opportunities to capture and address their experiential knowledge. Contextualized by my 3 research questions, a summary of the insights and recommendations that emerged from my research study are included below. Diagrams that represent an overview of the research process in relation to answering the questions have been included in Appendix A.

6.1 Question 1 (Overarching): How does the application of the body biography practice help studio facilitators to become more aware of artists with disabilities both personally and professionally as a way of contributing to the practices in their art studios?

6.1.1 Insights. The body biography practice allows facilitators to capture more holistic portraits of the artists that go beyond their disabilities to include their personal and professional knowledge and experiences, such as their learning styles, specific interests, and aspirations. In turn, such information from the artists, both long-term and newly enrolled ones, would provide
facilitators with valuable knowledge as they revisit and revise studio practices for future implementations. Although the facilitators may not be formally trained as designers, they do fulfill many functions of ones, from preparing to revamping the studio’s curriculum. In fact, their relevant skills and knowledge of the studio’s workings and tools as well as their direct contact with the artists place them in an optimal position to do so. Furthermore, as they engage the artist in their body biographies, facilitators can create their own body biographies as a means of becoming more aware of their own learning styles, interests, and other factors that could influence their roles at the studio. Hence, the body biography practice supports the notion of the facilitators and artists as co-collaborators at the studio.

6.1.2 Recommendations: In view of the above insights, the following recommendations have been made for future implementations of the body biography practice: (i) use multimodal means of expression and representation to expand artists options of communication, (ii) provide a definite structure for each session that allows room for flexibility to encourage artists’ own sense of individuality, (iii) create smaller groups (3-6) to allow for more personalized participation for the artists, (iv) include a co-host or support person who is familiar with the artists and can support and encourage, and (v) conduct sessions at the artists’ own online or on-site studio with known materials and tools. See Appendix A for a diagram that provides a visual of the overall process involving the insights and recommendations for question 1.

6.2 Question 2: What are the contributions of the body biography practice for design research method, especially in relation to designing with people with disabilities?

6.2.1 Insights: The body biography practice has the potential to foster empathetic and holistic portraits of the artists as unique individuals with their own interests, abilities, and aspirations. The use of multiple sessions to obtain the artists’ knowledge and experiences allowed them more
time to reflect and generate more relevant personal and professional details about themselves. Such information would be especially beneficial for smaller organizations where the users are encouraged to provide input into the operations of their programs. Moving the body biography practice from its original 2-D form to a 3-D one via wearable art, broadened the range of possibilities for the artists to express and represent themselves from verbal to performative communication. In addition, there is relatively limited need for in-service education for facilitators, who already have the skills and knowledge of the artists as well as the workings and tools of the studio to implement the body biography practice.

6.2.2 Recommendations: Concerning the above insights, the following recommendations have been made for future implementations of this variation of the body biography practice: (i) provide a definite structure for each session that allows room for flexibility to encourage artists’ own sense of individuality, (ii) expand forms of expressions and representations, from verbal to performative, for the optimal input of the artists via the body biography practice, (iii) enact active listening to hear and capture the artists’ contributions, (iv) provide multiple means of communication beyond interviews and questionnaires to accommodate artists communication needs. See Appendix A for a diagram that provides a visual of the overall process involving the insights and recommendations for question 2.

6.3 Question 3: What are the design process implications for the on-line implementation of the body biography practice stemming from the government COVID-19 lockdown situation?

6.3.1 Insights: Having an online studio eliminated the need to set up equipment on-site, which has its own challenges such as distractions for the artists and any technology malfunctions that could occur. The recordings provided detailed records of the sessions, including photos, for
ease of transcription and reference. When the sessions are online, artists avoid transportation
issues and can still participate despite health concerns. The use of found materials helped to
defray costs. Although there are advantages to having online sessions, disadvantages arose as a
result of moving from on-site to online. More specifically, the artist kits, which were originally
comprised of 2 freezer bags, one for materials, and one for tools, and included in a cardboard box,
needed to be streamlined for delivery. Also, instead of dividing the materials into one large bag,
it was concluded that a bag of materials prepared for each activity would help with organization
and readiness to participate in the sessions. Other disadvantages were the need to modify
demonstrations of new skills, and reminders for artists to position their screens, adjust their
sound and eliminate any glare from sources of light such as windows in front of their devices.

**6.3.2 Recommendations**: In light of the above insights, the following recommendations have
been made for future implementations of the body biography practice: (i) first become
acquainted with the studio’s online technology and operations, (ii) begin with participant
observation to become familiar with the artists, staff, and general operations of the online studio,
(iii) record sessions for future use, (iv) assemble individual bags of materials for each activity,
including wearable items, (v) use found materials to defray costs, (vi) have artists adjust screens,
sound, and lighting, (vii) create smaller groups (3-6) for a more personalized level of
participation, (viii) include a co-host or support person who is familiar with the artists, and (ix)
provide a definite structure for each session that allows room for flexibility to encourage artists’
own sense of individuality. See Appendix A for a diagram that provides a visual of the overall
process involving the insights and recommendations for question 3.

During the last session of the body biography implementation, each of the 4 artists narrated
their wearable art. Eva thoughtfully articulated the meaning of her hat and tank top, both
bedazzled in arrays of jewel-tone rhinestones. She emphasized that people need to stop criticizing themselves and others, and appreciate the world around them. Hanna modeled two red, gold and white bracelets; a fairy tale themed t-shirt; and two head coverings that reflect her passion for princesses and brides. Love, hearts, and primary colors emanated from her works. With a garland of silver stars on her head, Alina posed to present her bracelets of multicolored beads and a t-shirt with a name tag that says “police girl”, a career that she would like to pursue one day. Her infatuation with NYC emerged in her black and white line drawings of iconic city buildings—welcome subject matter to transfer on to t-shirts, scarves hats, and bags. Celeste, who enjoys designing and making clothing and jewellery, performed a folk dance as she models her designer collection featuring a zebra-striped tunic with a shark-bite hem; red, black, and white bangles; a scarf with a multi-textured fringe; and a fedora with its dome covered in a repeating cactus print. She emphasized that she comes from a long line of seamstresses, including her mother, who encourages her to make her designs come to life.

In sum, every individual has a narrative comprised of a bricolage of storied life experiences, attributes, and aspirations. Multimodalities, particularly the body biography practice, has the capacity to play an integral role in accessing the valuable working material of such narratives, thereby placing the user as a unique individual at the center of the design process. As a consequence, both researchers and practitioners could have a broader range of practices and tools from which to choose as they strive to find solutions to a broad range of design challenges.
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Appendix A: Diagrams for Overview of Research

In each of the following diagrams an overview of the research has been broken down into 4 parts: (i) data collection, (ii) data analysis and interpretation, (iii) insights and (iv) recommendations. Although each representation has been delineated into 4 parts to inform the reader about the different components of the research, it is important to point out that data collection, data analysis, and interpretation are interrelated processes, that begin to work together from day 1 of the research project.
Question 1 (Overarching):
How does the application of the body biography practice help studio facilitators to become more aware of artists with disabilities both personally and professionally as a way of contributing to the practices in their art studios?

Data Collection
- Researcher background
- Narrative inquiry
- Participant observation
- BB sessions
- Artist interviews
- Artist kits and journals
- Researcher journal
- Staff focus group

Recommendations
- Use multimodal means of expression and representation
- Structure sessions with flexibility
- Make smaller groups (3-6) for personalized participation
- Include co-host/support people who are familiar with artists
- Conduct sessions via artists’ studio with known materials & tools

Data Analysis/Interpretation
- Inductive approach
- Transcription
- Close readings of transcripts
- Carry out iterations
- Creation of meaning units
- Lumping/splitting coding and categorizing
- Thematic analysis

Insights from research
- Goes beyond artists’ disabilities to obtain holistic portraits of them multimodally
- Supports learning about artists in relation to their contributions to revisiting and revising studio practices
- Can be implemented by facilitators who have relevant experience and skills
- Encourages facilitators to become more aware of their own learning styles & approaches for planning and implementing sessions with the artists
Question 2
What are the contributions of the body biography for design research methods, especially in relation to designing with people with disabilities?

Data Collection
- Researcher background
- Narrative inquiry
- Participant observation
- Body biography sessions
- Artist interviews
- Artist kits and journals
- Researcher journal
- Staff focus group

Data Analysis/Interpretation
- Inductive approach
- Transcription
- Close readings of transcripts
- Carry out iterations
- Creation of meaning units
- Lumping/splitting coding and categorizing
- Thematic analysis

Recommendations
- Structure sessions with flexibility
- Expand forms of expressions & representation for optimal artist input via BB
- Enact active listening to hear & capture artists' contributions
- Provide multiple means of communication beyond interviews & questionnaires

Insights
- BB narrative inquiry has potential to foster empathy and holistic portraits of artists, especially beneficial for small organizations where artists have direct input
- Moving BB from 2-D to 3-D via wearable items broadened range of expressions and representations from talk to performance
- Relatively limited need for in-service for facilitators to implement BB
- Multiple sessions beneficial for capturing artists' knowledge and experiences
Question 3: What are the design process implications for the on-line implementation of the body biography practice stemming from the government COVID-19 lockdown situation?

Recommendations
• Become acquainted with studio’s online technology and operations
• Begin with participant observation
• Record sessions for future use
• Assemble Individual bags of materials for each activity, including wearable items
• Use found materials to defray costs
• Have artists adjust screens & sound
• Make smaller groups (3-6) for personalized participation
• Include co-host or support person
• Structure sessions with flexibility

Data Collection
• Researcher background
• Narrative inquiry
• Participant observation
• Body biography sessions
• Artist interviews
• Artist kits and journals
• Researcher journal
• Staff focus group

Data Analysis/Interpretation
• Inductive approach
• Transcription
• Close readings of transcripts
• Carry out Iterations
• Creation of meaning units
• Lumping/splitting, coding and categorizing
• Thematic analysis

Insights
• Eliminates need to set up equipment on-site, which could pose distractions
• Online recordings provide detailed record of sessions, including photos, for ease of transcription and reference
• Artists can avoid transportation issues & participate despite health concerns
• Use of found materials eases costs
• Artist kit deliveries require adaptations
• Skill demos require modifications
• Issues can emerge re lighting and position of artists’ screens