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Multimodal Dissertations: Opportunities for Multimodality in Higher Education

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Graduate Program in Education

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

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Multimodal Dissertations: Opportunities for Multimodality in Higher Education



Annie Tran

Abstract

In an era when communication and higher education are rapidly changing, there is much to learn about multimodality and the dissertation. For example, how can multimodality be used to forward an argument or inform research in a dissertation? How is technology changing the format of the dissertation? And how might multimodality and technology change the experience of composing a dissertation? This study addresses dissertations and the problem of understanding how research can be argued, represented, and presented in multimodal ways, and considers the lived curriculum of Ph.D. graduate students. My work addresses the learning needs of contemporary graduate students so that they may present their dissertation in multimodal ways. The research questions explored in this study are: what are the lived experiences of Ph.D. Education graduate students who created multimodal dissertations? What is my lived experience as someone conducting a multimodal Ph.D. dissertation in Education? What do students understand to be the affordances and constraints of multimodal dissertations? What do I understand to be the affordances and constraints of my research process? And what are the implications of promoting multimodal dissertations in the social sciences? In this study, I define a multimodal dissertation as one that employs multiple modes in meaningful ways to communicate research. Using a multiliteracies theoretical framework, this exploratory case study includes five participants who have successfully defended a multimodal dissertation in a Faculty of Education in North America. Data collection methods include a personal journal, interviews, and a multimodal analysis of the participants' dissertations. The findings reveal my participants' lived curriculum (the stories they had as individuals, with their scholarly community, and with their dissertation) was very important to the creation of their dissertation. Further, my participants' multimodal dissertations have resulted in accolades such as winning awards and receiving SSHRC grants; however, these positive experiences have been tempered by challenges such as technical difficulties and institutional requirements. Recommendations for further research include how to best support students who want to use a multimodal format for their dissertation, how supervisors and examiners assess these dissertations, and how the lived experiences of the graduate students currently completing multimodal dissertations impacts their work. This study contributes to the body of knowledge in my field by creating new opportunities for alternative dissertation formats for future graduate students. It also contributes to the literature on multiliteracies and multimodality in higher education and the ways technology and communication are changing how students research, learn, and disseminate their findings.



multiliteracies, multimodality, higher education, technology, communication, dissertations, graduate education

Acknowledgments

My participants: You have inspired me to experiment with my work and proceed with bravery. You have encouraged me to see the creative future and my place in it.

Thank you, Drs. Jennifer, Anar, M.J., & Kathryn.

My supervisor: You have taught me strength in the face of challenges. You have given clarification often sought. You are fundamental to this process.

Thank you, Dr. Rachel Heydon.

My committee member: You have taught me the meaning of dedication, support, and love.

Thank you, Dr. Kathy Hibbert.

My family: You have taught me the value of hard work. I will cherish the wisdom you have given me.

My friends: Your unwavering support and belief in me has taught me who I am when I did not know.

My mountain: You have stood strong, when I was facing the storm.



 **Dedication**



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Warning

This dissertation includes linguistic, visual, and spatial elements. Viewer discretion is advised.

WHAT *is* this dissertation?

INSPIRED BY

- Infographics
- Iconography
- Typography
- Data Visualization
- Colour Psychology
- User Experience



Dear Readers,

Thank you for joining me on this wild journey. Admittedly and candidly, I wanted to test the limits of the dissertation. Deciding what my dissertation would look like was a long and winding journey. Finally, in the third year of my Ph.D., I realized that my dissertation was going to be a PDF with interactive elements. Why? Because I knew this format could be easily accessed through an online repository and disseminated on blogs or other online formats such as podcasts or YouTube. If I had unlimited resources and time, I would have created an interactive PDF that included multiple audio and video elements, but that would have caused issues for accessibility. I could have incorporated photography, as it is one of my passions (I listened to a photography course in the background while writing my dissertation). But the subject matter of my research and photography did not naturally align, so I decided against this. Throughout the composition of this dissertation, I toyed with the idea of including comics, videos, and audio, but I did not find these options especially meaningful.

*My goal was to design information in a way that was manageable, accessible, and aesthetically pleasing. It was important to me to question every design decision I made. I asked myself, “Why would I use these colours/pictures/layout? Will this approach/design make the most sense to me and to my readers?” During my Ph.D. process, I taught a teacher education course, *Multiliteracies Pedagogy*, and I needed to make sure I practiced what I preached! I worked hard to include music, video, games, and movement in my lectures. I could not present slides that were just text-based and boring, because I knew I could not process information that way. I needed to have at least three to four different modes in every lecture. Then I started to find ways to use a multimodal approach for my coursework, conference presentations, and other teaching. I was always trying to push my literacy practices in a way that was different from text-based.*

I have always wanted to be an infographic creator. I can make meaning with research and data from an infographic very easily. I knew icons were heavily used in infographics, so I have incorporated icon elements throughout this dissertation.

This PDF broke some unspoken rules. My dissertation has two columns and it is oriented as a landscape. I tried to make it as colourful as possible, as the use of certain colours will stimulate various thoughts and emotions. Sometimes, I interrupted the reading direction of left to right—top to bottom with the layout I used. I included instructions on how to approach certain sections.

Nevertheless, this dissertation still has a table of contents, figures, tables, and appendices. It follows the traditional five-chapter layout. It has a bibliography and is APA formatted. It has all the components to meet academic standards.

There are some components of this dissertation that I have decided not to explain, as an explanation might interfere with the aesthetics of the experience. With these components, I invite readers to engage with the work and interpret it in their own ways. I offer a divergence from the dissertation genre as a provocation for new, collective, meaning-making.

I thank you in advance for your patience in reading this dissertation.

Design of this dissertation

1.3 Background Summary

I begin this chapter by discussing the historical background of the Ph.D. dissertation and how it is conceptualized presently. Next, I discuss how I conceptualize knowledge, the role of the university in providing support and guidance to graduate students, and employment options for Ph.D. graduates. Table 1 summarizes this chapter to act as an organizational aid to the reader. In addition, the table is a visual representation of the table of contents for chapter 1.

Research Questions	
1.4 Ph.D. Dissertations	1.4.1 Traditional Dissertation 1.4.2. Current Dissertations 1.4.3 Future of Dissertations
1.5 Current State of Doctoral Education	1.5.1 Dissertation Formats in Canadian Universities
1.6 Students in North America	1.6.1 Examples of Completed and Currently Completing Dissertations
Database of Non-traditional Dissertations	
1.7 Chapter 1 Literature Summary	

Table 1. This chapter introduces historical and current perspectives on the dissertation, what constitutes as scholarly knowledge, institutional policies and requirements, and changing employment options for students.

Every chapter begins with a summary table of the content in the chapter. The chart is visualization of the table of contents and alerts the reader to the main topics in the chapter.

1.7 Chapter 1 Literature Summary

Every chapter ends with a chapter summary in a table.

The Ph.D. dissertation has been long viewed as a bureaucratized, formalized, academic, monomodal document. Discussions in Canada, the United States and the UK are reimagining the dissertation.
Knowledge creation is changing academic's understanding of research and the ways we communicate, represent, and present academic work. With changes in technology, the ways we teach and learn are changing graduate education.
The university institution is focused on being more engaged in terms of technology, support and how to support graduate students through the Ph.D. process.

DR. JENNIFER WATT
Jennifer was a substitute teacher, taught in England. She taught the language and literacy course in a teacher education program and invited students to do a lot of multimodal assignments.
Jennifer's supportive network included her husband, kids, a local artist, friends, mother, sister, and students.
Described her supervisor and committee as encouraging.
She has been doing multimodal work for years.

DR. KATHRYN RICKETTS
Kathryn is a professional dancer who ran a post-secondary dance conservatory. She was a learning and educational consultant.
Kathryn's supportive network included her dog, friend, cousin, uncle, community, photographers, and universities.
Expressed her supervisor and committee as encouraging.
She has been dancing and performing for years.

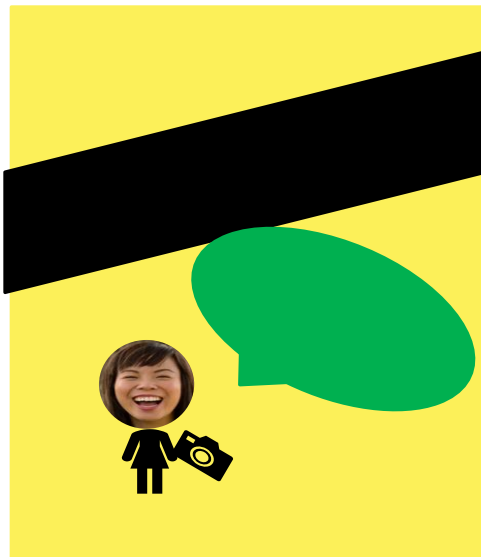
DR. ANAR RAJABALI
Anar had been teaching in some form (conservatory, religious, learning) since she was 19. She runs a centre for ESL students.
Anar's supportive network included her sister, parents, and students.
Had her supervisor and committee as encouraging.
She has been writing poetry since she was young.

DR. MJ BARRETT
MJ has taught since 1989 in various education, primarily in high school. She is now an assistant professor.
MJ's supportive network included her group of women, a programme to help build the website, language photographer, community, and the earth.
Used her supervisor and committee as encouraging.
She has always been exploring embodied knowing.

There are summaries in the data chapter that are meant to visually represent the information from the chapter as a supplement to the written text.

Multiliteracies Pedagogy Experiencing	Jennifer Watt	Kathryn Ricketts	Anar Rajabali	MJ Barrett
Conceptualizing	Life writing, teacher education, vulnerability, diaspora, multiliteracies, citizenship, women, cancer scholarship, L2/EFL, arts-based methodologies	Poetic narrative, embodiment, history, cultural identity, interdisciplinary	Poetic narrative, embodiment, history, cultural identity, interdisciplinary	Animism, ontology, epistemology, decolonizing research, expertise, research epistemologies, research methodology, arts-based inquiry, energy healing, environmental education, spirit
Analyzing	Supervisor: Dr. Wayne Smith Committee: Fana Fares, Debbie Schreier, Wynne Curtis, Carl Leggo	Supervisor: Dr. Carl Leggo Committee: Rita Irwin, George Belliveau	Supervisor: Dr. Paul Hart Committee: Cecelia Russell, Carol French, Shannon Fries	Supervisor: Dr. Colleen Barbour Committee: Vicki Kelly, Lynn Fink, Carl Leggo, Rosemarie Shi, Imogen Smith, Karen Meyers
Applying	Narrative, poem, journal, e-mail, photo, film, comic, photo, collage, alphabet book, art	Poem, reflection, photo	Poem, spoken word, song	Poem, photo, sound clip, music, recording

There will be “For Readers” instruction guides in the data chapter to explain how to approach the organization and content of the section.



Anatomy of a Multimodal Dissertation



Figure 1. Elements of a multimodal dissertation using icons. For example, a page in a multimodal dissertation can contain music and text.

Compositions of Multimodal Dissertations



re-animated perception

"Children's native capacity for narrative consciousness" has been highly damaged through western schooling processes. The key to mitigating the effect of the "normally disembodied perception" is reversing the habitual superimposition of the conceptual over the perceptual (Bai, 2009, p. 136; see also, Bai, 2001; Payne, 2005a; Smith, 2006).

Bai refers to this (renewed) connection as re-animation of perception, a process that enables a change in "the very modality of perception" (p. 136).

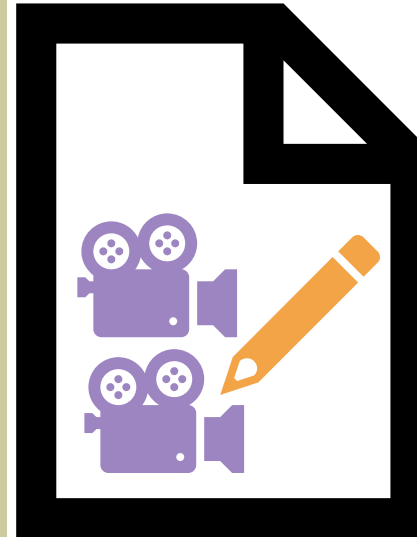


Figure 2. A hyperlinked dissertation (Barrett, 2009). The icons represent what features of multimodality are evident in this dissertation.

Raising Creativity Documentary

Raising Creativity - 1 / 15

- 1 Raising Creativity - FULL DOCUMENTARY Raising Creativity
- 2 Raising Creativity (part 5/5): Illuminations Raising Creativity
- 3 FILMING a PhD!? Raising Creativity
- 4 Raising Creativity (part 1/5): Rationale Raising Creativity
- 5 Raising Creativity (part 2/5): Lit Review Raising Creativity
- 6 Raising Creativity (part 3/5): Methodology Raising Creativity

Figure 3. A YouTube video dissertation (Zak, 2014a). Elements of her work are indicated with text and video icons.

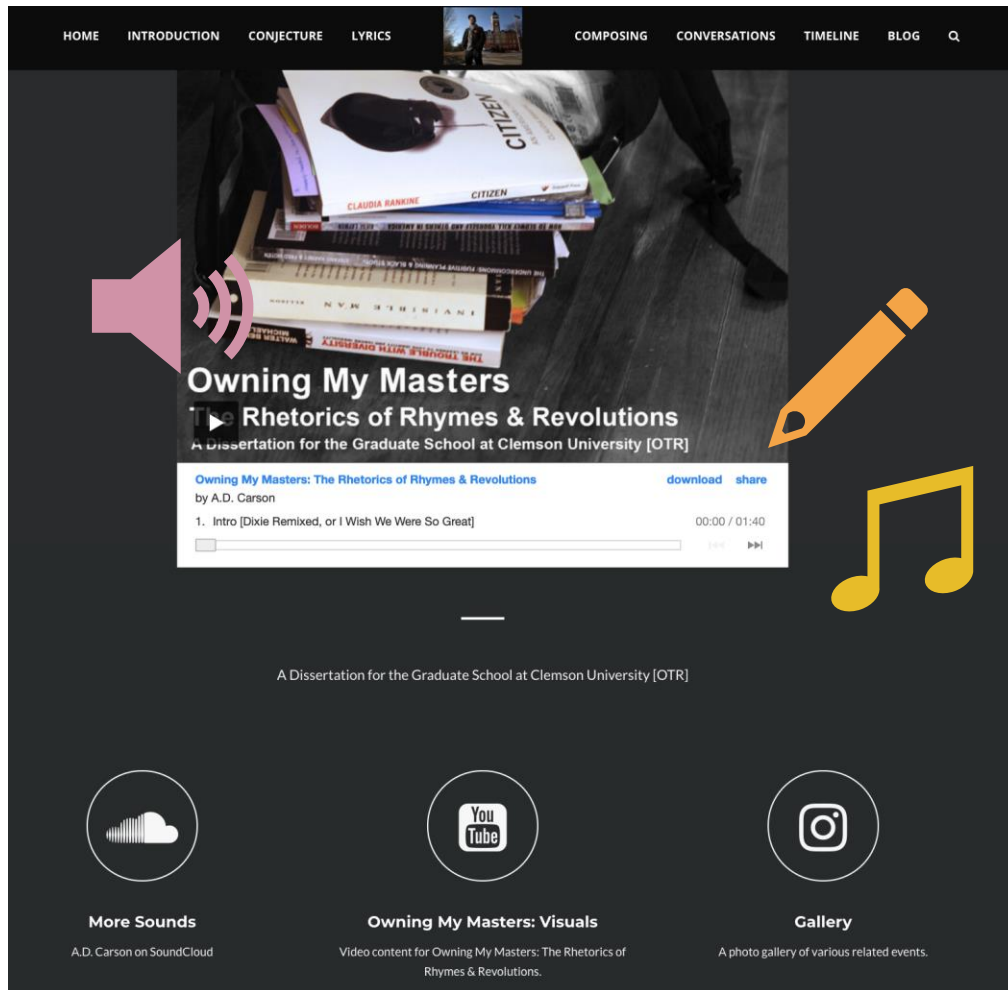


Figure 5. A rap album dissertation (A. D. Carson, 2017). He uses audio, oral, and linguistic modes.



Excerpts from
Unflattening
 A doctoral dissertation in comics form by Nick Sousanis @ Columbia University
 Book from Harvard University Press March 2015

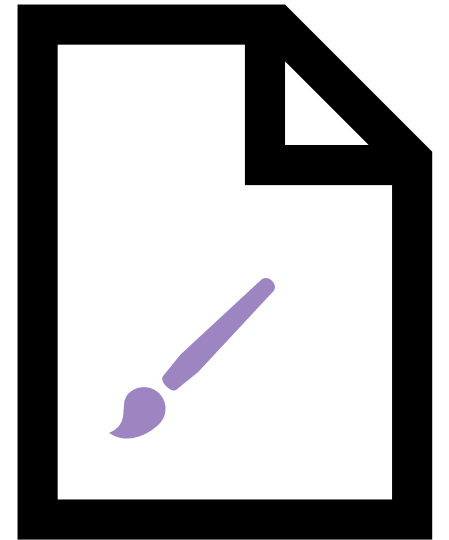
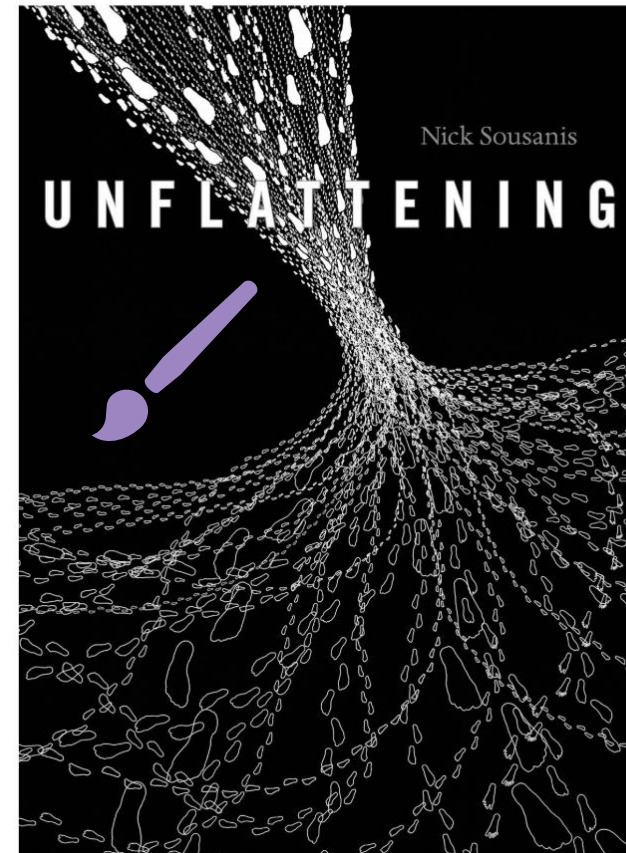


Figure 4. A comic dissertation (2015). Nick Sousanis uses the visual and linguistic modes throughout his dissertation.

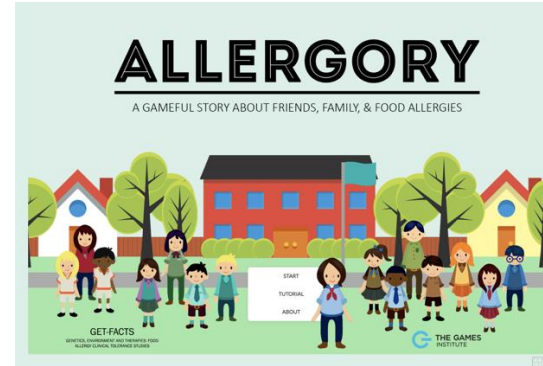
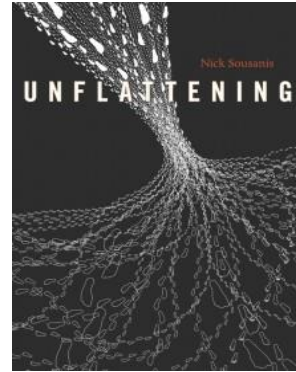


Figure 6. Collage of multimodal dissertations and theses (Shaw, 2017; Sousanis, 2015; Wilcox, 2017; Zak, 2014a). These are only some pieces of art-work from graduate students.

Chapter 1

1 Introduction

As an education researcher interested in multiliteracies pedagogy and multimodal literacy, I am intrigued about their place and potentialities in higher education. Currently, revolutions in communications technologies are changing how faculty and graduate students teach, learn, and disseminate their research within Canadian universities. For example, communications technologies have changed how faculty ask students to submit their work, what platforms or learning management systems they use, and how students use various technological tools to support their learning.

In this study, I explore the affordances and constraints associated with multimodal Ph.D. dissertations and how doctoral students present their research. To inform knowledge and practice at institutional and curricular levels in the field of Education and other disciplines, my research investigates the ways that multiliteracies and multimodality are understood within the academy and my work suggests how multimodality can be used to support argumentation, representation, and the presentation of research. This qualitative exploratory case study engaged with Canadian Doctor of Philosophy students in the field of Education who defended their multimodal dissertation. My study was designed to create knowledge of multimodal pedagogy (Kress, 2003) and to develop 21st-century curricula for future generations of graduate students.

To ground a reading of my study, in this chapter I discuss my positionality as a researcher and outline the historical and current state of the dissertation and doctoral education. I also include an overview of dissertation formats within Canadian Universities, with examples of completed and currently completing dissertations.

1.1 Positionality & Coming to the Questions



I am interested in how people, not least myself, express and make meaning of scholarly content, such as academic journal articles, theories, and presentations. I have multiple identities (teacher, photographer, and Ph.D. student). My identities are expressed differently depending on mode, but they all continuously impact how I make meaning and express myself. I am in the process of understanding my identities and experiences, and how they shape me as an academic.

Reflecting on the various roles I hold and examining their relationship to the identities I forge has taught me about how I make meaning, which in turn has relevance for my research. To make sense of the identities I forge online, I created My Hyperlinked Identity (Figure 7), which is a collection of 13 different hyperlinks that I created within the last five years in my academic, personal, or work life that have helped me express and communicate some of my many roles and identities. Each of these links offer insights into my preferences for learning, understanding, and communicating with others; for instance, I am a teacher, and I have created a YouTube video to teach a learning comprehension strategy on visualizing which has received over 9,700 views. Reflecting on this work, I learned how satisfying it is for me to engage with a global online community to share knowledge and resources to learn with others. I am also a photographer. I share my photographs on Instagram and Facebook as a way of communicating thoughts and feelings without text. Reflecting on these practices, I learned that I love to engage with information visually and that I prefer visual modalities for expressing my ideas and emotions. I am a Ph.D. student. I create multiple blogs, and I explore different ways to use tables, figures, surveys, pictures, and videos to communicate my scholarly knowledge, thus highlighting for me my need for intersecting modalities to deal with complex knowledge and information. I think about how beautiful, eye-opening, and healing it would have been for me to recognize these multimodal ways of communication earlier in my graduate program because I would have felt more successful, or more accepted into the world of academia. I would not have felt like such an imposter since beginning graduate studies. The lack of opportunity to work with multimodal ways of communication even extends to my early post-

secondary education, as multimodal practices were never invited into my undergraduate degree. What if there was a common academic standard for multimodality in post-secondary/graduate education? In my study, I think about students who would benefit from expanding their communication options starting with their undergraduate degrees and how these students can be supported to communicate their learning through multimodal ways.

To further position me and this study, I next explain how the process behind my master's research, "[University Professors' Perceptions on Blogging as Course Assignments in Southwestern Ontario: A Multiliteracies Framework](#)" (Tran, 2015), led me to my dissertation questions. In my master's research, I examined how non-traditional formats in university assignments are perceived by faculty in academia. Expanding on this idea, in my doctoral research I align my interest in new ways of composing in academia with non-traditional dissertations. I conclude my positionality and how I came to my research questions with a journal entry that I wrote in my first year of my Ph.D. that was fundamental to the scholar I am today. This journal acknowledges my different learning needs as a graduate student and the ways my needs were or were not supported in the previous five years. My positionality is important to understand the following research questions: what is my lived experience as someone conducting a multimodal Ph.D. dissertation in Education, and what do I understand to be the affordances and constraints of my research process? My positionality and the ways I come to my research questions are ways of including myself as a participant in this study.



My Hyperlinked Identities

I am an elementary school **teacher** who uses *Twitter* to connect with other educators to record observations of student learning. I use *YouTube* to create educational videos on learning materials. I have a classroom *blog* where I record my philosophies, teaching strategies, and online resources. I find it important to self-reflect and gather artefacts for a portfolio.

I am a **photographer** who uses *Facebook* to create a page, where all my clients can view my portfolio and send me messages. I use *Instagram* as my creative outlet for my artwork that I create with photos.

I am a **Ph.D. student**. I create slideshows on *Keynote* and *Prezi*. I also have created a resume of work experience, education, professional development, and publications through a website using an infographic format.

I am a **blogger** who has made over four different *blogs* for various graduate school assignments. I have used platforms such as *WordPress*, *BlogSpot*, and *Wix*. I use blogs to engage in meta-cognition, reflection, and learning.

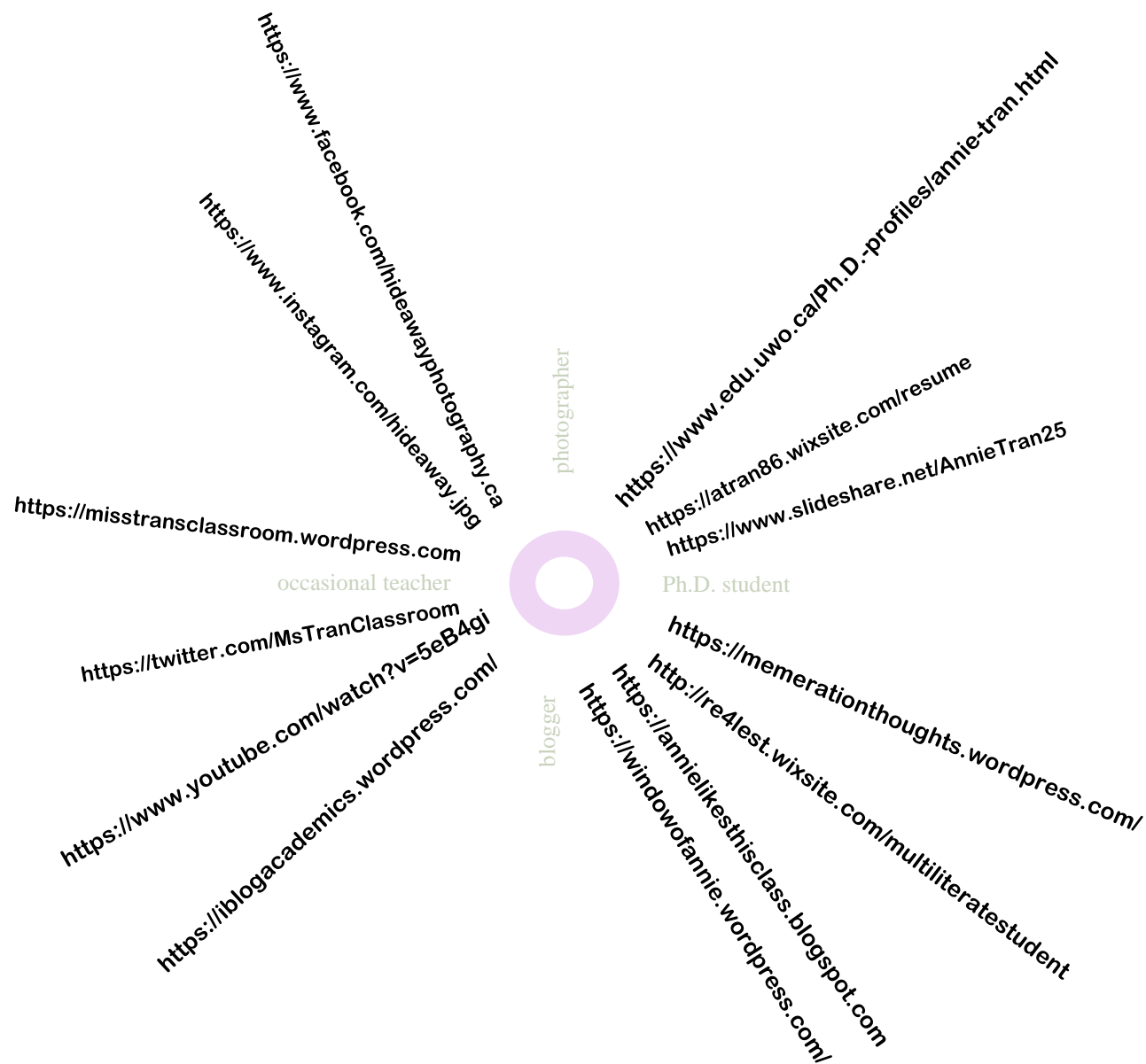


Figure 7. My Hyperlinked Identity. I identify as a teacher, photographer, student, and blogger.



Annie and Her Masters

When I started my master's degree in Education in 2013, I knew I had challenges with traditional academic formats of expression. One of my earliest struggles during my degree was in a required first-year master's course where I was expected to read academic articles and write in a traditional essay format. Specifically, I had to write essays with mandated word counts in APA style. I wrote in this prescribed way, and it was a constant battle: I earned 67% on my papers and did not understand how to do better. I tried my best, but I could not make sense of how to read and write in a dense, academic, and linear style. I needed a way to make sense of scholarly writing that was compatible with my own style of thinking and learning. To help address my struggles, I consulted with my professor in one-on-one meetings to discuss expectations, how to approach academic writing, and how I could do better. I read scholarly writing books and engaged in discussions with peers. But how to accomplish academic writing still did not resonate with me.

Coming to my master's after having earned two degrees, a Bachelor of Science and a Bachelor of Education, it was ingrained in me that an academic paper was the only way to express my knowledge. I had no prior experience with alternative formats of expression in my scholarly work. I remember at the same time as I was working through my master's coursework, outside of school I was very passionate about photography. I ended up making an elaborate business plan, written as a mind map on paper, and printed out various designs for websites and product ideas and then taped it altogether.

I was the happiest when I was working in a space that was not structured by traditional academic rules. However, one night it suddenly occurred to me that I should apply the same approach of using mind maps to my academic work. I loved mind maps, as they allowed me to take my thinking in non-linear directions, to process information using colour, and to see the bigger picture. I loved not being constricted. For the next assignment in my master's coursework, I tried a different approach to making-meaning of my readings. I present the mind map process in Figure 8, in which I used mind maps to understand the course readings for a first-year master's course and then I offer a reflection on this process. First, I took blank pieces of paper (not lined paper since I did not want to be restricted to an actual linear format) and wrote all the quotes that resonated with me from each week's reading and then attached it together, organized by week. Next, I flipped over this large sheet and wrote down all of my questions and thoughts. After executing the first two steps of this reading comprehension strategy, I still needed to understand the themes that were emerging from my readings, so I overlaid parchment paper on top of the mind maps that I had attached and taped together. Next, I highlighted and colour-coded what was important to me.

If I could prove that I was thinking carefully and deeply about the literature using a mind map, I wondered why I could not submit this as my assignment instead. I worked for several days and nights on my mind map (Figure 8), which proved that I was covering the course material in a deep and meaningful way. I thought about how wonderful it would be if I could submit this work to my professor instead of writing an academic essay. I felt that this way of composing my ideas was far more indicative of my originality, creativity, and knowledge of the course content than I could portray in an

academic paper. But I knew there was no way I could submit a mind-map for an assignment. At this point, though, I was unsure of what other ways I could submit the assignment. After the course, I always wondered if I could have done better if I had been given the opportunity to submit my assignments in an alternative way. I had questions about how I could have been better supported through my graduate education, and how the communication options for academic composition could be expanded.

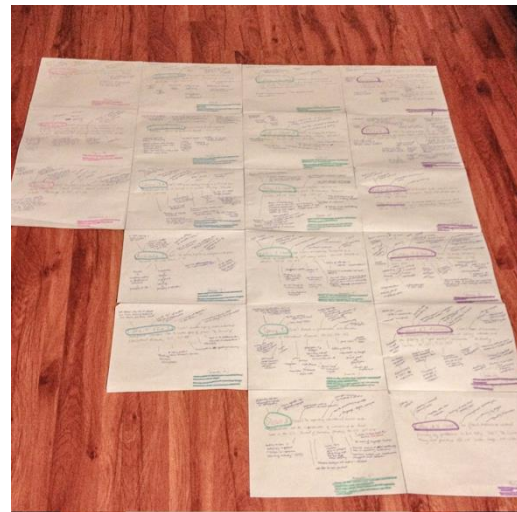


Figure 8. My Master's Mind Map. This is 20 pieces of paper taped together, organized carefully, and overlaid with parchment paper.

1. I made mind maps for every reading in my course. I wrote all of the quotes that resonated with me and their corresponding page numbers. I taped the mind maps together according to each week of reading. For example, I read two to four academic journal articles each week. I did this all in black ink.

2. I flipped over the assembled product and made mind maps of all of the thoughts and questions I had about the readings. I used highlighters to colour-code each week's themed readings to better see the connections between the readings.

3. I overlaid parchment paper on top of the mind maps written in black ink. I did this because I wanted to see exactly where the connections were, how I could do a thematic analysis, and to begin my paper on a very specific question of curriculum.

I received 67% on this paper.

Working through this reading comprehension strategy was the first time that academic readings were illuminated for me and this process helped me learn. I loved using a variety of materials and colours with the texts to see my thinking in a more tangible way. This way of reading allowed me to be creative, while still being able to use conventional pen and paper. After making meaning in this multimodal way, however, I was forced to submit an assignment written in standard academic prose. Needless to say, I ended up with a disappointing grade in the course. In contrast, I received an A+ in the same term in two separate courses, which allowed me to submit assignments in multimodal ways.

In a world where assessment is one of the indicators of a student's academic worth, it is clear how different courses are designed to either support students or constrain students' communication. When a course does not offer modal options for assignments, some students will struggle. When students are offered alternative options, then there is greater possibility for every student to share what they know. In my work as an elementary school teacher, I am aware that differentiation strategies are supposed to be offered to students. However, in graduate education, differentiated assessments are only found in some courses. Further, the key to success for elementary teachers is to

always know one's students. The same should hold true for graduate education faculty; however, in my experience rarely are students' identities, hobbies, and interests invited into academic work. In a world where graduate students are inundated by different media in their lives outside of school, the processing of information is changing.

A keystone in my master's work was when I encountered the 2013 article "Memeration: Exploring Academic Authorship in Online Spaces" by Rob Simon, Alisa Acosta, and Eveline Houtman. This article described the implications of viewing multimodal practices as forms of scholarly work, what it means to invite multimodal work into graduate education, and the affordances and challenges of multimodal scholarship. I was immediately inspired to think about blogging as a form of scholarly work. In the article, Simon, Acosta and Houtman (2013) asked three questions that sparked my interest: "What are the implications of regarding multimodal practices as forms of scholarly work? What does it mean to invite multimodal work in graduate education? And what are the affordances and challenges of engaging in multimodal scholarship?" (p. 54). These questions made me ask: What does it mean to be an academic? What does it mean to be in a graduate education program? What is scholarship and who is a scholar?



Herein lies the genesis of my master's thesis, which was based on professors' perceptions of blogging as scholarly writing. Researching and composing the thesis did not entirely go smoothly. When I started the first year of my Ph.D., I reflected on the challenges and struggles I experienced during my master's program—some of which I share with you here. This sharing is elemental to knowing my own meaning-making processes. In the following journal entry, I express the affordances and constraints I experienced through my master's research, including all the questions I grappled with since 2015. I have included this journal entry because it was written during the first year of my doctoral program and I decided to reflect back on my experience as a way of acceptance and moving on. I changed my name in this entry and wrote in third person so I could write it as a narrative in the style of a journal entry. I wanted to maintain distance and be truthful about my experience without being overly explicit about my story.

A journal entry (November 19, 2015)

What: How Enna is right now in her Ph.D. program

Where: Ontario

Why: To acknowledge what she has so deeply ignored

When: The past 3 years

Rising Action: A series of unfortunate events

Climax: Writing the Ph.D. dissertation

Falling Action: Defense

Resolution: She graduates

* Based on a true story

Enna cried when she didn't get into the Faculty of Education the first time she applied. She cried when she got into the Faculty of Education the second time she applied. But she had an associate teacher (AT) who just made her

cry. Her AT made her feel insufficient, incapable, and incompetent as a teacher. She gave Enna an unhealthy dose of incivility in the workplace. After that placement, Enna vowed that she would be careful with what she said from now on to anyone she worked with. Enna internalized the idea that if her lifespan only consisted of 1000 words she would use her words wisely, and be cognizant of everything she said. *Words cannot be wasted. Words can get you in trouble. Don't say anything or you'll make it worse.* That is what repeated in her head.

Enna proceeded straight into her Master of Arts in Education after finally being able to smile after graduating from her Bachelor of Education. That smile was one that came and went very quickly. Her master's began with a course where, quite frankly, she sucked as an academic reader and writer. *What is the formula? Why can't I get it right? Why is my professor so challenging? Why don't I understand what my professor wants? Why don't I understand what I read in academic journals? Why is there one right answer to what I'm supposed to understand?*

Why are you telling me what I'm supposed to understand? Why can't I understand this in a different way? Aren't I supposed to think outside of the box? Why are you telling me to be creative and then you say you don't understand my creativity? I thought creativity was what you wanted? Okay, but then my creativity isn't what you want? WHAT DO YOU WANT? Enna was so shaken. She got her lowest mark in that class.

In a parallel universe, Enna had entered the world of multiliteracies. I can make a blog in a graduate course? I can make an iMovie? I can use pictures? WHAT? ...WHAT?! She had found her niche. She had found her superpower. She was getting 90% and above on assignments. For once in her life, she had understood her learning. She had understood how she thinks and how she functions. She could think in mind maps; she knew she could think using technology, and she knew she could be artistic and creative in an academic sense. But she never felt like a real academic. Academics read and write and that's it.

Enna worked on her thesis and she felt like her writing was that of a 12-year-old. Enna worked many hours alone on her research and finally submitted it. She felt she needed to be self-sufficient. She needed to make sure her supervisor liked her. She had to make sure her relationship with her supervisor wasn't going to be like the one with her AT. She got it over with. She was all set to go to her defence until the day before; it was cancelled and rescheduled without much explanation. She was told that no new information was available at the moment. Enna was appalled at how she was left in the dark to anxiously survive, breathe, and calm down. She finally received notice that her writing had significant flaws and she was unable to go to defence.

She FAILED. She was a bad writer. She was a bad researcher. Someone disliked her. Her thesis wasn't good. After all she'd done to avoid the poor evaluation: saying the least possible, being as accommodating and tenacious as possible, and trying to simply be everyone's friend, she still failed. She did the opposite

of what happened with her AT with her master's supervisor but was still let down.

Academic writing was officially the death of her. She couldn't escape it. Multiliteracies couldn't save her. The thesis is a thesis is a thesis is a thesis. Why was I being told there was only ONE way to write a thesis? Why was it the RIGHT way? She felt extremely rebellious. But she was constrained by the system. Academia was a world that she never knew would turn her life upside down.

But what would it look like if multiliteracies did SAVE THE DAY? What would my thesis have looked like? Would examiners HATE it if my thesis was actually a blog? What if I didn't write 100 pages of text, but instead I spent 100 hours making a movie? Could that be considered work done by a legitimate academic? I'm putting equally enough energy and thought into it. Most importantly, could a multiliterate thesis have saved her the grief, tears, anxiety, sheer helplessness, stress, restlessness, anger, despair, discomfort, heartache, and worry of

failing to proceed to her thesis defence? Could she have been able to rely only on herself in accomplishing this when not much support was given to ensure she would pass otherwise?

HOW COULD WE AVOID THIS?

So, Enna's research isn't an interest, it's a fight. It's a fight for students just like her. She wants to celebrate students who want to expand and reconceptualize academic standards and soar high above in a multiliterate world. She can't be the only one out there, and she's excited to see a little bit of herself in future students to come.

To be continued.

1.2 Dissertation Structure

This dissertation is organized into six chapters: introduction, theoretical framework, literature review, methodology, data, and discussion and conclusion. The theoretical framework is based on lived curriculum, multiliteracies approach, multiliteracies pedagogy, multimodality, multimodal literacy, and multimodal pedagogy. The literature review focuses on six common themes: scholarly creativity, doctoral studies, completion rates and employment options, supervisory pedagogy, academic literacies, and dissertation changes. The methodology is an exploratory case study, which uses the methods of a journal, participant interviews, and a multimodal analysis of dissertations. The interview and dissertation data is analyzed through thematic and multimodal analysis. The dissertation ends with a discussion and conclusion about the research questions.

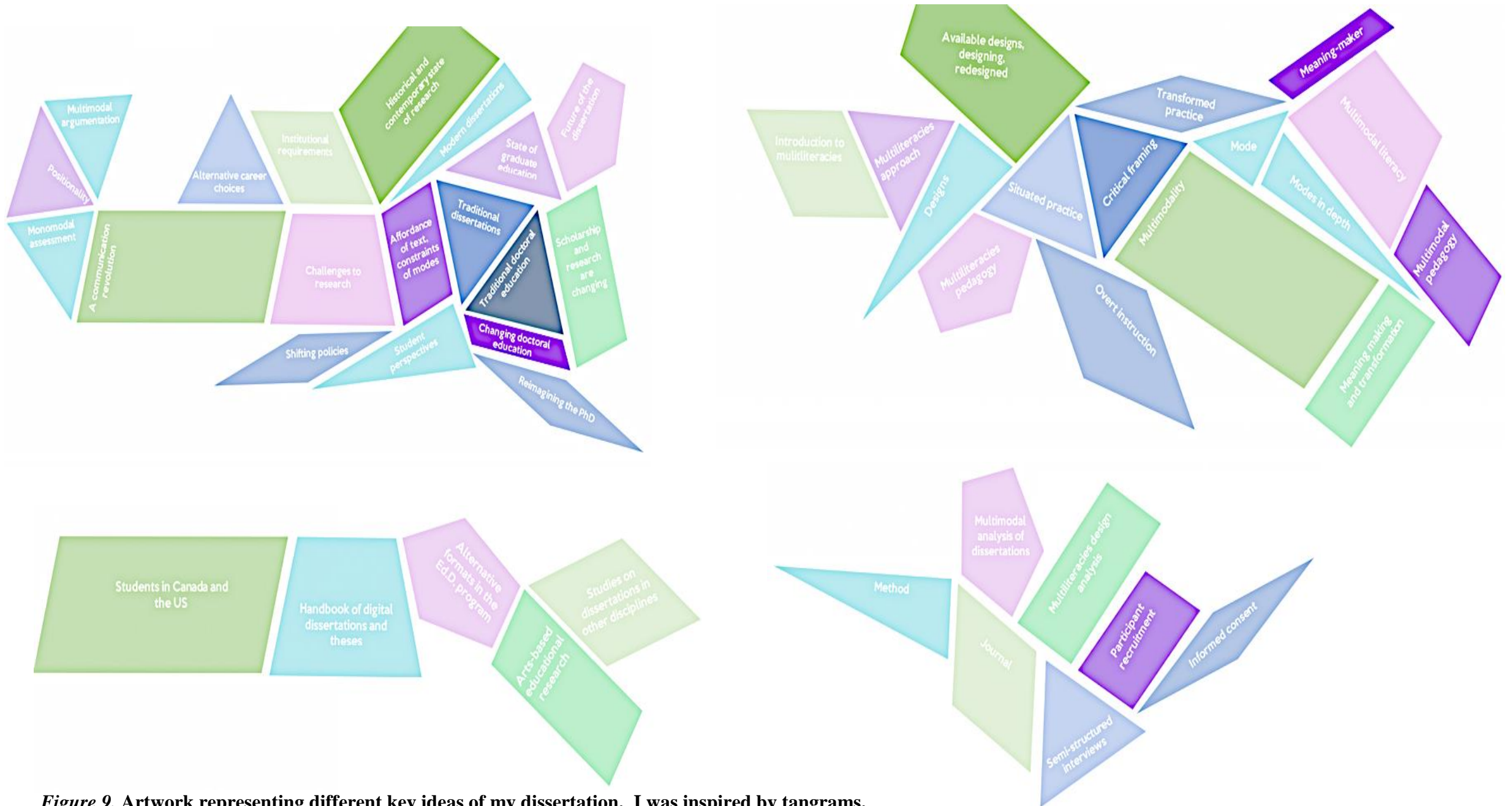


Figure 9. Artwork representing different key ideas of my dissertation. I was inspired by tangrams.

1.3 Background Summary

I begin this chapter by discussing my research questions, and then move on to the historical background of the Ph.D. dissertation and how it is presently conceptualized. Next, I discuss the current state of doctoral education, including different dissertation formats in Canadian universities, and examples of completed and currently completing multimodal dissertations. Table 1 summarizes this chapter to act as an organizational aid for the reader. In addition, the table is a visual representation of the table of contents for chapter 1.

Research Questions

1.4 Ph.D. Dissertations

1.4.1 Traditional Dissertation

1.4.2. Current Dissertations

1.4.3 Future of Dissertations

1.5 Current State of Doctoral Education

1.5.1 Dissertation Formats in Canadian Universities

1.6 Students in North America

1.6.1 Examples of Completed and Currently Completing Dissertations

Database of Non-traditional Dissertations

1.7 Chapter 1 Literature Summary

Table 1. This chapter introduces historical and current perspectives on the dissertation, the current state of doctoral education, and examples of multimodal dissertations in North America.

My research questions are:

What are the lived experiences of Ph.D. Education graduate students who created multimodal dissertations?

What is my lived experience as someone conducting a multimodal Ph.D. dissertation in Education?

01

What do students understand to be the affordances and constraints of multimodal dissertations?

What do I understand to be the affordances and constraints of my research process?

02



RESEARCH QUESTIONS

What are the implications of promoting multimodal dissertations in the social sciences?

03

1.4 Ph.D. Dissertations

This study resides within the contemporary state of research about the dissertation, contributing to the understanding of how dissertations may be changing. The practice of writing dissertations began in the late eighteenth and early nineteenth centuries and has been in existence for the past two hundred years (Cassuto & Jay, 2014). One of the earliest dissertations at Yale University was handwritten in Latin and was six pages long (Borg & Davis, 2012). As doctoral study expanded, companies introduced the typewriter, which functioned to create “linear and objective dissertations” (Borg & Davis, 2012, p. 14). As one of the sacrosanct doctoral education requirements (Cassuto & Jay, 2014), the dissertation is the gold standard (Freeman & Tolmie, 2012), as it is said to capture the unfolding of the mind (Jump, 2015) and is now required almost everywhere in the world for the completion of a doctoral degree (Cassuto & Jay, 2014). Institutions have created rules and regulations on the production and form of dissertations over the past hundred years, which “can easily be seen as set in stone” (Freeman & Tolmie, 2012, p. 49). However, the current state of doctoral education, including different dissertation formats in Canadian universities, and examples of completed and currently completing multimodal dissertations are changing.

1.4.1 Traditional Dissertation

The historical background of the dissertation is important to understand because until recently there has been little questioning of the dissertation’s purpose, content, and

structure. The traditional dissertation is understood to be “academic... [and] conservative” (CAGS, 2016a, p. 3) as well as “formalized and bureaucratized” (Borg & Davis, 2012, p. 5). The dissertation normally takes the form of a scholarly monograph (CAGS, 2016a) or “a linear, largely monomodal medium for the presentation of research” (Andrews & England, 2012, p. 32). The doctoral student is required to undertake a supervised research project and produce a “substantial piece of writing of 80 000-100 000 words that is then examined” (Freeman & Tolmie, 2012, p. 48). As a majority of dissertations are similar in terms of word length, there is also a “familiarity of conventional dissertation—table of contents, footnotes, index, bibliography, etc.” (Borg & Davis, 2012, p. 24). Although there are no current universally accepted definitions of the content and scope of a Ph.D. dissertation, the following descriptors are commonly used: “substantial research and scholarship, original contribution to knowledge, unified focus, and a single, cohesive topic” (CAGS, 2016a, p. 4). The goal of the dissertation is to create and conduct research, interpret new knowledge or a novel concept, communicate results, satisfy peer review, and contribute to a specialized area and ongoing debates (Borg & Davis, 2012; Cassuto & Jay, 2014; Freeman & Tolmie, 2012; Gould, 2016). The dissertation is typically understood in the literature to be a document that can be turned into a published article, a credential for hiring decisions, or a first draft of a book (Council of Graduate Studies, 2016). The dissertation has typically led to other scholarly publishing options or pathways that are fairly traditional in standard and practice.

Contemporary literature identifies that the traditional dissertation include writing an extensive amount, which contributes to the perception that “Ph.D.s have become a demoralizing ‘conveyor belt’, with students convinced that as long as they churn out 300 pages, they will get through” (Jump, 2015, n.p.). Monomodal, print dissertations can be a result of the “academy’s self-perpetuating ‘bias towards print’” (Lee, 2015, p. 93) and reflect the “academy’s infatuation with agonistic logos/word and linear, ‘plain-vanilla’ thesis” (p. 94). Lee (2015) argued that the academy has deep systemic ideologies regarding the dissertation.

My reading of the literature indicates that there is a disconnect between university regulations, such as the single channel of communication in the Ph.D. dissertation, and the world being studied, which is visual, aural, tactile, multimodal, multidimensional, and polysemic (Borg & Davis, 2012). Some institutions stick to the status quo because the doctorate is the heart of the university and to change it means to risk or affect the quality and reputation of the institution (Snyder & Beale, 2012). This institutional reluctance to change means that the real learning needs of contemporary postgraduate students are often left unmet (Freeman & Tolmie, 2012). Andrews and England (2012) contended that when students face stipulated requirements of higher educational institutions they compromise intellectual momentum. This compromise is caused by the conflict between the research topic of a Ph.D. dissertation, with design and delivery of research (Parnell, 2012), causing students to change the style and presentation of their research ideas to abide by university regulations. It is a problem all research students face—how to capture live, tangible, and present experience in advanced research and represent it in academic form (Andrews et al., 2012). There also

may be ethical imperatives in “research involving partners (whether communities, institutions, or individual human participants) to disseminate and/or validate findings in modes that differ from the usual academic ones” ((CAGS), 2016A, p. 4). Findings and arguments in the literature such as those I share in this section indicate that it is time to revisit university regulations across institutions regarding the traditional monomodal dissertation.

Without doubt, communication in the academic world is changing “profoundly and rapidly” (Beetham, Littlejohn, & Milligan, 2012, p. 68). This change is a revolution in the landscape of communication, as the combined effects of social, economic, communicational, and technological changes are so profound (Kress, 2003). Gourlay (2012) described this change in communication as “increasingly multimodal, interconnected, performed on the move and dispersed across a range of communities” (p. 85). This means the “processes of writing, collaborating, reviewing, sharing, commenting on and publishing research are in revolution” (Beetham, Littlejohn, & Milligan, 2012, p. 64). Gourlay (2012) posed the argument that “the current rise of multimodal and digital media has disrupted and questioned our assumptions around the primacy of text as the dominant mode of meaning-making in a digitally mediated society” (p. 85). Andrews and England (2012) further added that “a linear print-based [dissertation] format may not be suitable for the subject matter of the thesis, which may require a different logic and a different rhetorical shape” (p. 32). This opens up a discussion about the tensions between the primacy of text and the use of multiple modes and how it affects the dissertation in the 21st century. As Andrews et al. (2012) noted, there is a “philosophical debate about the primacy of word and contestation of the

assumption that words are essential to the validation of an activity as research” (p. 1). The argument has been made that the “current rise of multimodal and digital media has disrupted and questioned our assumptions around the primacy of text as the dominant modes of meaning-making in a digitally mediated society” (Gourlay, 2012, p. 87). Furthermore, “such widespread use of digitally mediated and multimodal communication in wider society raises questions regarding whether similar changes might be taking place in the university, and by implication in the context of the dissertation” (p. 88). Therefore, how are the literacy options influencing the ways of making meaning in the Ph.D. dissertation?

There is abundant research to support multiliteracies and multimodality from K-12 education (Cordova & Matthiesen, 2010; Karchmer-Klein & Shinas, 2012; Kerdersha, McClay, & Stagg Peterson, 2013; Kist, Doyle, Hayes, Horwitz, & Kuzior, 2010; Lapp, Moss, & Rowsell, 2012; Martens, Martens, Doyle, Loomis, & Adhalarov; Mills, 2010; Walsh, 2010), which allows for the assumption that future generations of graduate students are increasingly developing facility with multimodal literacies. However, some students growing up in the 21st century are only being taught traditional writing methods, with no alternative. This creates a divide between students who have “dutifully worn masks of objectivity in their academic writing” (Ellis, 2013, p. 44) and those who have experience with multimodal creations. Ellis (2013) stated that there is a level of emotional intimacy in multimodal texts and that students may struggle or feel uncomfortable or even reject it for a more comfortable essay style. Furthermore, it is possible that students can feel overburdened to “learn simultaneously, not only new technologies and a new rhetorical situation but also a new genre (or combinations of

genres)” (39). The dissertation style is dependent on the discipline, individual, program, and institution, and it is important to question how to expand or broaden options to the dissertation because of the unique combination of research students can bring. It is also important to acknowledge that not all students will be proponents of a multimodal dissertation. Regardless, it is crucial to determine if there are similarities such as life circumstances, experiences, learning strategies, or learning needs among students. This knowledge leads to better-informed ways of understanding how institutions and faculty can support students who may benefit from using alternative formats for dissertations.

An essential ingredient of a dissertation is an argument, which is conventionally communicated through linear, alphabetic text. At present, some academics cannot conceive argument in any other way (Andrews et al., 2012). The traditional print dissertation does not reflect the dramatic transformation of representational alternatives and resources that is taking place in the construction of knowledge (Edminister & Moxley, 2002). Although multimodal pedagogy is increasingly integrated into institutions of higher education (Gourlay, 2012), my research will address this gap by aligning this pedagogy with the monomodal, linear, print-based dissertation. Much knowledge can be lost if both the writer and the reader of a media-rich dissertation do not understand how an argument can be communicated multimodally. It is evident that “the problem of digital and multimodal argumentation remains one of the most pressing to solve” (Andrews & England, 2012, p. 45). Yamada-Rice (2012) stated “the implications of undertaking research in a digital and multimodal age are huge and more space needs to be given in academia to discuss this and its implications for research

presentation” (p. 174). I want to open a space for this discussion of multimodal dissertations.

It is timely to question the dissertation genre (Graupner et al., 2009). What has previously been constituted as literacy, singular, is now widely understood in the literacy studies world to be literacies, plural (Cope & Kalantzis, 2012a). The move to multiple literacies calls for research to be both “about and through multimodality” (Andrews et al., 2012). Academic writing is slow to change. However, as the literature by Andrews et al. (2012) noted, the dissertation is increasingly becoming multimodal across disciplines, and thus the dissertation as genre is contingent, changing and changeable.

As suggested above, the genre of the dissertation is shifting and there is little information about this shift. Genre is the “semiotic mergence of social organization, practices and interactions” (Fransman, 2012, p. 145), and answers the questions “who is involved as participants in this world; in what ways; and what are the relations between participants in this world” (p. 146). The dissertation genre is shifting because multimodal dissertations and advances in technology have allowed students to engage with knowledge and represent their learning differently. For myself, I learn about the world predominantly through image. Moreover, I prefer to use images, pictures, colours, and maps to organize information and communicate with others. I find using the visual mode is more engaging for myself and the reader. I think the visual mode allows the reader to interpret for themselves without myself having to explain everything in detail.

The literature suggests that the traditional dissertation has been structured to become a book, yet there are many reasons to question this assumption. Studying the

history of dissertations, Borg and Davis (2012) found that the printed book was a common format after the dissertation was published, but it was “the often unread volume on a dusty shelf” (p. 25). The Council of Graduate Studies (2016) concurs with the obsolescence of the academic book, identifying it as a dying form:

The format of the dissertation as a long form proto-monograph in the humanities and some social sciences faced special criticism. Sugimoto asserted that the academic book was a dying form, reflected in the decline of academic book publication and drastically reduced library acquisitions. University press editors explained that too many young scholars and their mentors make unrealistic plans about the dissertation as a future book publication. Today only a slim percentage of all submitted manuscripts are accepted and marketed by university presses; even fewer of those are revised dissertations. If revised, the new book manuscript is often 90% rewritten or augmented with broader research. Since academic book publication now loses money (one estimate was \$10, 000—15, 000 per book), presses and libraries need to find a new mode of electronic-first book dissemination for academic specialty topics. (p. 2)

With the academic book in peril, there is an opportunity in academia to expand the dissertation.

The traditional dissertation is defined by commonly accepted features: monomodal, conventional, substantial research and scholarship, original contribution to knowledge. However, it is much needed to examine the dissertation in this contemporary age, and how it can be revised to include other options. Next, I explore

the opinions that academics are sharing about what the dissertation should encompass in this day and age.

1.4.2 Current Dissertations

With rapid changes in digital technologies, the dissertation has changed “in the form of the doctorate and expectations of doing a doctorate” (Freeman & Tolmie, 2012, p. 47). Currently, the form and expectations of a dissertation in the contemporary age are largely dependent on the discipline. These forms and expectations can range from portfolios, computer-generated art, models, and interactive websites (Wilson, 2012). In other words, the changes in dissertations can be described as “graduate students looking to take advantage of the interactivity of online platforms...that integrate film clips, three-dimensional animation, sound and interactive maps” (Patton, 2013, n.p.). In some fields, it is becoming common for students to “include other scholarly products, including digital material (e.g., videos, websites) or creative products (e.g., novels, artwork)” (Canadian Association of Graduate Students [CAGS], 2016a, p. 5). The Council of Graduate Studies [CGS] (2016) has advocated for broadening dissertation types and formats:

There was general consensus among the discipline experts in the Social Sciences and Humanities that substantial widening of accepted dissertation types and formats should be the future. These included an ambitious range of substitutions for the social science dissertation, including community projects, articles and reviews... acceptance of a suite of essays, ensemble dissertations, capstones with

community-based projects, highlighting teaching innovation, public scholarship, translation, visual mapping, curation, and tool building. (p. 3)

It is evident that academics are voicing their opinions regarding changing the dissertation in various different ways, and why.

The literature contains current examples of opportunities for new forms of dissertations to enter select areas of scholarship. Patel (2016), for instance, stated that humanities programs

have started to allow dissertation formats to veer from the traditional book-length monograph. These projects have taken the form of a suite of three or more papers, a documentary, an interactive analysis of a text, or even a comic book. (n.p.)

It is important that humanities programs are addressing the concern of the printed book being unread by considering a form that can be read by many.

The Modern Language Association of America ([MLA], 2014) recognized that the book-length print dissertation needs to be questioned, and that alternative modes of scholarly communication should be a new direction in doctoral study. The association offered different ways the academic community could explore options within the humanities. Further, the MLA (2014) is working to maintain the important elements of the dissertation, while accommodating alternative modes of scholarly communication. In a statement explaining the overarching ideas of the traditional and current state of dissertations, the MLA (2014) recommended that:

The dissertation is the pivot point for change in doctoral education. Today alternative modes of scholarly communication challenge the priority of the dissertation as proto-print book; multimodal platforms for e-books are being developed that incorporate still images, audio, and moving images as well as interactive features and text. (p. 14)

As this academic association shifts their views on the traditional dissertation, it is clear that institutions should follow and begin to assess their regulations.

The academic community is in a transitional period in terms of the “options, modes, and media of scholarly inquiry and communication” ([MLA], 2014, p. 15). As programs make options available, as well as reimagine alternatives to the printed book, these options “encourage students to become responsive to the fit between the topic and the mode of communicating that topic, as well as thoughtful about the consequences of choosing a particular mode of scholarly communication” (p. 15). If students were to think deeply about their topic and the mode(s) of communication available, there would be more synthesis and a different way of communicating scholarly ideas. When students respond to a topic and the mode of communicating that topic align, they can push the boundaries of what constitutes a dissertation and engage in “a more complex range of meaning-making practices to be orchestrated alongside printed text in a more multimodal, digitally mediated assemblage as product, reflecting the multimodal and hybrid nature of the process” (Gourlay, 2012, p. 99). It is becoming common that researchers and academic associations are questioning the book format of the dissertation, for a format that is synchronous to individual research ideas.

For multimodal researchers, it makes sense to include multiple modes in their work because of the synthesis of the topic and the mode(s) of communication available. Not just for multimodal researchers, but all researchers in different fields need synthesis between their topic and mode(s) of communication because

the types of representation used in digital theses can be as diverse as the people who make them, each of whom has learned about different phenomenon in the world... and each of whom has been trained to represent these phenomena using specific sets of semiotic resources organized in accordance with the conventions of their respective disciplines. (Wilson, 2012, p. 427)

For Wilson (2012), in graduate education the student, research topic, and discipline can be diverse, and the combinations are endless. It is important for all students to maintain synthesis between all three elements and the modes used to communicate their work because students’ work may result in more complex range of meaning-making practices.

As the academic community shifts its understanding of the dissertation and realizes its potential and the beauty of the possibilities, it will become clear that the dissertation is “not simply presentation: its development should clarify and perhaps transform the author’s thinking.... [it is a construction]. Creating a dissertation is (or should be) an iterative, reflective process giving its maker insights that were not otherwise achievable” (Borg & Davis, 2012, p. 22). A dissertation, as a final assessment of a doctoral program, is understood in the literature as a product of the student’s ability to achieve “the development of themselves” (Freeman & Tolmie, 2012, p. 52). This is a reminder to view the dissertation as a “gaining [of the] skills he or she acquires in

researching and writing it” (Cassuto & Jay, 2014, p. 83). The dissertation is about “messing about” (Wilson, 2012, p. 439) with ideas in various combinations of modes, and this process can be a “fruitful and generative practice that can enable [students] to develop new understandings” (p. 439). In the end, the literature on the dissertation in the contemporary age advocates for new creative and critical thinking opportunities, with an openness to different modes in the dissertation.

1.4.3 Future of Dissertations

To try to ascertain the direction of dissertations in Canada, I turned to the Canadian Association of Graduate Studies (CAGS) task force and the Council of Graduate Schools (CGS) in the United States. In Canada, CAGS is the prime association devoted to the discussion of the future of the dissertation. In its task force, there are 116 faculty, staff, students, postdoctoral fellows, and alumni. CAGS created a consultation document that aimed to “encourage dialogue and to establish recommendations regarding the purposes, content, structure, and assessment of the doctoral dissertation” (University of British Columbia, 2017, p. 14).

CAGS (2016a), which consists of faculty, deans, and graduate students across Canada, wrote a consultation document on the future of the doctoral dissertation titled *The Doctoral Dissertation – Purpose, Content, Structure, Assessment*. The document outlined many concerns the faculty, deans, and graduate students had about diversifying doctoral scholarship and dissertations. First, there were worries from some academics that following a non-traditional dissertation path might mean new graduates would not

land academic jobs, and academic jobs are ostensibly what most new graduate students want. Second, some in the association worried that non-traditional scholarship could potentially devalue and reduce the prevalence of basic research. Third, non-traditional dissertations may result in a diluting of the Ph.D. (i.e., that such a dissertation would not represent rigor and would simply not be suitable as an academic text). Fourth, various members of the association expressed concern that if graduates of non-traditional dissertations did not get appointed to academic jobs, they would not be able to transform their dissertation into a book (an important step for many new academics). Fifth, some faculty, deans, and graduate students were worried that external examiners would not approve non-traditional dissertations and also thought that students who did not want academic track Ph.Ds. should not be admitted to Ph.D. programs. Also, other faculty, deans, and students were concerned that students would not get scholarship funding if their research was presented in a non-traditional way. Lastly, the consultation document stated that some faculty, deans, and students believed that promotion and tenure procedures did not value non-traditional academic work, thus putting faculty in a situation where they would not get credit for this type of work (CAGS, 2016a). A majority of the topics discussed were centered around the future of doctoral education, innovative doctoral education approaches, preparing graduates for diverse career paths, and engaged scholarship.

In particular, the members of CAGS (2016b) raised specific questions about the purpose of the Ph.D. dissertation in their consultation document:

What are acceptable forms of scholarship in dissertations, must/should the dissertation represent a unified program of research, or is it acceptable to include

loosely related but separate studies? How should the boundaries of acceptable scholarship be determined? Who should determine these boundaries? What, other than traditional scholarly text, can be included in a dissertation? What standards should be used to assess the quality and rigor of non-traditional forms of scholarship of the dissertation? What are the barriers to change? (p. 6)

It is important to rethink the purpose of the dissertation because the ultimate goal is to maintain academic rigour and acceptable scholarship. When members of CAGS (2016b) were rethinking what the context of the Ph.D. dissertation should be, they addressed the following questions:

How does the intellectual development stemming from an exploration of a single subject compare with that of several loosely related or unrelated subjects? [...] Is it acceptable in the humanities or basic sciences to investigate the application of knowledge, or the identification of new knowledge in a non-academic setting? (p. 6)

These questions are important because they explore whether the dissertation can be expanded and applicable to subject matter outside of academia, or to cover a breadth of ideas instead of a depth.

Another section of the consultation document includes questions that should be asked about the dissertation form. These specific questions about form were:

What, other than traditional scholarly text, can be included in a dissertation? Should/could creative works (art, film), lay communication materials, policy

papers, websites, syllabi, museum curation material, consulting reports, business plans or other elements be included and assessed as integral parts of the dissertation? When non-traditional elements are included, do they need to be placed within a scholarly context? Is a critical analysis and/or interpretation required? How should the boundaries of what is acceptable for inclusion be determined? Are there identifiable criteria for making the determination? If so, what are they? Who should determine these boundaries? Is this the domain of central university authority (Senate, Faculty of Graduate Studies), the disciplinary group offering the graduate program? The supervisory committee? (CAGS, 2016b, p. 6).

These questions related to form are important in identifying the balance between non-traditional elements and traditional. Scholars in CAGS are questioning the importance of critical analysis and interpretation, which is commonly written in linguistic form, and how that merges with non-scholarly text.

The third section of the document is about the evaluation of the dissertation, and included questions about quality and rigor, the role of the supervisor and examination committee, and dissertation quality. Specific questions about evaluating a dissertation were:

What policies or practices should be in place to ensure quality and rigor? Should all work be addressed by those with appropriate expertise, if that means including practitioners without a Ph.D., or scholars from other disciplines on the supervisor and/or examination committee? What standards should be used to assess the

quality and rigor of non-traditional forms of scholarship and associated elements of the dissertation? Who should determine these standards and policies? (CAGS, 2016a, p. 6).

One gap in the literature is how multimodal dissertations maintain academic quality and rigour. My study only includes students who successfully defended their dissertation, which suggests that they were able to maintain academic standards.

Similarly to CAGS, in a symposium report by the University of British Columbia (2017), Canadian academics are engaging in many discussions about reimagining the Ph.D. For example, scholars suggested developing “more and greater learning opportunities around broadened scholarship; encourage interdisciplinary, inter-sectoral scholarship; and explore opportunities to support and develop methods to assess broadened Ph.D. scholarship” (p. 2). The report also suggested that “there would need to be a significant cultural shift in university values...encouraging more interdisciplinary partnerships and programs and designing more flexible funding packages and apprenticeship models” (p. 15). Tangible steps in the report for supporting multi-sectoral collaborations and non-traditional scholarly outputs in doctoral education included:

Continuing the ‘awareness campaign’; encouraging the involvement of appropriate supervisory and examining committee members from outside the academy; creating more opportunities for transdisciplinary and collaborative scholarship; developing assessment and learning frameworks and; recognizing the value of public-facing scholarship in faculty reward systems. (p. 16).

My research opens a space for discussing the multimodal dissertation, which is important as shifts in the academy and society over the last few decades have led to a “world-wide conversation on rethinking educational approaches to the Ph.D., with a number of recent meetings, conversations, and papers focused on the future of the dissertation in particular” (CAGS, 2016b, p. 2). CAGS and scholars at the University of British Columbia are engaging in important discussions with the greater academic community, making my work timely and current.

This discussion reveals the need for further research on and understanding of the dissertation. The CGS in the United States is the only national organization dedicated to the advancement of graduate education and research (CGS, 2017). Similarly to CAGS, the CGS held a two-day workshop and asked very similar questions:

What is a dissertation? What is its purpose? Who are its audiences and what are their needs? What skills are or might be gained as a result of writing a dissertation? What does completing a dissertation demonstrate? What formats beside the proto-monograph would support the desired purposes and results of a dissertation? Can non-traditional formats coexist with traditional ones? How should/could dissertation research be archived, accessed, and disseminated? What is the role of the dissertation in the employment marketplace? What cultural and disciplinary barriers exist to rethinking the dissertation? ([CGS], 2017, n.p.)

In Canada and the United States, there are organizations dedicated to the advancement of graduate education and research, as well as to the discussion of the future of the

dissertation. Each organization is interested in the same questions about the purpose, content, form, and evaluation of the dissertation. Many scholars around the world are now discussing and questioning the role of the dissertation within doctoral education. The questions that are introduced in these various consultation documents and workshops provide an important platform to begin to discuss the dissertation.

1.5 Current State of Doctoral Education

There is increasing variation of requirements, regulations, and academic associations in doctoral programs in the social sciences and humanities available worldwide. Examples of these changes include the professional doctorate, practice-based doctorates, the Ph.D. by publication, and the Doctorate of Education. Examples of academic associations that are changing include the Social Sciences and Humanities Research Council [SSHRC] and the American Association for the Advancement of Science. A prime example of the rise of non-traditional programs is the increase in the professional doctorate, which typically involves an “assessed taught component delivered to cohorts of students with [a] supervised research project assessed as a thesis (smaller, more applied and work based)” (Freeman & Tolmie, 2012, p. 48). There are also practice-based doctorates where the final product could be in the “performing arts, production of a written commentary (shorter, reflective and contextual) and one or more pieces of work (portfolio or performance pieces)” (Freeman & Tolmie, 2012, p. 48). Some doctoral programs encourage students to shape their dissertations for public

dissemination. History students at Washington State University, for example, work on “projects that can be useful to museums, historical societies, and preservation agencies” (Patton, 2013, n.p.). Some graduate programs

allow students to work collaboratively. Doctoral students in history at Emory University and Stanford University, among others, work together on projects with help from faculty, lab assistants, computer technicians, and geographers, who use digital techniques like infrared scans and geolocation mapping to build interactive maps that, for example, tell the history of cities and important events in visually creative ways. (Patton, 2013, n.p.)

In certain disciplines students are encouraged to communicate their work in visual and creative ways and using multiple modes.

Other doctorate programs offer the Ph.D. by publication, which is increasing in popularity. Thesis by publication, “allow[s] students to write three or four publishable articles instead of one book-length text” (Patton, 2013, n.p.). In other words, thesis by publication is a “number of peer reviewed published in press articles with substantial commentary linking the work and highlighting its significance and coherence and examined in usual way” (Freeman & Tolmie, 2012, p. 49). In the UK, students “publish their findings prior to graduation or have a bundle of papers” (Jump, 2015, n.p.). At the University of Oxford’s Faculty of Philosophy, “DPhil candidates [have] two choices: they can submit a traditional thesis or one consisting of several journal-style papers (which may have been published) that collectively represent a coherent and focused body of research into a single subject” (Jump, 2015, n.p.). The integrated articles, or Ph.D. by

publication, is an increasingly popular option for graduate students, and is commonly accepted at institutions.

Another program option within the field of Education offered at various institutions is the Doctorate of Education (Ed.D.) as opposed to the more traditional Doctorate of Philosophy (Ph.D.). The Ed.D. typically takes three years to complete, and according to Western University (2018) the program “values the professional knowledge that students bring to this course-based program, and actively seeks to apply what students learn in coursework to their professional practice” (n.p.). This program is meant for working professionals engaging in current, timely research who are employed in the field.

There are signs in the literature and practice that scholarship and research are changing even in the once traditional sectors. For instance, the Social Science Humanities Research Council (SSHRC), the Canadian federal government body that represents the interests of the academic public and private sectors (SSHRC, 2016), now has a Storytellers contest. The SSHRC Storytellers contest “challenges postsecondary students to show Canadians how social sciences and humanities research is affecting our lives, our world and our future for the better. They are looking for storytellers, data journalists, social media masters and aspiring filmmakers” (SSHRC, 2018, n.p.). The contest rules are: “grab our attention, be creative, push the boundaries: use a podcast, video, infographic—or surprise us with something new” (SSHRC, 2018, n.p.). I remember attending the SSHRC storytellers presentation at a conference in Toronto and Saskatchewan. I enjoyed learning about everyone’s research in a way that was animated, lively, and engaging. I loved the way graduate students were using oral, audio, visual,

and gestural modes of meaning-making throughout their presentation. It brought so much meaning to their research, and helped to involve me as an audience member in their work. I understood their research in a way that I probably could not if I read their textual dissertation.

Another example of changing scholarship is the Dance Your Ph.D. competition, promoted by the American Association for the Advancement of Science (Science Magazine, 2018). This competition challenges graduate students to transform their dissertation (introduction, literature review, theoretical framework, methodology, discussion and conclusions) into a dance. Students studying physics, chemistry, biology and the social sciences, are challenged to turn their research into a dance. This adaptation of their work requires turning quantitative data into a more abstract dance. This challenge also needs to communicate key elements of a dissertation. The rules are: “you must have a Ph.D., or be working on one as a Ph.D. student; your Ph.D. must be in a science-related field, and you must be part of the dance” (Science Magazine, 2018, n.p.). As this competition only includes students at their doctoral stage, there is a higher demand to communicate scholarly depth. This competition also suggests that there are particular ways of examining and assessing these works of art and science that could help inform how to evaluate scholarly multimodal pieces.

One last example of an initiative in changing scholarship and research is “Bake Your Thesis” at Memorial University. Scholars from all different disciplines such as chemistry, nursing, or sociology had to submit a baked portion of their presentation, as well as write an explanation of their research in a format that would be understandable to non-scholars (Coles, 2018). This competition was inspired by similar universities in the

United Kingdom, with the intention of communicating research to the general public. It is exciting that the Dean of Graduate Studies at Memorial University supports alternatives to the usual research competitions at other universities, as this represents an acceptance of creative formats for doctoral work among scholars in various faculties.

There are many options available in the current state of doctoral education, including program options such as the professional or practice-based doctorate. Furthermore, options to express research through storytelling, dancing, and baking are very promising to how scholars in doctoral education are keeping up with contemporary and creative ways of communication.

1.5.1 Dissertation Formats in Canadian Universities

In Canada, there is a shift in dissertation policies at various universities to support a multimodal format. For example, Brock University's guidelines specifically allow for a multimodal format. The University's policy defines a multimodal thesis or dissertation as,

a work in which the key component is a performance or piece of art. For multimodal theses, part of the work can be produced in a digital or print format, but a key element of the dissertation experience relies on the exam committee's direct experience with media, visuals, moving images, pieces of art, and performance. (Brock University, 2017, n.p.)

In addition, Brock University stated that there must be a written component, but placed heavy emphasis on film, videos, slides, and electronically interactive word or image-based text.

At York University, the Faculty of Graduate Studies allows for complex electronic and multimodal theses and dissertations, accepting

work with a high reliance on slides, film, or videos, electronically interactive word/image based text on CD-ROM or the internet. For complex electronic theses/dissertations, part of the work can be produced in traditional written form, but key elements of the work depend on direct experience with or interaction with a text whose physical form may be changed as a consequence of the interaction. (York University, 2017, n.p.).

Like at Brock University, however, there must be a written component. One important aspect of York University's thesis guidelines is the particular language it uses to define a multimodal dissertation, or a 'complex electronic thesis or dissertation'. It is important to note that Brock University labels this alternative to the traditional dissertation as 'multimodal', whereas York University defines this option as 'complex electronic'. This difference calls into question the terminology used for this alternative option. Although York University uses the words 'complex electronic', what they go on to suggest closer describes the various modes of each format. The way that York University defines a complex electronic dissertation involves slides (visual, spatial, and linguistic modes), film or videos (visual, audio, gestural, linguistic, and spatial modes), or an interactive word/image based text on the internet (visual, linguistic, spatial, and gestural modes).

An important part of York University's guidelines is that there needs to be interaction between the dissertation work and the audience, which leaves it open to student interpretation.

Similarly to York and Brock University, The University of Toronto defines electronic theses and dissertations (ETDs) as:

text-based PDF files...[containing] non-text elements such as sound, video, and hypertext links... Electronic theses have many advantages. As well as the capacity to include various non-text modalities, they offer vastly improved accessibility and ease of use, which increases your readership and benefits those interested in your work. (Frey & Krishnan, 2016, n.p.)

The University of Toronto defines their ETDs as 'non-textual elements such as sound, video and hypertext' in which I understand their ETDs as involving several modal elements such as linguistic, auditory, visual, and gestural modes. The format could be through video or hypertext, but at the core of a student's work is their modal usage.

After reviewing thesis and dissertation guidelines at other institutions in Canada, there are three common patterns. Either the guidelines state that some sort of multimodality or multimedia is allowed but rather in a more supplemental format (McMaster University, 2016; University of British Columbia, n.d.) or that there is an option to submit a collection of papers instead of traditional text (University of Calgary, 2018; University of Waterloo, n.d.; Western University, 2019). Other institutions only have the traditional text-based dissertation option (McGill University, 2019; University of Alberta, 2019; University of Regina, 2019, Queen's University, n.d.). There are a lot of promising changes happening within institutions in Canada. Next, I offer examples of multimodal work that graduate students have created at institutions within North America.

1.6 Students in North America

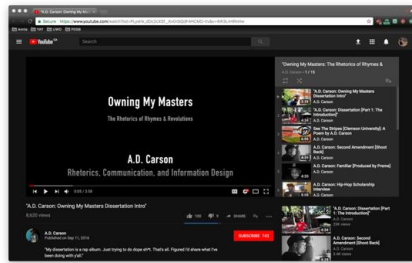


Figure 10. A screenshot of A. D. Carson's (2017) YouTube channel. He created a rap album now posted on YouTube.



Figure 11. A screenshot of Obasi Shaw's (2017) SoundCloud website. He created a rap album of his thesis work.

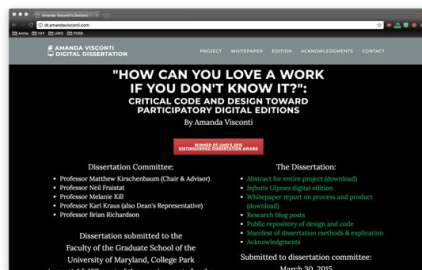


Figure 12. A screenshot of Amanda Visconti's (2015) digital dissertation. She created an interactive website.

To share the possibilities of multimodal dissertation work, in this section I outline examples of dissertations that can be considered non-traditional, complex electronic, or multimodal. Since my research topic is fairly recent, I include dissertations that are completed as well as work that is being created currently by graduate students who have not yet completed their multimodal dissertation, but who anticipate being done within the next two to three years. There are numerous examples of multimodal dissertations that have been composed across a variety of fields and disciplines on the continent. Below I summarize a few examples of multimodal dissertations and then offer a collection of additional examples I found through my research.

1.6.1 Examples of Completed and Currently Completing Dissertations

In this section I discuss students who have successfully completed and defended their dissertation. There are two cases reported in social media of students creating rap albums for their final thesis and dissertation. At Clemson University, A. D. Carson (2017) produced a rap album for his dissertation in the Rhetoric, Communication, and Information Design Ph.D. program. His dissertation used the platform YouTube (Figure 10 is a screenshot of his dissertation to demonstrate how he presented his work) and was composed of [34 hip-hop songs](#) that explore ideas such as identity, justice, economics, citizenship, and language (Scar, 2017). Carson's (2017) work has been streamed and downloaded more than 50 000 times. Along similar lines, at Harvard University, Obasi Shaw (2017) was the first to submit a [rap album](#) as a senior thesis in the English department (CBC, 2017). Shaw (2017) used the platform SoundCloud (Figure 11) is a screenshot of his work displayed in a different way than A. D. Carson's) to present and distribute his work. Shaw's (2017) thesis was composed of 10 tracks that contained songs that reported on topics such as racism within the criminal justice system.

Carson (2017) and Shaw (2017) produced rap albums as the primary component of their theses and were the first to do so at their institutions.

Other students who have successfully completed their dissertation in non-traditional ways are Amanda Visconti (2015) (interactive website), Marta Madrid-Manrique (2014) (graphic novel trilogy), and Patrick Stewart (2015) (used no punctuation). [Amanda Visconti](#) (2015) from the University of Maryland designed and coded a website (Figure 12) as a fully online and interactive dissertation on James Joyce's *Ulysses* called *Infinite Ulysses* (CAGS, 2016a). Visconti's (2015) dissertation explored how scholars, first-time readers, book clubs, teachers, and their students could annotate *Infinite Ulysses* with infinite interpretations, questions, and contextualizations. Marta Madrid-Manrique (2014) at the University of Granada, Spain, chose a non-traditional format for her dissertation and "published online in three volumes similar to a graphic novel trilogy. Her work incorporated many forms of visual data (including photos and watercolour illustrations) and was presented in the forms of a comic book, graphic novel, and story book" ((CAGS, 2016A), p. 9). Another example of a non-traditional dissertation was created by 61-year-old architect and UBC graduate student Patrick Stewart (2015), who wrote a 52, 438-word architecture dissertation with no punctuation (Hutchinson, 2015).

Two other students are currently completing multimodal dissertations. Katrina Foxtan from the University of York is creating a mixed-used community venue with a Prezi map using a mixture of text, image, and hyperlinking (Foxtan, 2016). Alex Galarza (2017), a Ph.D. student in history at Michigan State, is creating an "online scholarly think tank that includes a group library, film database, audio archive, academic directory, syllabus repository, and online forum where researchers discuss monographs, articles, films and pedagogy" (Patton, 2013).

There are also examples of multimodal dissertations from within Education, and two important cases discussed frequently on social media are Rebecca Zak (2014a) and Nick Sousanis (2015). Zak (2014a) was the first Ph.D. candidate to submit a documentary in fulfillment of the dissertation component, as seen in

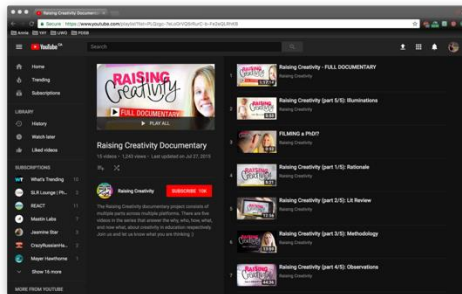


Figure 13. Rebecca Zak's (2014a) YouTube channel. Her work includes various videos. This is a screenshot of her work.

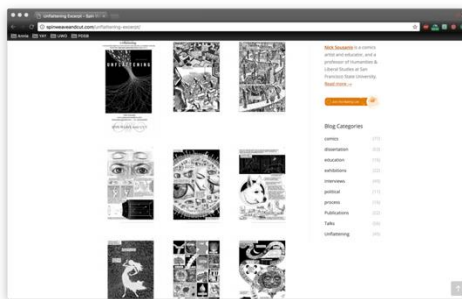


Figure 14. Nick Sousanis *Unflattening* (2015) dissertation. He created a comic book. This is a screenshot of his work.

Figure 13 is a screenshot from Rebecca Zak's (2014a) YouTube channel. She created a playlist that included five videos of her dissertation work. When given the choice to view the videos separately or altogether on her YouTube channel, the audience can navigate which video to see first. Zak was previously an art teacher at a public school, and she expressed in a feature that she wrote for *University Affairs* (2014b) that she continuously communicated with visual imagery and wanted to practice this process in her Ph.D. Zak explained that there were also precedents at York University, University of Toronto, and Ryerson University to build a framework at Brock for alternative format dissertations. Her dissertation consisted of five YouTube videos (introduction video, literature video, methodology video, as well as an observations and recommendations video), which she paired with a blog to provide a written component for the submission of her dissertation. Zak (2014b) distributed her work through social media, which enabled viewers to share and offer comments on her work. As of this writing, Zak's (2014a) dissertation has been viewed 37 000 times, in 195 countries. Zak (2014b) estimated that her videos took over 100 hours of work, as they required:

script writing, storyboarding, recruiting reliable volunteers, getting the lighting, audio, and lens acuity right, shooting multiple takes, navigating the lengthy editing process, and adding text titling on screen and animations in post-production to bring the work up to a professional level. (n.p.)

Zak (2014b) described the process of composing her dissertation as being not easier than a written dissertation,

making a multimodal dissertation is not an easier route to a Ph.D. in any way! It is like embarking on an adventure without a map instead of opting for the highway and a GPS: both roads lead to the same destination, but the trip is very different. (n.p.)

Sousanis' (2015) dissertation is another example of a multimodal dissertation in Education. Sousanis is widely known to be the first Ph.D. graduate in Education at Columbia University to compose his dissertation in [comic-book format](#), which he titled *Unflattening* (2015) (Figure 14). In Figure 14, I included a screenshot of Sousanis' website as a visual look into his comic-based dissertation. In his dissertation, Sousanis wrote and drew about the importance of visual thinking in teaching and learning. His dissertation has opened up discussion about the new possibilities for scholarship (Sousanis, 2017). In section 3.3, I created a database of non-traditional dissertations. I constructed this database because I learned that there was no online repository for multimodal dissertations. As the terminology for describing multimodal dissertations is unclear, I included any example that was originally labelled as 'non-traditional', 'complex electronic', 'electronic thesis', or 'digital thesis'. For me, it was important to at least gather examples of any dissertation that was not primarily linguistically based. Gathering these examples was important for my research because future generations of students can view these precedents of multimodal dissertations, and institutions can draw their own conclusions on whether non-traditional dissertations can be a viable substitution for the traditional dissertation.

DATABASE OF NON-TRADITIONAL DISSERTATIONS



RAP ALBUM
2017
A. D. CARSON
CLEMSON UNIVERSITY,
COMMUNICATION

[CLICK](#)



RAP ALBUM
2017
SHAW OBASI
HARVARD, ENGLISH

[CLICK](#)



DIGITAL DISSERTATION
2015
AMANDA VISCONTI
UNIVERSITY OF
MARYLAND, ENGLISH

[CLICK](#)



COMIC BOOK
2015
NICK SOUSANIS
COLUMBIA UNIVERSITY,
EDUCATION

[CLICK](#)



MUSIC
2014
LARISA SEGIDA
UNIVERSITY OF
MANITOBA, EDUCATION

[CLICK](#)



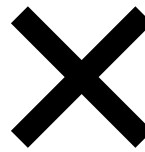
GAME
2017
STEVE WILCOX
WATERLOO UNIVERSITY,
ENGLISH

[CLICK](#)



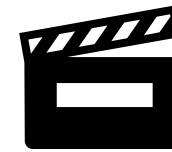
ORAL HISTORIES
2017
ALEX GALARZA
MICHIGAN STATE,
HISTORY

[CLICK](#)



NO PUNCTUATION
2015
PATRICK STEWART
UNIVERSITY OF BRITISH
COLUMBIA,
INTERDISCIPLINARY

[CLICK](#)



YOUTUBE/BLOG
2014
REBECCA ZAK
BROCK UNIVERSITY,
EDUCATION

[CLICK](#)



GRAPHIC NOVEL, PHOTOS
2014
MARTA MADRID
UNIVERSITY OF
GRENADA, VISUAL ARTS
EDUCATION

[CLICK](#)



CIRCUS TENT
2010
SPENCER HARRISON
TRENT UNIVERSITY,
ADULT EDUCATION

[CLICK](#)



SUITCASE
2005
DARIA LOI
RMIT UNIVERSITY,
ART

[CLICK](#)



VIRTUAL LEARNING
IN PROGRESS
GENEVIEVE CLOUTIER
UNIVERSITY OF OTTAWA,
EDUCATION

[CLICK](#)



INTERACTIVE MAP
IN PROGRESS
KATRINA FOXTON
UNIVERSITY OF YORK,
ARCHEOLOGY

[CLICK](#)



MASKS, PLASTICINE
2009
KARI-LYNN WINTERS
BROCK UNIVERSITY,
EDUCATION

[CLICK](#)



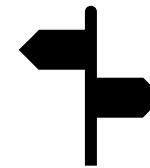
WALKING LAB
IN PROGRESS
SARAH TRUMAN
UNIVERSITY OF
TORONTO,
EDUCATION

[CLICK](#)



ORATIO
IN PROGRESS
ZANE ZALIS
UNIVERSITY OF
MANITOBA,
EDUCATION

[CLICK](#)



EXHIBITION
IN PROGRESS
RACHEL SANDERS
UNIVERSITY OF
GEORGIA, EDUCATION

[CLICK](#)

* All links are included in
Appendix F.

1.7 Chapter 1 Literature Summary

The Ph.D. dissertation has been long viewed as a bureaucratized, formalized, academic, monomodal document. Discussions in Canada, the United States, and the UK are reimagining the dissertation.

Knowledge creation is changing the academic's understanding of research and the ways we communicate, represent, and present academic work. With changes in technology, the ways we teach and learn are changing graduate education.

The university is focused on being more engaged in terms of technology and how to support graduate students through the Ph.D. process.

There are many examples of successfully defended non-traditional, complex, multimodal dissertations and theses from North America.

There are many examples of successfully defended non-traditional, complex, multimodal dissertations and theses from North America.

Chapter 2

2 Theoretical Summary

My theoretical framework begins with an introduction to lived curriculum as conceptualized by Aoki (1993). Then, I discuss multiliteracies in detail regarding multiliteracies as an approach, designs of meaning, and the four components of multiliteracies pedagogy. Lastly, I discuss modes and multimodal literacy and pedagogy. The table below shows the table of contents for this chapter.

2.1.1 Lived curriculum

2.1.2 Multiliteracies

- 2.1.2.1 Multiliteracies Pedagogy
- 2.1.2.2 Experiencing (Situated Practice)
- 2.1.2.3 Conceptualizing (Overt Instruction)
- 2.1.2.4 Analyzing (Critical Framing)
- 2.1.2.5 Applying (Transformed Practice)

2.1.3 Multimodality (Subset)

- Multimodal Literacy and Pedagogy
- 2.1.3.1 Mode
- 2.1.3.2 Affordance of Print Text and Constraints of Modes
- 2.1.3.3 Modes in Depth
- 2.1.3.4 Designs
- 2.1.3.5 Available Designs, Designing, Redesigned
- 2.1.3.6 Meaning-Making (Verb)
- 2.1.3.7 Meaning-Maker (Noun)

2.2 Chapter 2 Summary

Table 2. This chapter is organized by lived curriculum, multiliteracies, and multimodality.

2.1 Theoretical Framework

The theoretical framework of this study is built from the concept of lived curriculum, multimodal literacy and multimodal pedagogy as a focus within a multiliteracies approach and pedagogy. In the following sections, I discuss each theory.

2.1.1 Lived Curriculum

This study relies on the concept of lived curriculum (Aoki, 1993) to help conceptualize participants' experiences with multimodal dissertations. Aoki explained that lived curriculum is “not the curriculum as laid out in a plan, but a plan more or less lived out” (p. 257). Lived curriculum involves seeing students and who they are vis-à-vis curricula rather than as “faceless people, students shorn of their uniqueness” (p. 258). In the point of view of my study, lived curriculum reflects the experiences of students who are working through course work, comprehensive exams, proposal, ethics applications, writing, and the defence, while balancing their in- and out-of-school experiences.

Aoki (1993) suggested that curriculum should “accommodate lived meanings, thereby legitimating thoughtful every day narratives” (p. 263). These narratives are “grand stories through which [academics] have come to accept certain notions about ‘truth,’ ‘progress,’ ‘goals,’ ‘rationality,’ ‘unity and totality,’ ‘subjectivity,’ ‘objectivity,’ [and] ‘ends-means’” (p. 262). Lived curriculum allows “space for stories, anecdotes, and

narratives that embody the lived dimension of curriculum life” (p. 263). In my semi-structured interviews, I ask questions that help to develop a story or narrative for their lived curriculum.

Lived curriculum gives “legitimacy to the wisdom held in lived stories of people who dwell within that landscape” (Aoki, 1993, p. 267). I used lived curriculum to understand what graduate students experience through course work, comprehensive exams, qualifying papers, proposals, and the years they take in building and creating their dissertation with their supervisor and committee member(s). All of these experiences are important in understanding the concept of a multimodal dissertation, rather than investigating each experience individually (looking only at Ph.D. completion, or looking only at their relationship with their supervisor). Lived curriculum helps to situate the graduate student as primary in understanding the implications of multimodal dissertations in the social sciences.

2.1.2 Multiliteracies

Multiliteracies is fundamental to this study. Rethinking and questioning literacy teaching extends the idea and scope of literacy pedagogy (Bull & Anstey, 2018; Heydon, Cooper, & Tran, 2017; Hibbert, 2013; Kalantzis & Cope, 2017; Kim & Xing, 2019; New London Group, 2000; Thibaut & Curwood, 2018). The focus of a multiliteracies approach is “‘literacies’ or meaning-making as multimodal practices of representation

and communication” (Kalantzis et al., 2016, p. 231). These authors explained that a multiliteracies approach “focuses on the inevitable fluidity of meanings, their different interpretations and the necessity to negotiate meanings socially” (p. 219). Kalantzis and Cope (2015) described multiliteracies as capturing two aspects of human meaning-making; the first aspect is “The things we do to mean in an era where communications are increasingly multimodal. The second aspect is a new regime of social power, and new structures of agency emerging in the meaning-making process” (p. 17).

Multiliteracies in education takes into consideration the “technological, social, political, economic, and cultural changes happening in the way students use literacy, and the way students develop literacy knowledge, skills, and processes” (Anstey & Bull, 2006, p. 1). The literature documents that these changes are occurring in work places, public spaces, and everyday lives, and students are facing new demands as makers of meaning (Cope & Kalantzis, 2000c). In response to these demands, students are “creating new ways with words, new literacies, and new forms of learning” (Gee, 2000, p. 43). As students are adapting, it is necessary for academics to “rethink the social and the semiotic landscape of Western ‘developed’ societies” (Kress, 2000b, p. 182) and question “what constitutes appropriate literacy teaching in the context of the ever more critical factors of local diversity and global connectedness” (Cope & Kalantzis, 2000c, p. 3). Multiliteracies comes with a notion of design that is vital in this study for understanding learning, teaching, meaning-making, communicating, and representing ideas.

2.1.2.1 Multiliteracies Pedagogy

Multiliteracies provides a framework for thinking about the pedagogical opportunities (or lack thereof) that the participants in my study had when composing their multimodal dissertations. Multiliteracies pedagogy seeks to create a “productive, relevant, innovative, creative and even emancipatory pedagogy” (Kalantzis et al, 2016, p. 226), and places meaning-making and transformation as central to learning. As well, Kalantzis et al. explained that this type of pedagogy illuminates opportunities for students to engage in their learning in new ways and to “recognize the pivotal role of agency in the meaning-making process” (p. 226). Multiliteracies pedagogy was originally formulated as situated practice, overt instruction, critical framing, and transformed practice and more recently developed into four knowledge processes: experiencing, conceptualizing, analyzing, and applying (Cope & Kalantzis, 2015b).

In a pedagogy of multiliteracies, “all ways of meaning including language, are regarded as dynamic processes of transformation rather than processes of reproduction” (Kalantzis et al., 2016, p. 226), and meanings are “constantly being remade by their users” (New London Group, 1996, p. 64). A pedagogy of multiliteracies

allows for alternative starting points for learning (what the learner perceives to be worth learning, what engages the particularities of their identity. It allows for alternative forms of engagement, such as the varied experiences that need to be brought to bear on the learning, the different conceptual bents of learners, the different analytical perspectives the learners may have on the nature of cause, effect, and human interest. It allows for divergent learning orientations...

different modalities for meaning-making, embracing alternative expressive potentials for different learners... each meaning maker designs the world afresh in a way that is uniquely transformative of found meanings. (Cope & Kalantzis, 2009, p. 188).

This pedagogy allows learners to really engage in intrinsically motivated learning. Teaching and learning in this way gives learners an opportunity to investigate and engage in their passions, accepting students as a whole, inside and outside of school.

Multiliteracies pedagogy aims to develop learners' skills and sensibilities, first by asking "the question of design, form, and function, or how meanings are made differently for different purposes, and then how they are further transformed by their particular interests of the communicator and the interpreters of their message-prompts" (Kalantzis et al., 2016, pp. 226-227). A pedagogy of multiliteracies "focuses on modes of representation much broader than language alone. These differ according to culture and context and have specific cognitive, cultural, and social effects" (Cope & Kalantzis, 2000c, p. 5). The four components of pedagogy are: "situated practice, overt instruction, critical framing, and transformed practice" (p. 7), and the four knowledge processes are "experiencing, conceptualizing, analyzing, and applying" (Cope & Kalantzis, 2015b, p. 4). Multimodal pedagogy and the four knowledge processes are important in my study for elucidating how my participants came to understand how to compose their dissertation. For example, my participants' available designs and situated practice helps me understand their background, positionality, and lived curriculum during their doctoral program. Conceptualizing or overt instruction takes into consideration what participants had to seek from others to understand their research and the modes they wanted to use.

In addition, this knowledge process helps to understand what they had to do to learn how to use different design forms, such as song, poetry, art, or comics. Analyzing or critical framing in this context is considering how students may have rationalized their design decisions. Graduate students are responsible for performing, understanding, and critically framing their research; however, their supervisor and committee members play an important role in analyzing the dissertation. Finally, applying or transformed practice is the final creation of the multimodal dissertation. A dissertation requires many revisions and alterations, which I view as a re-design of the all the available designs, or in this case all the dissertation drafts. In the next section, I discuss each knowledge process and component of pedagogy. In figure 15, the knowledge processes based on the original conceptualization of multiliteracies pedagogy, and the knowledge processes are included. This figure helps map the original pedagogy with the knowledge processes.

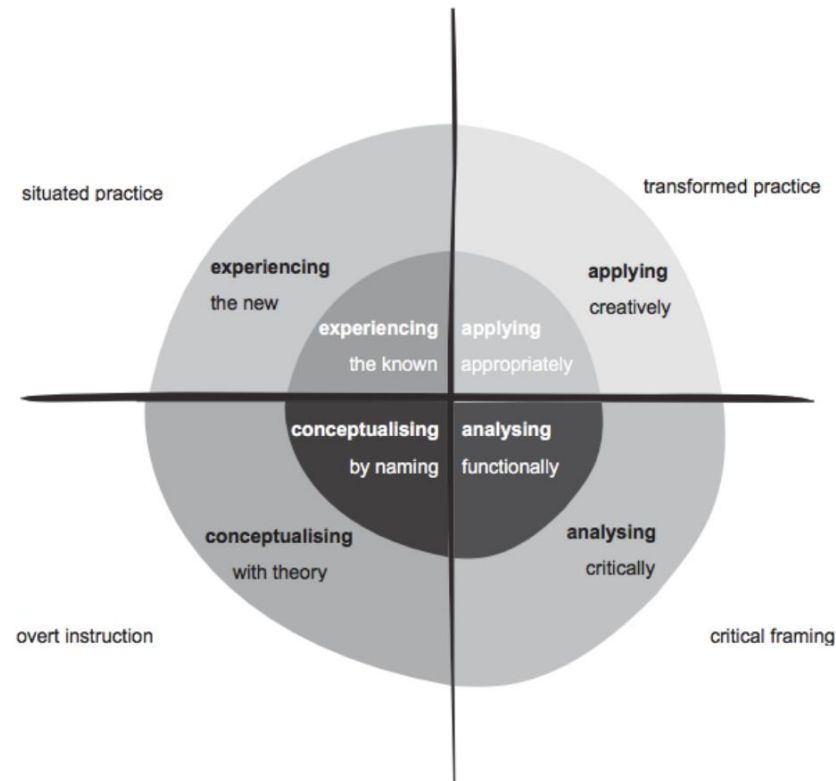


Figure 15 Mapping the original pedagogy against the 'Knowledge Processes' (Cope & Kalantzis, 2015b, p. 5)

2.1.2.2 Experiencing (Situating Practice)

Situating practice draws on the “experience of meaning-making in lifeworlds, the public realm, and workplaces” (New London Group, 1996, p. 65). It is the “immersion in experience and utilization of available designs of meaning, including those from the students’ lifeworlds and simulations of the relationships to be found in workplaces and public spaces” (New London Group, 2000, p. 25). A more recent reconceptualization of situating practice by Cope and Kalantzis (2015) is the process of experiencing the known

and the new. Experiencing the known means understanding the student and their background. It is important for the educator to draw on learner prior knowledge and experience, community background, personal interests, concrete experience, individual motivation, student’s own lives, and the everyday and familiar (Cope & Kalantzis, 2015a). Experiencing the new means providing new opportunities for students. Here, the authors explained that the educator introduces learners to new experiences either through real excursions or guest speakers, or through virtual means (texts, images, information). The concept of new is from the learner’s perspective and a learner will have to use what they already know to make sense of the new.

2.1.2.3 Conceptualizing (Overt Instruction)

The pedagogical component of overt instruction involves the introduction of an explicit metalanguage of design (New London Group, 1996), and develops a “systematic, analytic, and conscious understanding of Designs of meaning and Design processes” (New London Group, 2000, p. 35). Conceptualizing modes helps to “describe and interpret the Design elements of different modes of meaning” (p. 35). This gives “greater depth to meanings in particular situations” (Kalantzis & Cope, 2000, p. 246). Overt instruction involves asking questions that are representational, social, or organizational. According to Kalantzis and Cope, a representational question is: What do the meanings refer to? A social question is: How do the meanings connect the persons they involve? And an organizational question is: How do the meanings hang together? Conceptualizing may also involve,

developing a language to describe the processes of how we make meaning, such as: the patterns in the Available Designs of meaning, that is the resources we find and use to make meaning, how we do Designing, how meaning becomes Redesigned. (p. 246)

A more recent reconceptualization of overt instruction is conceptualizing by naming and conceptualizing with theory. Conceptualizing by naming is connecting and identifying new concepts, ideas, or themes. This includes abstract generalizing terms, conventions, features, structures, definitions, and rules in the use of various modes with different content matter. Naming is the first step toward understanding (Cope & Kalantzis, 2015a). Cope and Kalantzis stated that conceptualizing with theory is connecting different types of modes and ideas through generalizing, and synthesizing concepts by linking them together.

2.1.2.4 Analyzing (Critical Framing)

Critical framing is understood as when “students interpret the social and cultural context and purpose of designs of meaning” (New London Group, 1996, p. 65). Critical framing involves analyzing modes and content matter and giving “perspective to the meanings in a particular situation” (Kalantzis & Cope, 2000, p. 247), and having “students [stand] back from what they are studying and viewing it critically in relation to its context” (New London Group, 2000, p. 35). For example, contextual or ideological questions can be asked about the use of modes and content matter. A contextual question is: “How do the meanings fit into the larger world of meaning?” (Kalantzis &

Cope, 2000, p. 247). An ideological question could be, “Whose interests are the meanings skewed to serve?” (p. 247). Other questions asking how design fits in with local meanings and more global meanings could be,

what is the immediate function of Design? (What’s it doing: to whom? For whom? By whom? Why?); what’s the structure and immediate context of the Design? (Situation, connections, systems, relationships, effects); what’s the larger social and cultural context of the Design? (Culture, history, society, politics, values). (p. 247)

A more recent reconceptualization of critical framing involves analyzing a design functionally and critically. Analyzing functionally includes thinking about what a mode does. This means examining “the function or rationale of knowledge, action, an object, or represented meaning. What is it for? What does it do? How does it work? What is its structure, function or connections?” (Cope & Kalantzis, 2015a, n.p.). Analyzing critically involves “thinking about interrogating human purposes, intentions and interests of knowledge, an action, an object, or represented meaning. What are its individual, social, and environmental consequences? Who gains? Who loses? (n.p.). Analyzing functionally and critically means making justified decisions about design choices.

2.1.2.5 Applying (Transformed Practice)

Transformed practice is “learning as transformation, with the student becoming a new person by being able to do new things” (Kalantzis & Cope, 2000, p. 248). Students, as meaning-makers, “become designers of social futures” (New London Group, 1996, p. 65). Students learn to “transfer and re-create Designs of meaning from one context to

another” (New London Group, 2000, p. 31). There are different degrees and types of transformation of meaning from close reproduction to significantly creative change. There are different ways to transfer meanings to other contexts and cultural sites such as “addressing one’s particular interests, adding a part of one’s self and making connections, and recognizing influences and cross-references of history, culture and experience” (Kalantzis & Cope, 2000, p. 248). A more recent reconceptualization of transformed practice for both teachers and learners is the pedagogical component of applying designs appropriately and applying designs creatively. Applying appropriately is defined as doing things the way that is most commonly understood and acting upon knowledge in an expected, predictable, or typical way based on what has been taught. It involves transformation of the learner and requires that they have opportunities to demonstrate their understanding and learning (Cope & Kalantzis, 2015a). The authors explained that applying creatively means doing things in interesting ways by taking knowledge and capabilities from one setting and adapting them to a different setting—taking something out of its familiar context and making it work somewhere else. In my study, applying appropriately and creatively would mean adhering to the academic and scholarly standards, while using modes in creative combinations. These four knowledge processes used in multiliteracies pedagogy connects to my study because my participants do experience the known and the new, contextualize their research with theory and naming, analyze functionally and critically, and apply appropriately and creatively.

2.1.3 Multimodality

Multimodality crosses boundaries across disciplines (Bainbridge & Heydon, 2016; Hamilton, Heydon, Hibbert, & Stooke, 2015; Heydon & O’Neil, 2014), and is a subset of a multiliteracies approach and pedagogy. It is commonly discussed across a range of disciplines such as anthropology, education, design, linguistics, media and culture studies, musicology, sociology, and composition studies (Jewitt, 2009). Kalantzis and Cope (2015) described multimodality “as a key issue in our contemporary communications environment” (p. 17), and explained that “we need to expand the focus of traditional literacy learning to encompass multimodal meaning-making” (p. 19). Multimodality is the theory of how modes of meaning—oral, written, visual, gestural, tactile, audio, and spatial—are interconnected in our practices of representation and communication (Cope & Kalantzis, 2012b). In multiliteracies, multimodal representation is defined as the “cognitive work that individuals do with their minds. It is the raw material of thinking” (Kalantzis et al., 2016, p. 216), and communication is the transport and transformation of meaning” (Kress, 2000c, p. 189). Kress suggested that there is not one way to communicate a specific idea or concept; rather, an idea can be represented or communicated in multiple different ways.

Multimodal literacy expands definitions of literacy from the reading and writing of print texts to include all sign systems that are used for communication (Heydon, Zhang, & Bocazar, 2017). Multimodal literacy refers to the meaning-making that occurs through the “reading, viewing, understanding, responding to, producing, and interacting with written texts combined with other modes, particularly with screen based texts” (Walsh, 2011, p. 12). Multimodal literacies,

expand the idea of literacy beyond reading and writing; include the literacies of the new digital media; recognize the powerful learning opportunities as a consequence of synaesthesia of mode shifting; recognize learners as designers of uniquely voiced meanings; and focus on the meaning-making as transformation which changes the meaning-maker and their world. (Kalantzis et al., 2016, p. 237)

Kalantzis et al. highlighted the pluralism of literacies and the importance of synaesthesia or mode switching in making-making. Multimodal literacy is “inclusive of all modes of sense-making and the range of media through which one can construct meaning” (Heydon & O’Neil, 2014, p. 6). Multimodal literacy is the broadening of literacy to be inclusive of different modes in sense-making.

Multimodal pedagogy expands students’ communication options (Loerts & Heydon, 2017). Multimodal pedagogies “work consciously and systematically across semiotic modes to unleash creativity, reshape knowledge, and develop different forms of learning beyond the linguistic” (Stein, 2008, p. 123). Stein posited that language and literacy classrooms are more democratic spaces, and acknowledge learners as agentive, resourceful, and creative meaning-makers. This approach to teaching and learning comes from the theoretical position that “treats all modes as equally significant for meaning and communication” (Jewitt & Kress, 2003, p. 2). This calls for the re-thinking of “learning as a multimodal accomplishment” (p. 34). There are two guiding principles that form “the core of our language learning and teaching approach; what we called ‘a genuine search for meaning’ within an atmosphere of freedom and learner responsibility” (Stein, 2008, p. 4). Multimodal literacy is understanding literacy as

communication and representation through multiple modes. Multimodal pedagogy is the teaching and learning through multiple modes. The most important aspect of multimodal literacy and pedagogy is the process of meaning-making, which includes being creative and reshaping knowledge. Next I discuss the details of modes and meaning-making.

2.1.3.1 Mode

Multiliteracies is a theorization of a

full range of semiotic modes in a particular society; a full understanding of the potentials and limitations of all these modes; of their potential for interaction and interrelation with each other; and an understanding of their place and function in our imaginings of the future. (Kress, 2000b, p. 183)

It is important to understand what a mode is because it is different than materiality, medium, or media. Mode is broadly understood to be a “regularized, organized set of resources of meaning-making, including, image, gaze, gesture, movement, music, speech, and sound effect” (Jewitt & Kress, 2003, p. 1). Kalantzis and Cope (2015) explained that with the “rise of new, highly personalized media, we see the proliferation of still and moving image as modes of expression, displacing messages that would once have been expressed in oral or written language” (p. 17). Mode answers the question: “how is the world best represented and how do I aptly represent the things I want to represent in this environment?” (Freeman & Tolmie, 2012, p. 146). It is the general principle of a mode that suggests “there needs to be a shared cultural sense of a set of resources and how these can be organized to realize meaning” (Jewitt, 2009, p. 22). If a

culture values a mode highly, “much work will inevitably go into its elaboration, through its constant use of members of a social group. Its constant use in relation to specific purposes will make it elaborate in relation to these domains” (Jewitt & Kress, 2003, p. 15). Rowsell (2013) conceptualized “a mode as unit of expression and representation. As long as a person and community treat something as able to express and represent meanings, then it meets the criteria of a representational and communication mode, unit or element” (p. 3). Media are “the technologies for making and distributing meanings as messages—book, magazine, computer screen, video, film, radio, billboard” (Jewitt & Kress, 2003, p. 4). Medium refers to the resources being used: paint, pencil crayons, paper, and magazines. Materiality, on the other hand, refers to “what a culture provides as materials for making meaning. All cultures have drawn on the human ability to make an infinitely varied range of sounds to make meaning, turning sound into full means for representation” (Jewitt & Kress, 2003, p. 14). In other words, materiality refers to a mode’s physical features and the social, cultural, and historical aspects pertain to “what has been done in the past with this material and how the meanings made in the past affect what can be done with a mode” (Bowen & Whithaus, 2013, p. 15).

Rowsell (2013) explained that a mode has three functions: express, represent, and signal. The ideational function of modes, Rowsell expressed, is when modes reflect human experiences such as ideas, values, beliefs, emotions, and senses. The interpersonal function of modes is when modes reflect human experiences such as ideas, values, beliefs, emotions, and senses. Finally, Rowsell relayed that the textual function of modes is forming and shaping meaning. This is the functional specialization of modes, which encompasses the affordances of mode, design decisions in relation to the

reader of the work, and the longer-term effect of cultural variation (Jewitt & Kress, 2003). Modes can be chosen, sorted, assembled, distributed, and remixed together to create meanings that coalesce or cross over by transmodal, intermodal, and intramodal elements (Rowsell, 2013). Transmodal elements in texts are elements that reach across modes. For example, films reach across visual and audio modes. Intermodal effects represent links between modes that can exist separately but that cross-reference each other. Intramodal elements involve modes that cohere to make meaning, for example colour with fabric to make a strong effect (Rowsell, 2013). There are plenty of affordances of using modes, and there are many different reasons in doing so when communicating information.

There is also a specific logic to each mode, as they provide different communicational and representation potentials (Jewitt, 2009). The logic of modes refers to “what (deep) orientation to the world is necessarily and inevitable embedded in the resources for representation” (Jewitt & Kress, 2003, p. 15). Kress (2010) described each mode as having its specific lens on the world, and with that lens the world is organized as specific arrangements in space, in time, or both. The definition of an affordance of a mode is “the different ways in which a mode has been used, what it has been repeatedly used to mean and do, and the social conventions and material possibilities that inform its use in context” (Fransman, 2012, p. 143). In other words, the affordances of a mode means the ways a community has used a mode or how a mode is traditionally represented to the point that it becomes the norm, or what most people accept and understand to be true. Affordances refer to “what is possible to express and represent readily, easily with a mode, given its materiality and given the cultural and social history

of that mode” (Jewitt & Kress, 2003, p. 14). In other words, Kalantzis and Cope (2015) described “affordances as “a ‘can’ rather than a ‘must’” (p. 19). In contrast, constraints are the “limits that are part of modes at a particular time” (Heydon & O’Neil, 2014, p. 6). The affordance of “the logic of time governs writing, the affordance of the logic of space governs the image” (Kress, 2003a, p. 183). Specific examples of the affordances of modes include how “speech and writing ‘name’; image ‘depicts’, gestures lend emphasis and sketch our themes and topics. Layout does not ‘name’ as words do or ‘depict’ as (elements in) images do; it organizes information” (Jewitt, 2009, p. 64). In this way of explaining affordance in relation to speech, writing, image, and layout, there are common uses of each one: to name, depict, lend emphasis, sketch, or organize. Understanding the affordances and constraints of each mode in the participant’s dissertation will also help to respond to the question of the affordances and constraints of multimodal dissertations. Some of the affordances of using modes (such as visual, oral, textual, gestural, or audio information) are to depict, name, or organize information. In addition, multimodality helps to refer, dialogue, structure, situate or intend meaning of information. There are many affordances to using modes in order to communicate information.

2.1.3.2 Affordance of Print Text and Constraints of Modes

Even with the changes to dissertations I describe in the introductory chapter, alphabetic print text remains an important part of dissertations (Gourlay, 2012). Print in the traditional dissertation has remarkable strengths (Borg & Davis, 2012). These

authors explained that an evident strength of print text is to make argument explicit and avoid vagueness, implicitness, allusiveness, ambiguity, or multiple meanings. Language “constitutes a rich store of shared meaning and subtle interplay and reference” (Gourlay, 2012, p. 94). Further:

Despite the rise in the prominence of multimodal representation in popular media within university pedagogy and for desk research, text (used to mean here the written or printed word) has arguably remained the dominant means of carrying meaning and argument for university assessment, and as a result remains at the heart of the process of dissertation writing as the dominant carrier of narrative or propositional knowledge or argument. (p. 88)

Print text contrasts with the visual mode, when used in academic work, as there is a possibility of a “heavier burden of interpretation and the resultant assumed meaning is highly unpredictable and reliant on the reader’s individual and unknowable set of personal associations” (p. 94). This means that the visual mode does two kinds of work: “act as evidence and carry the burden of argument” (Borg & Davis, 2012, p. 22).

Depending on the content and genre, image could have more or less interpretive space:

Images open up a greater interpretive space for the reader/viewer to occupy. This allows for subtlety and multiplicity of interpretation—which may enhance and open up meaning in creative or illustrative uses but may be less effective of (relatively) precise, shared, complex, propositional argument is the aim. (Gourlay, 2012, p. 96)

Thinking about mode in the ways just described allowed me to ask study participants the following questions: How did you craft your dissertation to avoid vagueness and implicitness? “To what extent can written words convey the meaning of visual or other modes? Conversely, to what extent can visual or other modes carry the burden of argumentation, which with the claim of new knowledge, has been one of the expected components of the dissertation?” (Andrews et al., 2012, p. 4). The concept of multimodal argumentation is slowly gaining in popularity and beginning to be more closely studied.

Modes also switch and transition in our meaning-making, which is called *synesthesia* or mode shifting is an “integral part of our thinking. It is also an invaluable thinking tool when used in support of learning” (Kalantzis and Cope, 2015, p. 21). This means we attend from one mode to another, such as “when we have an image, and say the word for the same thing” (p. 21). On the other hand, the process of transferring meaning from one mode to another is called “transliteration” (p. 21). For example, designers want to create products that “‘speak’ to their users, and teachers want to develop and implement contemporary academic pedagogies” (p. 21). Transliteration transfers meaning from a visual to an oral mode, or from written to gestural modes, or in many different combinations. Next I discuss each mode in further detail.

2.1.3.3 Modes in Depth

The following section explains each of the modes (written, visual, spatial, tactile, gestural, auditory, and oral) in depth. The written mode of meaning includes reading as

representing meaning to oneself and writing as communicating written meanings (Kalantzis et al., 2016). Elements of linguistic meaning include

delivery (features of intonation, stress, rhythm, accent); modality (the nature of the producer’s commitment to the message in a clause), transivity (the types of process and participants in the clause); vocab/metaphor (word choice, positioning, meaning); nominalization of processes (turning actions, qualities, assessments or logical connection into nouns or states of being; information structures (how information is presented in clauses and sentences); local coherence relations (cohesion between clauses and logical relations between clauses; [and] global coherence relations (the overall organizational properties of text). (New London Group, 2000, p. 27)

The linguistic mode focuses on the meanings of clauses, word choices, nouns, sentences, and how these linguistic elements communicate messages, processes, participants, metaphors, and logic. In dissertations, this would be the linguistic elements, including the use of passive or active voice, APA formatting, and avoiding colloquialism.

The visual mode of meaning refers to “making still or moving images (communicating meanings in traces that might be seen by another as a visual message-prompt); [and] viewing images, vistas, scenes” (Kalantzis et al., 2016, p. 232). For example, elements of visual meanings include “colours, perspective, vectors, foregrounding and backgrounding” (New London Group, 2000, p. 26). The visual mode refers to an aesthetic quality to meaning, through colours and perspectives of still or moving images.

The spatial mode of meaning concerns “positioning oneself in relation to others, creating spaces and ways of moving around in spaces and experiencing spatial meanings (re-representational spatial meanings to oneself as for instance: proximity, layout, interpersonal distance, territorially, architecture/building, streetscape, cityscape and landscape)” (Kalantzis et al., 2016, p. 232). For example, elements that communicate spatial meanings are “ecosystem and geographic meanings” (New London Group, 2000, p. 26). The spatial mode refers to layout in a dissertation, how is the ‘page’ used in designing a theoretical framework, for example.

The tactile mode of meaning refers to “making experiences and things whose effects can be felt as touch, smell and taste (tactile communication)” (Kalantzis et al., 2016, p. 232). The authors clarified the “forms of tactile communication and representation includes skin sensations (temperature, texture, and pressure), grasp, manipulable objects, artefacts, aromas, and cooking and eating” (p. 232).

The gestural mode of meaning includes “communication using movements of the body, hands, and arms, expressions of the face, eye movements and gaze, demeanors of the body, gait, clothing and fashion, hairstyle, dance, action sequences, manifesting in many forms, including ceremony and ritual” (p. 232). Elements that constitute the gestural mode of meaning are “behavior, bodily physicality, gesture, sensuality, feelings and affect, kinesics, and proxemics” (New London Group, 2000, p. 26). Students use the gestural mode in the Dance Your Ph.D. competition discussed in the previous chapter. However, web-based dissertations (Zak, 2014a) also involve the use of the gestural mode, as the reader navigates links, pages, and menus.

The auditory mode of meaning is “communication that uses music, ambient sounds, noises, alerts (meaning in social interaction) and hearing and listening (an individual re-representing the audio meanings they encounter to themselves, or imaging sounds)” (Kalantzis et al., 2016, p. 232). These are elements that constitute music and sound effects (New London Group, 2000). In multimodal dissertations, this can include rap albums or songs (Carson, 2017, Obasi, 2017).

The oral mode of meaning is “communication in the form of live or recorded speech (representing meaning to another) and listening (re-representing oral meanings one encounters to oneself, talking to oneself or rehearsing intended speech)” (Kalantzis et al., 2016, p. 232). The oral mode was used in Anar Rajabali’s dissertation (2017) involving spoken word.

2.1.3.4 Designs

Making-meaning requires design. Design is a fluid, open-ended and flexible process of meaning-making. In multiliteracies theory, the word ‘design’ describes “the patterns of meaning and action that constitute representation, communication and interpretation” (Kalantzis & Cope, 2015, p. 22). Creating a multimodal dissertation involves more than composing and producing; it is also a process of designing:

design is central to the activity of ‘writing’ a dissertation... students have to address issues of transduction from one mode to another (e.g. in the transcribing of an oral interview to a written record); and also, the relative positioning of one mode alongside another. (Andrews et al., 2012, p. 3)

This means that designing is the deliberate action of working with different modes of meaning.

Also, design is an “essential goal of educational practice, of theories of learning, and of theories of representation” (Jewitt & Kress, 2003, p. 17). Design can be understood as a verb and a noun. As a verb, design is “a sequence of actions, such as representation > communication > interpretation” (Kalantzis et al, 2016, p. 221). As a noun, design is “the form and structure of something, such as the components of meaning and how they are connected—in written text, a spoken text, an image” (p. 221). Design refers to “how people make sure of the resources that are available at a given moment in a specific communicational environment to realize their interests, as makers of a message/text” (Jewitt & Kress, 2003, p. 17). Designs have “epistemological decisions, but they are realized through design decisions focused on the use of modes, the truths they harbor, the use of genres, and the truths they contain” (Kress, 2000a, p. 158). In the study, I seek to understand the participants’ epistemological decisions, meaning how they make their decisions based on how they define knowledge and how they are connected to their lived curriculum in the process of composing a multimodal dissertation. This question leads to other queries such as how participants decided “what is needed now, in this one situation, with this configuration of purposes” (Kress, 2003a, p. 49). In this sense, design is using what you have or what is available and examining all extenuating factors.

For example, in regard to a website composed as a doctoral dissertation, I might ask what the purpose is and what the author’s epistemological decisions were relative to

the modes of a website. Andrews et al. (2012) provided the following example of what it is like to design a website and to think about design decisions:

Let us take the simple example of a doctoral research project which involves the design and creation of a website as a key component. The simplest and best way to relay the work to the examiner is via a URL address, so that he/she can look it up and explore it. The challenge for the examiner is to navigate their way around the site in whichever order they wish, gauging the quality of material, the range and layout of the material and the overall design (both in the terms of aesthetics and use). Issues of argumentation will be at stake, because the conventional printed and written argument, so essential to a successful thesis or dissertation, is sequential in its logic and narrative. In a web-based submission, such sequentiality may exist within sections and subsections of the site, that overall the structure is not sequential or time-based, though it may be logical. What we can say here is that a website, because of its collage-like structure, operates via a different logic. It is important for examiners to understand that logic/paradigm, and not impose logics from other formats and genres to the students’ work if it is not appropriate. Imposing a linear structure alters not only the representation but impacts meaning-making possibilities. For example, relying only on the written word to convey a range of thoughts and ideas that may not lend itself to linear forms, will invariably shift the overall design of argumentation on the page. (p. 5)

This means that many aspects of designing must be rationalized and carefully considered.

		we have just read.
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2.1.3.5 Available Designs, Designing, Redesigned

Designing is a semiotic activity involving three elements: Available Designs, Designing, and the Redesigned (New London Group, 2000). In Table 3, I outline how designing is used as a noun and a verb and how it contributes to meaning-making when students are reading. For example, available designs are having enough clues to make sense of what you are reading. Designing is incorporating experiences and interests in combination with what you read. The (re)-designed is the final interpretation of what is read. Further detail is provided in the next table. Table 3 outlines how readers can use these three elements of design (Cope & Kalantzis, 2016) to make meaning when they read.

Table 3. Making-meaning through reading: Reading as design (Cope & Kalantzis, 2016, p. 262).

Reading as ‘design’	<i>(Available) designs</i>	We have seen the word, phrase, or genre of text and we have experienced its meaning—or at least we have enough clues for it to make sense even if some parts of it are unfamiliar.
	<i>Designing</i>	As we read the text, we are helped along by the mental images it creates. We make sense of the text in our own particular way based on our experiences and interests.
	<i>The (re-) designed</i>	We are left with our interpretation of the text, our memory of what it says and how it says it. Our meaning-world is transformed in whatever small way by the text

Multiliteracies theorists hold that making-meaning is a semiotic activity involving available designs, designing, and the re-designed. The world is full of available designs, which are “patterns of meaning available to use in the form of our cultural and environmental heritage—the conventions of language, imagery, sound, gesture, touch, and space. We have lived with them since we were born” (Kalantzis et al., 2016, p. 221). Kalantzis et al. explained that available designs are what students have learned to use for meaning-making and interacting with others. Specifically, available designs are found and findable resources of meaning, and are based on culture, context, and purpose-specific patterns of conventions of meaning-making (Cope and Kalantzis, 2000b). Available designs are artefacts of communication, tools for representation and expressive materials (p. 222). More specifically,

Available designs are the categories of meaning we have, and the mental models of the world that tie these categories together. Available designs are meanings that we recall and connect to the text as we read. Some of these recollections take the form of visual, spatial, gestural, and other meanings: for example, restaurants we have seen in pictures or movies, or actual restaurants where you have been shown to a table by a waiter. As we read ‘We arrived at the restaurant...’, we apply out categories and mental models to it, giving it a meaning based on our experience. This is never quite the same as the next readers meaning, and that is because our particular experiences have been different. (p. 262)

This description of available designs means that when we make meaning we use our background knowledge, or in this case our available designs, to make meaning. To me, available designs represent memories that can be stored in all different modes.

Cope and Kalantzis (2000b) contended that when students design a multimodal text, they are participating in meaning-making. Designing is the

act of doing something with available designs of meaning, be that representing the meaning to oneself through the active, interpretive processes of reading, listening or viewing, or communicating to others by creating message-prompts to which others may respond, such as writing, speaking or making pictures.

(Kalantzis et al., 2016, p. 222)

Designing “always involves an injection of the designers guiding interests and cultural experiences, their subjectivity, and identity” (p. 223). It is the process of shaping emergent meaning, involving re-representation and recontextualization, and it is transforming “knowledge by producing new constructions and representations of reality” (New London Group, 2000, p. 22). To me, designing means incorporating all available designs with new designs.

The redesigned is the transformation of available designs—of the world, and of the designer themselves (Cope & Kalantzis, 2000b). The authors suggested that the redesigned is the world transformed by the new available designs or the meaning designer who, through the very act of designing, has transformed themselves. The texts of designing become the redesigned, “new resources for meaning in the open and dynamic play of subjectivities and meaning” (Kalantzis et al., 2016, p. 224). I assume

that graduate students have different designs available to them, engage in designing in all different ways, and each one will have a different *redesigned*. In my study, I looked for the redesigned in the final copy of the multimodal dissertation.

2.1.3.6 Meaning-Making (Verb)

Graduate student interests and practices of representation and communication are never readily matched by the existent semiotic resources, but rather [they] choose the most apt forms, the forms already most suited by virtue of their existing potentials, for the representation of [their] meanings. As there is never a total ‘fit’, the resources are always transformed. (Kress, 2000a, p. 155)

Because of this mismatch,

the breadth, complexity, and richness of the available meaning-making resources is such that representation is never simply a matter of reproduction. Rather it is a matter of transformation of reconstruing meaning in a way which always adds something to the range of available representational resources. (Cope & Kalantzis, 2000a, p. 204)

Cope and Kalantzis argued that learning, or meaning-making, is a process of continuous movement. This means that there is no final product of learning a concept; instead, there is growing, expanding, shifting, and moving based on the learner.

Transformations “show the extent to which meaning-making, creativity, and innovation are inseparable; every act of representation is a creative act in which a new sign is made. Innovation is the normal condition of all human meaning-making” (Jewitt & Kress, 2003, p. 146). Across disciplines, transformation is conceptualized as “an orchestration of multiple modes to communicate, represent, express meanings—attends systematically to the social interpretation of a wide range of communicational forms used in meaning-making” (Rowse, 2013, p. 6). In a multimodal approach, “all modes of communication drawn on in the making of meanings are given equally serious attention” (Stein, 2008, p. 1). There are interconnected theoretical assumptions about multimodality, such as “language is part of a multimodal ensemble; each mode in a multimodal ensemble is understood as realizing different communicative work; and people orchestrate meaning through their selection and configuration of modes—interaction between modes is significant for meaning-making” (Jewitt, 2009, pp. 14-16).

Multimodality approaches

representation, communication as something more than language...[it is] the social interpretation of language and its meanings to the whole range of representational and communicational modes or semiotic resources for making meaning that are employed in a culture—such as image, writing, gesture, gaze, speech, posture. (p. 1)

In a dissertation, understanding, representing, and communicating an argument are requirements of the genre. If modes come with different affordances and constraints, then discovering why and how modes can be used to support this meaning-making is vital to supporting the generation and mobilization of new knowledge.

Meaning-making is the process of how humans understand ideas and concepts. In fact, “All meaning-making is multimodal” (New London Group, 2000, p. 1). One of the key propositions of multiliteracies theory is “that a theory of meaning: as transformation or redesign is also the basis for a theory of learning” (Kalantzis et al., 2016, p. 224). Meaning-making is “‘sense-making’ and it is tied to what human beings understand they can actually do with an object, event or procedure, and to the extent that such doing makes sense within the person’s frames of references” (Stein, 2008, p. 32). Meanings are “made, distributed, received, interpreted, and remade in interpretation through many representational and communicative modes—not just through language – whether as speech or as writing” (Jewitt & Kress, 2003, p. 1). Meaning-making is also a “process of representation (sense-making) and communication (in which a message prompt is interpreted by another person)” (Kalantzis et al., 2016, p. 211). Meaning is made in “ways that are increasingly multimodal – in which written – linguistic modes of meaning are part and parcel of visual, audio, and spatial patterns of meaning” (Cope & Kalantzis, 2000c, p. 5). Yet multimodal meaning is also “much more than the sum of linguistic, visual, spatial, gestural, and audio modes of meaning. It also involves processes of integration and moving the emphasis backwards and forwards between the various modes” (Cope & Kalantzis, 2000a, p. 211). In these processes, “meaning-making accrues different material realizations, becomes rematerialized and in doing so, the meanings attached to the object or entity fundamentally shift” (Stein, 2008, p. 24).

Kalantzis and Cope (2015) explained that “all meaning-making, across all modes, operates at five levels, with five purposes” (19). They further explained:

We *refer* to things, events, processes and abstractions (Halliday’s ‘ideational function’). We *dialogue*, with ourselves and others (Halliday’s ‘interpersonal function’). We *structure* our meanings in ways which are both conventional and always innovative to the extent that every remaking is uniquely modulated (Halliday’s ‘textual’ function). We *situate* our meanings in contexts, or at least find that they are situated by default (what we call a ‘contextual’ function). And we *intend* when we position and/or encounter meanings in webs of intention or agency (a metafunction we call ‘interest’). (p. 19)

This grammar of multimodal meaning is important to my data analysis when I explore how the different modes in my participants’ dissertation refer, dialogue, structure, situate, and intend various different meanings, and whether it is an affordance and constraint to the overall meaning. In other words, there are five questions to ask about meaning-making: “What do the meanings refer to? How do meanings connect the participants in meaning-making? How does the overall meaning hold together? Where is the meaning situated? Whose interest is a meaning designed to serve?” (pp. 19-21). Table 4 further explains what questions should be asked regarding reference, dialogue, structure, situation, and intention for understanding multimodal meanings. This table will expand each purpose of meaning-making as well as explain in detail how to understand multimodal meaning or logic.

Table 4. A grammar of multimodal meaning (Cope & Kalantzis, 2016, p. 242).

<i>Reference...</i> raises	What is the reference point?
----------------------------	------------------------------

the question, ‘ <i>what do the meanings refer to?</i> ’	What does it denote?
	What is its subject or subjects?
	– remembering of course that answers to this question may be fluid, ambiguous, and a matter of interpretation.
<i>Dialogue...</i> raises the question, ‘ <i>how do the meanings connect the people who are interacting?</i> ’	How do happenings appear, who/what makes them happen, and what are the effects of their happening?
	How are the people interacting connected?
	What interpersonal relations, person-to-thing or thing-to-thing relationships, do the meanings try to establish?
	– remembering of course, that the social participants may not see the social connections in the same ways.
<i>Structure...</i> raises the question, ‘ <i>how does the overall meaning hold together?</i> ’	What makes a meaning cohere?
	What is its composition?
	What are its parts, and how do the parts fit together?
	What are its organization and structure as a whole?
	What is its structure?
	– not everyone will necessarily feel that their own meanings or the meanings they encounter are always totally coherent, or that they can ever get to the

	bottom of everything that is meant.
<i>Situation... raises the question, 'in what context are the meanings located?'</i>	How is the meaning connected to its surroundings?
	How does the meaning fit into the larger world of meaning?
<i>Intention... raises the question, 'what are the purposes of these meanings and whose interests do they serve?'</i>	Why are the meaning-makers involved in meaning-making activities?
	What motivates them?
	How does the meaning, its context, and its reception reveal the interests of those involved?
	How does the communicator regard their audience?
	Who is more and less powerful?
	The interests of different message-makers always vary, and messages always bring their interests and identities to bear in what they make of the meaning.

This table is important because the questions help identify the affordances and constraints of multimodality, especially within the dissertation.

2.1.3.7 Meaning-Maker (Noun)

Meaning-makers “are always (re)constructing their worlds, seeing them in new ways, thinking new thoughts, envisioning things from fresh perspectives, and imagining new possibilities. Meaning-making is the source of human creativity and innovation (Kalantzis et al., 2016 p. 217). Thus:

Learners develop knowledge and strategies for reading the new and unfamiliar when they encounter it. You can’t necessarily predict the rules of meaning in the next social space you encounter. But you learn how to look for patterns, to negotiate the unpredictable, to begin to interpret designs of meaning that may not at first make sense. (p. 226)

Meaning-makers “do not just use what they have been given; they are fully makers and remakers of signs and transformers of meaning” (p. 226). A meaning maker or multiliterate person can “interpret, use, and produce electronic, live, and paper texts that employ linguistic, visual, auditory, gestural, and spatial semiotic systems for social, cultural, political, civic and economic purposes in socially and culturally diverse contexts” (Anstey & Bull, 2006, p. 41). Therefore:

a literate person is flexible, positive and strategically responsive to changing literacies; is able to sustain mastery – knows enough to be able to reformulate current knowledge or access and learn new literate practices; has a repertoire of practices – has a range of knowledge, skills, and strategies to use when appropriate; is able to use traditional texts – uses print and paper, and face-to-face oral encounters; and is able to use new communications technologies - uses

digital and electronic texts that have multiple modes (e.g. spoken and written), often simultaneously. (p. 19)

Anstey and Bull argue that there are many more responsibilities to being literate such as navigating the interplay between traditional texts and new communications technologies. Being able to balance multiple modes makes a student more aware of their choices of modes.

Also, students “must first recognize that a context requires different literate practices and then be able to modify known literate practices of use them in new and different ways” (Anstey & Bull, 2006, p. 21). When learners “juxtapose different languages, discourses, styles, and approaches, they gain substantively in meta-cognitive and meta-linguistic abilities and in their ability to reflect critically in complex systems and their interactions” (New London Group, 1996, p. 69). The meaning-maker is responsible to “stretch, change, adapt, and modify all the elements used, all the time, and thereby change the whole set of representational resources with its external relations” (Kress, 2000a, p. 155). Individuals are now seen as the “remakers, transformers, of sets of representational resources – rather than as users of stable systems, in a situation where a multiplicity of representational modes are brought into textual compositions” (Kress, 2000a, p. 160).

The idea of meaning-making as a verb and meaning-maker as a noun help position myself as a researcher in this study. I firmly believe that pedagogy is about meaning-making and being a meaning-maker. I believe that using multiple modes is beneficial to literacy as communication and representation.

2.2 Chapter 2 Summary

Lived curriculum legitimizes thoughtful everyday narratives and allows space for stories, anecdotes, and narratives that embody the lived dimension of curriculum life.

Multiliteracies takes into consideration the “technological, social, political, economic, and cultural changes happening in the way that students use literacy, and the way students develop literacy knowledge, skills, and processes” (Anstey & Bull, 2006, p.1).

Multiliteracies pedagogy is experiencing the known and new, conceptualizing by naming and with theory, analyzing critically and functionally, and applying creatively and appropriately.

Multimodality is the theory of how modes of meaning—oral, written, visual, gestural, tactile, audio, and spatial—are interconnected in our practices of representation and communication (Cope & Kalantzis, 2012).

Multimodal literacy and pedagogy is about constructing meaning with all different modes and learning to be inclusive of all modes.

Chapter 3

3 Literature Review Summary

In this chapter, I discuss what is historically known in the literature about a wide range of topics, including the doctoral education, dissertation writing, scholarly creativity, completion of the Ph.D., supervisory pedagogy, and academic literacies. All of these various themes help inform my research. As identified by a scoping review (Jones, 2013), and handbook of digital dissertations (Andrew et al., 2012), these six themes are generally accepted as the landscape of literature in doctoral studies. The table below shows the table of contents for this chapter.

3.1 Literature Review

3.2 Scholarly Creativity Summary

3.2.1 Scholarly Creativity Review

3.3 Doctoral Studies Summary

3.3.1 Doctoral Studies Review

3.4 Completion of Ph.D. & Employment Options Summary

3.4.1 Completion of Ph.D. and Employment Options Review

3.5 Supervisory Pedagogy Summary

3.5.1 Supervisory Pedagogy Review

3.6 Academic Literacies Summary

3.6.1 Academic Literacies Review

3.7 Changes With Dissertations Summary

3.7.1 Changes in Dissertations Review

3.8 Chapter 3 Summary

Table 5. This table summarizes the literature review

3.1 Literature Review

In the following section, I discuss the changes in graduate education.

Specifically, I offer examples of how scholarship is broadening, becoming more engaged, and collaborative. Herein I describe the emergence of different program models for the Ph.D. and its dissertation, the roles that Ph.D supervisors and examining committees play in alternative types of dissertations, academic literacies, and scholarly creativity.

This chapter summarizes the key ideas I have identified in the literature:

1. The dissertation is a significant contribution to the fulfilment of the scholarly criteria for a doctoral degree.
2. To date, research has focused on the dissertation as a product of writing.
3. Doctoral students bring their own unique knowledge and experience from an increasingly multimodal world, and not all students learn and represent their knowledge in the traditional ways.
4. Supervisors have little experience supervising non-traditional theses.
5. This study explores the production of multimodal dissertations, and its implications for students, supervisors, and academic institutions.

In Figure 16, I provide a visualization of the literature review for my study.

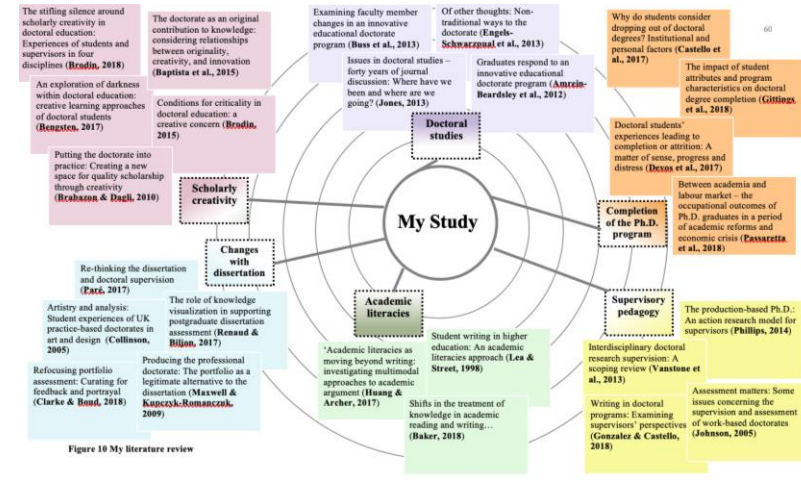


Figure 16. Example of my literature review. This is a screenshot from page 60.

Figure 16 is a constructed representation of the six themes I identify within the literature. I include the title of the reference, a condensed version of the authors, and the year of publication. I connect each source to an overarching theme. I put a spider web at the back to represent how each theme connects to each other in some way, but I will let the reader make the connections themselves. The gaps in the web signify the gaps in the research, and in my study. I break down each study with a more detailed summary. As well, I explain how each study relates to my work and where gaps may be found in the literature. In figure 17, I provide an example of a graphic organizer that will appear before every theme of my literature review. In particular, Figure 17 is about the theme scholarly creativity. I have reviewed four different studies. The boxes closer to the centre represent the author(s) and title of the work. The larger boxes closer to the edges of the page are summaries of the papers. The purpose of this is to provide the reader

with a summary of each reading related to the theme. After I explain in depth each study that I use.

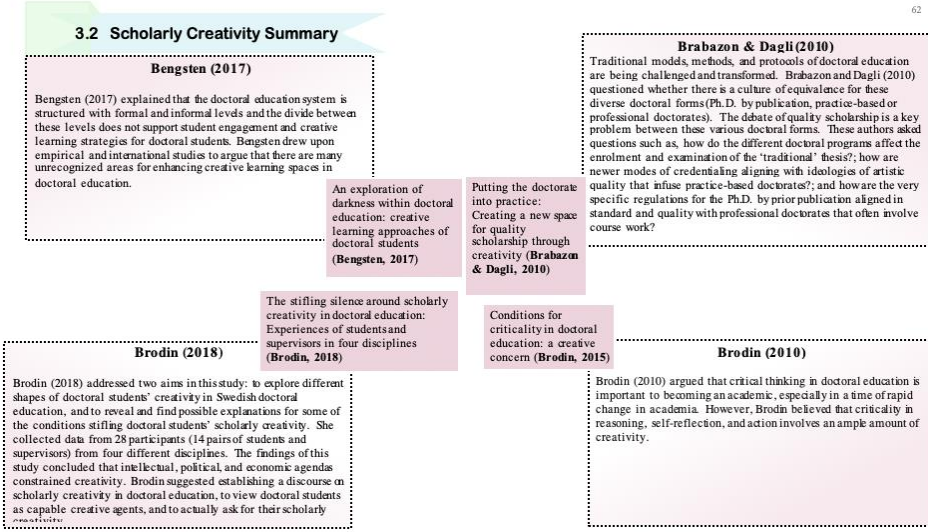


Figure 19 Literature review on the theme scholarly creativity

Figure 17. Literature on scholarly creativity theme. This is a screenshot from page 61.

I organized my literature review based on the six themes I identified, which are further supported by Jones (2013): doctoral studies, completion of the Ph.D. program, employment options, supervisory pedagogy, academic literacies, changes with dissertations, doctoral students' experiences, and scholarly creativity. The literature concerning the Doctorate of Philosophy has grown substantially within the last five years, with many studies recently published. There have been a variety of issues that have been explored by scholars in doctoral education. This component of the literature is important because of the current way that doctoral programs are changing. My study

can contribute to this research that focuses on how traditional doctoral programs are becoming more innovative. I identified a second theme, which is about completing the Ph.D., as well as the employment options after graduating with a doctorate. Next, I found the theme of supervisory pedagogy became clear in the literature, as there have been many studies based on the supervisor-graduate student relationship and understanding the areas where support can be improved. Also, another theme in the literature that I identified was academic literacies, which encompasses the literature around academic communication and what writing means in higher education. In particular, a current trend in this area of the literature that I identified is how digital technology is shifting academic writing. There is a growing theme in the literature regarding changes with the dissertation in various different doctoral programs, including the professional doctorate, as well as the arts and sciences. This also legitimizes the importance of speaking directly to those who have created a multimodal dissertation. Lastly, the theme of scholarly creativity emerged in this literature review. As creativity is a key component of the dissertation, it is important to question *how* this is accomplished and *what* it may look like. My research will make apparent what creative processes are involved in creating a multimodal dissertation. My intention with visualizing my literature review was at first to see where the themes are most evident in the literature, and second to see where the gap is physically in relation to my research. As my research is connected to various elements of research in higher education—issues with doctoral research, supervisory pedagogy, academic literacies, employment options, and changes with the dissertations—there is still missing research specifically focusing on multimodal dissertations viewed from a multiliteracies framework. Ultimately, my

research will contribute to all of these areas in the literature as well as fill this gap in the literature.

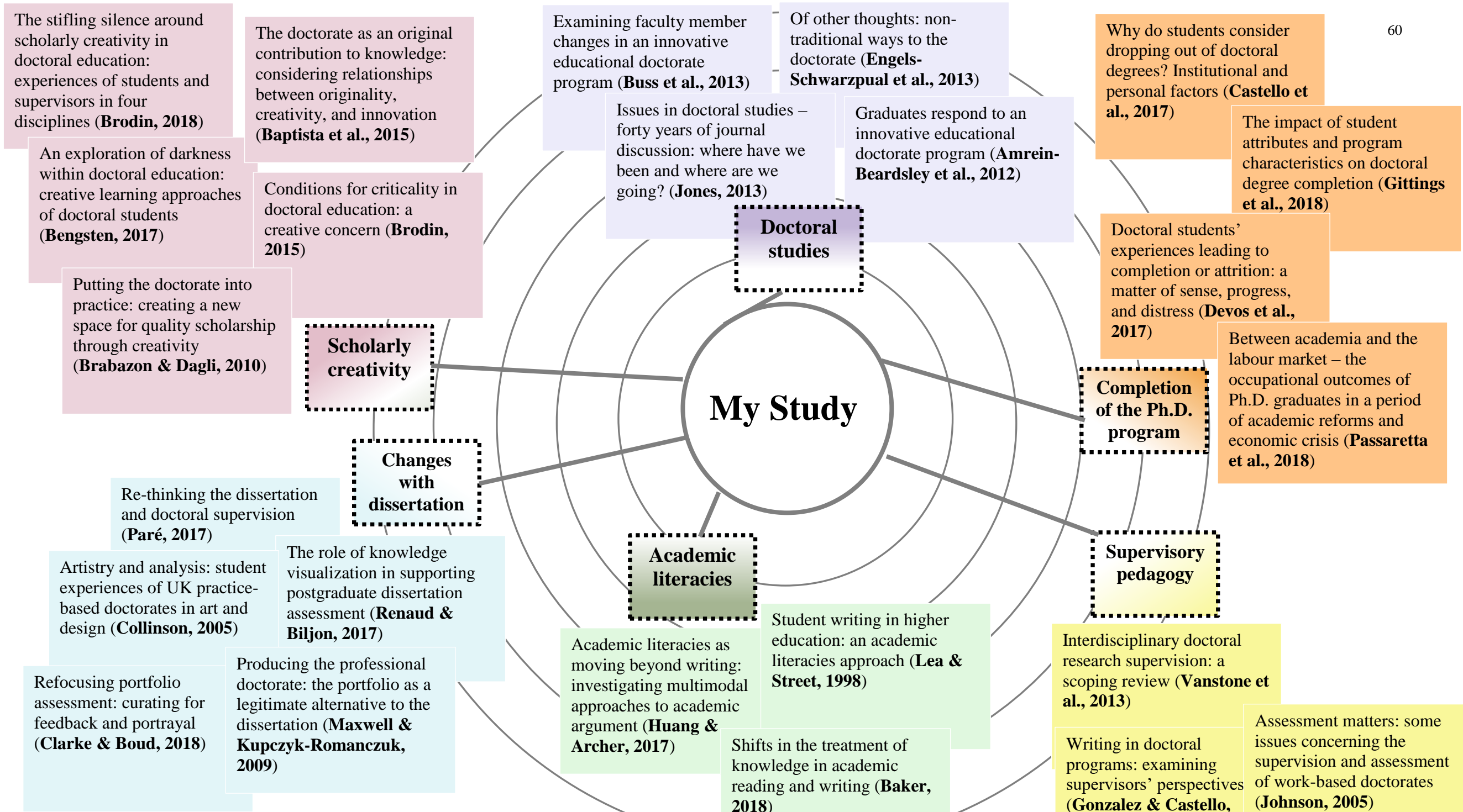


Figure 18. My literature review. I review six common themes in the literature.

3.2 Scholarly Creativity Summary

Bengsten (2017)

Bengsten (2017) explained that the doctoral education system is structured with formal and informal levels and the divide between these levels does not support student engagement and creative learning strategies for doctoral students. Bengsten drew upon empirical and international studies to argue that there are many unrecognized areas for enhancing creative learning spaces in doctoral education.

An exploration of darkness within doctoral education: creative learning approaches of doctoral students (Bengsten, 2017)

Putting the doctorate into practice: Creating a new space for quality scholarship through creativity (Brabazon & Dagli, 2010)

Brabazon & Dagli (2010)

Traditional models, methods, and protocols of doctoral education are being challenged and transformed. Brabazon and Dagli (2010) questioned whether there is a culture of equivalence for these diverse doctoral forms (Ph.D. by publication, practice-based or professional doctorates). The debate of quality scholarship is a key problem between these various doctoral forms. These authors asked questions such as, how do the different doctoral programs affect the enrolment and examination of the ‘traditional’ thesis?; how are newer modes of credentialing aligning with ideologies of artistic quality that infuse practice-based doctorates?; and how are the very specific regulations for the Ph.D. by prior publication aligned in standard and quality with professional doctorates that often involve course work?

The stifling silence around scholarly creativity in doctoral education: Experiences of students and supervisors in four disciplines (Brodin, 2018)

Brodin (2018)

Brodin (2018) addressed two aims in this study: to explore different shapes of doctoral students’ creativity in Swedish doctoral education, and to reveal and find possible explanations for some of the conditions stifling doctoral students’ scholarly creativity. She collected data from 28 participants (14 pairs of students and supervisors) from four different disciplines. The findings of this study concluded that intellectual, political, and economic agendas constrained creativity. Brodin suggested establishing a discourse on scholarly creativity in doctoral education, to view doctoral students as capable creative agents, and to actually ask for their scholarly

Conditions for criticality in doctoral education: a creative concern (Brodin, 2015)

Brodin (2010)

Brodin (2010) argued that critical thinking in doctoral education is important to becoming an academic, especially in a time of rapid change in academia. However, Brodin believed that criticality in reasoning, self-reflection, and action involves an ample amount of creativity.

Figure 19. Literature review on the theme scholarly creativity. This is research about how creativity is explored in an academic sense.

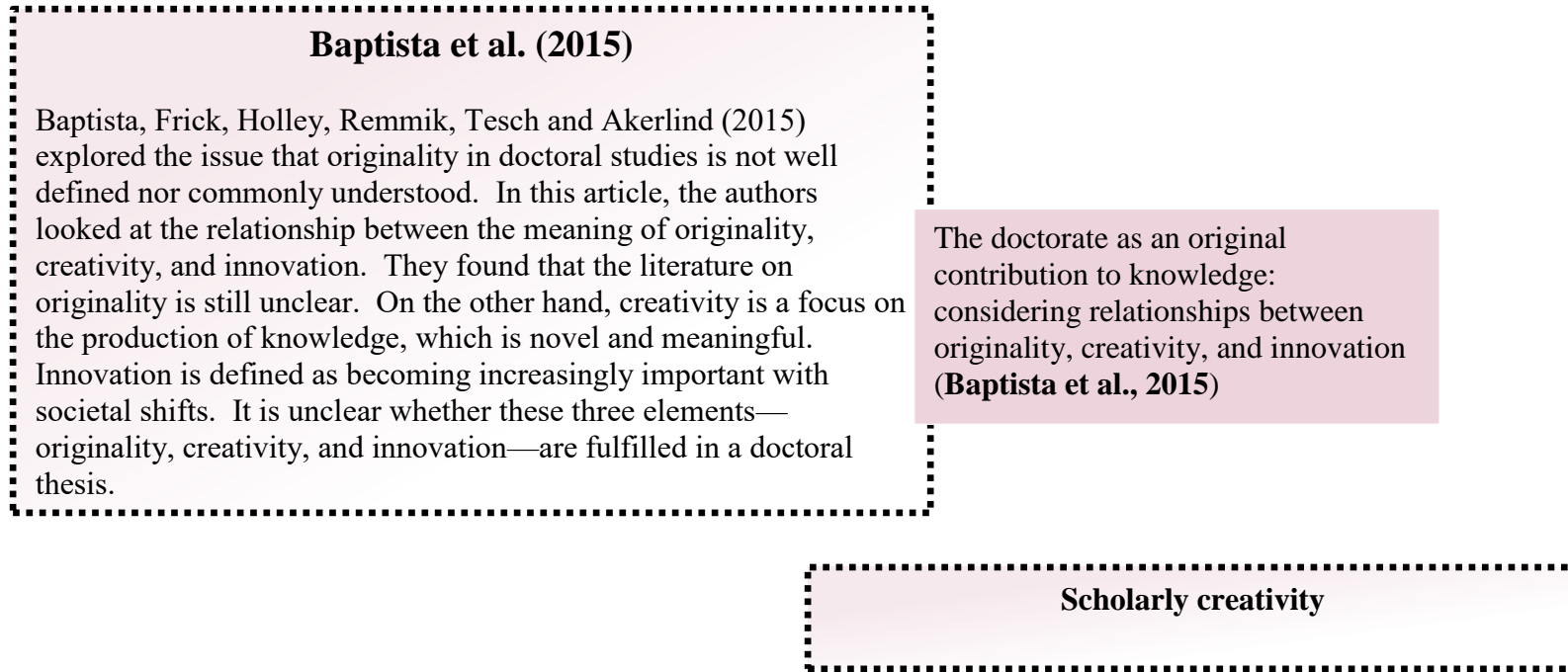


Figure 20. Literature review on the theme scholarly creativity (ctd.).

3.2.1 Scholarly Creativity Review

One theme that emerges in the literature review is scholarly creativity, or the ways in which scholars can be creative in doctoral studies. Brodin (2018) stated that “creativity is fundamental to scholarly and societal development through its potential of moving existing knowledge to new dimensions” (p. 656) and that “doctoral creativity implies *seeking for novelty of disciplinary relevance or value*” (p. 656). In the literature, the concept of creativity is viewed in different ways such as through learning spaces within formal and informal structures in the doctoral education system (Bengsten, 2017), how creativity can be stifled in various academic structures (Brodin, 2018), how practice-based doctorates align with ideologies of artistic and creative qualities (Brabazon & Dagli, 2010), and how critical thinking and creativity are very important to being a scholar (Brodin, 2010.) Next, I briefly introduce each of these studies, how they relate to my research, and where potential gaps are.

Bengsten (2017) explained that the doctoral education system is structured with formal and informal levels and the divide between these levels does not support student engagement and creative learning strategies for doctoral students. Bengsten drew upon empirical and international studies to argue that there are many unrecognized areas for enhancing creative learning spaces in doctoral education. In other words, Bengsten argued that creative learning approaches and learning spaces are overlooked and ignored within formalized doctoral education. Bengsten’s research questions were: “How can the ‘non-formal’ and ‘dark’ sides of doctoral students’ learning approaches be made comprehensible, and in what ways may we see them as resources rather than barriers to creativity when developing doctoral education for the future?” (p. 262). Bengsten

conducted a small-scale case studying of 12 qualitative interviews in a Faculty of Arts at Aarhus University in Denmark using a literature review and a theoretical study. With this study, Bengsten advised more research is needed to understand the layers of graduate schools and its effect on creativity. This work by Bengsten is applicable to my study because it brings to light the various structures within the doctoral education system that ignore creative learning spaces. In this view, it is important that my study reveals the learning spaces of multimodal dissertations and understands creativity at a formal level.

Brodin (2018) addressed two aims in her study: to explore different shapes of doctoral students’ creativity in Swedish doctoral education and to reveal and find possible explanations to some of the conditions stifling doctoral students’ scholarly creativity. She collected data from 28 participants (14 pairs of students and supervisors) from four different disciplines. The findings of this study concluded that intellectual, political, and economic agendas of graduate institutions constrained creativity. Brodin suggested establishing a discourse on scholarly creativity in doctoral education, to view doctoral students as capable creative agents, and to actually ask for their scholarly creativity. Brodin (2018) made the distinction between creativity that corresponds to an individual’s own learning process of attaining new and meaningful insights, and creativity that is found in individuals who create something new but not very original. Another level of creativity occurs when the creator has developed enough expertise to be both professional and innovative. Brodin also states that professional creativity is recognized in outstanding dissertations; however, outstanding dissertations are extremely rare. Certain conditions can foster doctoral students’ creativity such as educational

support, ‘collaborative supervision’, or even extra-curricular activities outside of the doctoral program. Brodin’s (2018) work helped to define the expectation of creativity and what that means for the dissertation. There is an ideal notion of creativity in doctoral education, but it is not often achieved because of scholarly traditions, embodying supervisors’ power, and creativity being unrequested in practice. This study is important to my research because Brodin highlighted that there is a certain level of creativity expected at a doctoral level and it is important to reveal what factors contribute to creating outstanding dissertations. To me, outstanding dissertations win awards within the academic community, and multimodal dissertations certainly have garnered attention and praise in academic and non-academic communities.

Traditional models, methods, and protocols of doctoral education are being challenged and transformed. Brabazon and Dagi (2010) questioned whether there is a culture of equivalence for these diverse doctoral forms (Ph.D. by publication, practice-based or professional doctorates). The debate of quality scholarship is a key problem between these various doctoral forms. These authors asked questions such as: How do the different doctoral programs affect the enrolment and examination of the ‘traditional’ thesis? How are newer modes of credentialing aligning with ideologies of artistic quality that infuse practice-based doctorates? And how are the very specific regulations for the Ph.D. by prior publication aligned in standard and quality with professional doctorates that often involve course work?

Maxwell and Kupczyk-Romanczuk (2009) outlined the portfolio as a product of doctoral work in the Professional Doctorate. These authors compared the portfolio and the traditional dissertation. The results concluded that the portfolio is appropriate for the

Professional doctorate and that the use of the portfolio is evident worldwide in doctoral education. In fact, the authors argued that a professional doctoral candidate has “great potential to show a breadth of capacity in communication in a portfolio... such a variety of communication facilitates the presentation of research to different audiences... to different communities” (p. 139). In addition, the “professional doctoral researcher might work within different paradigms or in different disciplines and so the research is likely to be drawn from a broad range of possible areas” (p. 139). However, the Ph.D. style dissertation demands more depth. The Ed.D., professional doctorate, and portfolio literature is important to the research on the Ph.D. and the dissertation because there is growing literature suggesting the Ph.D. should prepare doctoral students for jobs outside of academia, and how the dissertation and portfolio differ in preparing students for work life is important to consider in meeting this demand.

Clarke and Boud (2018) reviewed the portfolio as an effective tool for students to represent their learning and to prepare them for the future despite concerns of academic standards and employability. This paper argued that portfolios in digital environments can prepare students to meet academic standards and help to facilitate employability. In this paper, the authors reviewed the diversity of portfolios and different purposes of assessment and suggested six key elements to a portfolio at the doctoral level: a repository of all student artefacts, portfolio tasks, coursework tasks, proof of competency, ongoing collection of feedback comments, and curated collections of evidence. This would be considered a programme-wide portfolio and it would be focused on learning as well as achievements. This is an alternative to the monograph dissertations and the authors found that educational portfolios reflect multiple designs,

pedagogical intentions, and purposes. Clarke and Boud (2018) contributed an important alternative to the monograph dissertation. It is important to review the literature from scholars who studied more engaging alternatives to doctoral education.

Practice-based Ph.Ds. are doctorates that involve “non-textual” submissions such as a work of art as the final assessment (Brabazon & Dagli, 2010). In one particular example in this paper, Brabazon speaks about a doctoral student, Dr. Zeynep Dagli, who created four films along with seventy-thousand word print-based doctoral research. Dagli had many problems and often received negative judgements about the quality and scholarship of her doctoral research and was questioned about the calibre of the “art” being produced. This caused her to leave the institution where her research had originally commenced and move to a new university, where she passed all her examination protocols and her films have been exhibited at a range of film festivals. Although this paper by Brabazon and Dagli (2010) focused on the distinctions between a practice-based Ph.D. and other forms of the Ph.D., this paper is important to my study because the work that is done in practice-based Ph.Ds. is similar to the work being done in multimodal dissertations, and finding an equivalent standard to assess these dissertations is greatly needed. Also, practice-based dissertations do have the standard and quality of scholarship needed.

Brodin (2010) argued that critical thinking in doctoral education is important to becoming an academic, especially in a time of rapid change in academia. She believed that criticality in reasoning, self-reflection, and action involves an ample amount of creativity. This integrative relationship between criticality and creativity is not explicitly defined by academics in practice. This is important to my research because the criteria

for a doctoral dissertation involves originality, creativity, and criticality, and it is important to bridge the gap between what this really means and what it looks like in practice. The multimodal dissertation helps to achieve some understanding of the integrative relationship of these two concepts.

Baptista, Frick, Holley, Remmik, Tesch and Akerlind (2015) explored the issue that originality in doctoral studies is neither well defined nor commonly understood. The authors looked at the relationship between the meaning of originality, creativity, and innovation. They found that the literature on originality is still unclear. On the other hand, creativity is a focus on the production of knowledge, which is novel and meaningful. Innovation is defined as becoming increasingly important with societal shifts. Baptista et al. suggested that it is unclear whether these three elements—originality, creativity, and innovation—are fulfilled in a doctoral theses.

Baptista et al. (2015) classified research contributions as follows:

		Is the contribution novel?	
		Yes	No
Is the contribution relevant?	Yes	Creative	Cumulative
	No	Original	Replication

Table 6. Classification of research contributions (adapted from Baptista et al., 2015)

This table shows the relationship between originality and creativity. Relevance depends on the academic community that the doctorate is produced in. Originality is expected to be novel, whereas creativity is expected to be relevant and novel. These authors

demonstrated the relationship between originality, creativity, and innovation in Figure 20:

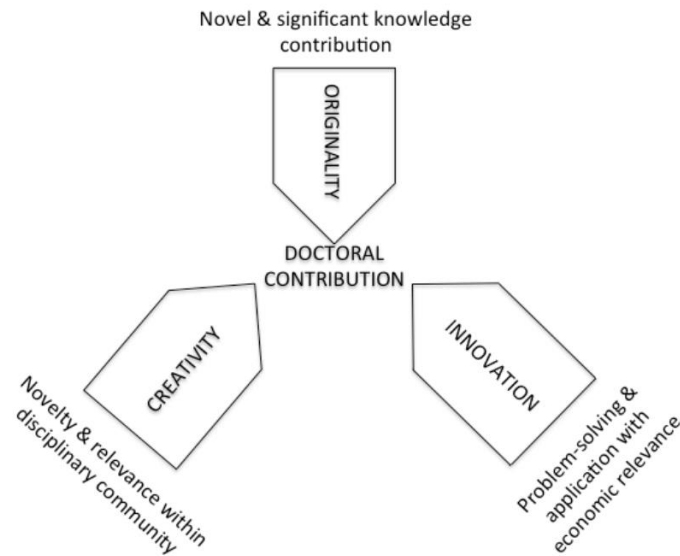


Figure 21. The relationship of originality, creativity, and innovation (Baptista et al., 2015). These are essential components of a dissertation.

The implications of this study were to encourage students to have the courage and confidence to take risks, make mistakes, and pursue lifelong inquiries in order to accomplish creativity, originality, and innovation. This work by Baptista et al. is important to my work because it helps to understand and set an academic standard for relevance, originality, and creativity, a standard that is not often well defined in dissertation regulations.

Scholarly creativity is an important part of the literature related to my study because creativity is one of the most important criteria in dissertations and doctoral research throughout Canada. It is time to question what that means and what it looks like in practice. Multimodal dissertations help to bridge the gap between an outstanding dissertation and an acceptable dissertation, and help to create a standard of scholarly creativity.

3.3 Doctoral Studies Summary

Engels-Schwarzpual (2013)

This book critiqued traditional doctoral research and guided doctoral candidates and supervisors working with different modes of research. The authors of this book offered a diverse collection of perspectives on non-traditional paths to the Ph.D. as well as insights into non-traditional and emergent modes of research. In particular, issues such as the nature of the literature review, research practices, status, and structuring of the thesis creates openings for alternative modes of researching.

Of other thoughts: non-traditional ways to the doctorate (Engels-Schwarzpual & Peters, 2013)

Amrein-Beardsley et al. (2010)

Amrein-Beardsley et al. (2012) focused on the design of educational doctorate programs (Ed.D.). In this study, the authors analyzed the first cohort of graduates in an educational doctorate program. Twenty graduates completed an exit survey, as well as a content analysis of their dissertation. The results of this study found that graduates reported changes in their professional identities (value for the program, more engagement in local settings, developed a stronger sense of community).

Graduates respond to an innovative educational doctorate program (Amrein-Beardsley et al., 2012)

Buss et al. (2013)

Buss, Zambo, Painter and Moore (2013) reviewed the Educational Doctorate (Ed.D.) and how faculty members come to create or reform such programs. In one particular institution with a new Ed.D. program focused on leadership and innovation, Buss et al. conducted an action research study through an online survey regarding what faculty members experienced. The results of this study were that the perceptions of research, teaching, students, and professional identities were changing because of collaborative teaching, a community of practice, and strong leadership.

Examining faculty member changes in an innovative educational doctorate program (Buss et al., 2013)

Issues in doctoral studies – forty years of journal discussion: where have we been and where are we going? (Jones, 2013)

Jones (2013)

Jones (2013) addressed doctoral studies as a field of academic research. Jones identified recurring themes and issues in 995 papers written on doctoral studies through 1971 and 2012. A thematic analysis revealed six themes: teaching, doctoral program design, writing and research, employment and career, student-supervisor relationship, and the doctoral student experience. This paper helped to illuminate what has or has not been done in the research on doctoral studies.

Figure 22. Literature review of the theme doctoral studies. This includes changes in doctoral programs and institutions.

3.3.1 Doctoral Studies Review

Given the importance of digital communication to contemporary times, a discussion of multimodal dissertations requires a consideration of digital dissertations. Much of the research concerning digital dissertations and theses comes from the United Kingdom (UK). *The SAGE Handbook of Digital Dissertations and Theses* (2012) is considered a major work in the area; it provided a comprehensive look at digital dissertations, and there was nothing like it before its publication. The advent of the discussion of digital dissertations in a comprehensive handbook that was published as recently as 2012 signals the nascent nature of the research. Given the foundational nature of the handbook, in this section I offer a detailed description of it.

The handbook is divided into the following sections:

1. Institutional Perspectives (p. 9)
2. Student Perspectives (p. 81)
3. Ethical and Intercultural (p. 177)
4. Multimodality, Including the Representation and Presentation of Theses (p. 241)
5. Archiving, Storage and Accessibility in the Digital Age (p. 377)
6. Research Methods (p. 405)

Section one “situates the digital thesis within its historical context so that readers can be aware of the distinctive nature and affordances of printed as opposed to digital theses”

(Andrews et al., 2012, p. 6). The institutional context component includes a discussion of the “role of the graduate or doctoral school in setting the parameters for research, composition, and production of theses and dissertations” (p. 6). Next, the handbook details student perspectives through the inclusion of chapters written by students to acknowledge that “it is undergraduate, master’s and especially doctoral students who are setting the pace in change in the nature and format of the dissertation” (p. 6).

Section three deals with issues of “copyright and reproduction” highlighting that “the classic issues in education and social science research of consent, propriety and the wish to do no harm to respondents are still at play” (p. 6). Section four focuses on multimodality as “a lens through which to create and assess contemporary communication” (Andrews et al., 2012, p. 7). The next section is about how libraries are archiving, storing and making digital theses and dissertations accessible (p. 7). Cassuto and Jay (2014), argued in *The Ph.D. dissertation – In Search of a Usable Future*, individual programs are not free to

adjust Ph.D. requirements and the shape of doctoral dissertations on their own. Each of these programs has to operate in accord with its graduate school’s requirements, and these will have to be adjusted in order to allow for changes at the department level. (Cassuto & Jay, 2014, p. 89)

My dissertation contributes to this literature because it provides a Canadian context for multimodal dissertations.

The field of doctoral studies has been investigated in multiple different ways. First, it is important to recognize doctoral studies as a field of academic research (Jones,

2013). There are many themes and issues that occur within doctoral studies and it is important to review what has been done and what is still needed. As many scholars question what needs to be done in doctoral education, there has been plenty of reform and changes made to the doctorate program. Currently, research has been increasing on the Educational Doctorate (Ed.D.) (Baptista, et al., 2015; Buss, Zambo, Painter, & Moore, 2013; Amrein-Beardsley et al., 2012) and alternative modes of researching (Engels-Schwarzpual, 2013).

Jones (2013) addressed doctoral studies as a field of academic research. Jones identified recurring themes and issues in 995 papers written on doctoral studies through 1971 and 2012. A thematic analysis revealed six themes: teaching, doctoral program design, writing and research, employment and career, student-supervisor relationship, and the doctoral student experience. This paper helped to illuminate what has or has not been done in the research on doctoral studies.

Specifically, issues around doctoral program design have focused on doctoral program funding, flexible delivery, examination and assessment, and professional doctorates (Jones, 2013, p. 88). There has been a great deal of discussion on the professional doctorate, in which some scholars question its merit and place. In addition, there have been issues around doctoral writing and research. Issues related to this theme are collaborative approaches, students' attitude to writing, training for research and publication, pressure to publish, and research productivity. Jones argued, "doctoral students are also the backbone of all research programs, and as such, are instrumental in the discovery and implementation of new knowledge" (p. 99). This paper is important to my research because it outlined the breadth of doctoral studies as a field of research. In

addition, it addressed areas that have been studied and identified gaps in the research. According to this scoping review, it is apparent that my work aligns with the theme doctoral writing and research.

Buss, Zambo, Painter and Moore (2013) reviewed the Educational Doctorate (Ed.D.) and how faculty members come to create or reform such programs. In one particular institution with a new Ed.D. program focused on leadership and innovation, Buss et al. conducted an action research study through an online survey regarding what faculty members experienced. The results of this study were that the perceptions of research, teaching, students, and professional identities were changing because of collaborative teaching, a community of practice, and strong leadership.

Buss et al. described the generational shift of doctoral degrees, with the first generation having a heavy course workload and a culminating dissertation dominated by academe and the second generation being situated at the intersection of the profession, workplace, and university. As doctoral degrees change, faculty members find themselves "needing to abandon practices they have used for years and to risk failure as they embark in new directions" (p. 60). This paper focused on faculty members who created an innovative Ed.D. program centered around the questions: "did the culture the leaders built encourage faculty members' participation, create opportunities for them to grow, and address concerns?" (p. 62) as well as "did experiences within the new program change professors' professional identities, especially when they were immersed in communities of practice that focused on understanding and implementing innovations?" (p. 62). This study is important to my work because it shows the willingness of faculty members to engage in innovative doctoral approaches and to turn their focus away from

traditional approaches. In this sense, if faculty members are engaging in different doctoral structures such as the Ed.D., then perhaps there is an openness towards alternative dissertations. However, there is still a gap in the literature regarding faculty impressions of non-traditional dissertations. My research sets the foundation for further questions such as these.

There is much debate of the pedagogical strategies and curricular goals of the Ed.D. program and how it compares to the Doctor of Philosophy (Ph.D.) in education. Amrein-Beardsley et al. (2012) focused on the design of educational doctorate programs (Ed.D.). In this study, the authors analyzed the first cohort of graduates in an educational doctorate program. Twenty graduates completed an exit survey, as well as a content analysis of their dissertation. The results of this study found that graduates reported changes in their professional identities (value for the program, more engagement in local settings, developed a stronger sense of community). This study is important to my research because the authors explored student perceptions of a non-traditional degree such as an Ed.D.

Engels-Schwarzpaul and Peters (2013) described non-traditional candidates working on a creative practice-led thesis as coming from diverse backgrounds and as having research interests that do not fit easily into the traditional organization of universities. The gap that these writers found is of “changing student populations: as new groups of non-traditional students mature into postgraduate researchers, they enrich academic culture and research by bringing their own, distinct ways of knowing and getting-to-know into the research situation” (p. 2). These authors argued that it was “worthwhile (while risky) to deviate from safe and certain formats, methods and

procedures” (p. 2) when they supervised two doctoral candidates to successful completion with their creative practice-led theses. It was an experience filled with many anxious moments because of concerns about the potential and limit of “disciplinary knowledge-gaps in supervision” (p. 2). This work is important to my study because it is a collection of lived experiences from faculty and doctoral graduates regarding their non-traditional work. Although not necessarily multimodal dissertations, their work still involves creating with different modes of meaning in some form.

In the literature on doctoral studies as a field of research, it is clear that there are many themes and subthemes within this field that have been researched such as the Ed.D. and creative practice-led theses. Throughout the literature, however, there is a gap within the research regarding multimodal dissertations and how they have the potential to change doctoral education, particularly the Doctor of Philosophy in education. The research suggests that there are many innovative changes happening, and that faculty is moving towards supporting non-traditional students of diverse backgrounds.

3.4 Completion of Doctoral Studies & Employment Options Summary

Devos et al. (2017)

Devos, Van der Linden, Azzi, Frenay, Galand and Klein (2017) compared the experiences of doctoral students who completed or quit their Ph.D.. This study included 21 formal doctoral students: 8 completers and 13 non-completers. Several factors led to differentiate these two groups of students. Factors that were important to completion or quitting included if the project felt like it made sense and if it was moving forward without much distress.

Doctoral students' experiences leading to completion or attrition: a matter of sense, progress, and distress (Devos et al., 2017)

Castelló et al. (2017)

Castelló, Pardo, Sala-Bubaré and Suñe-Soler (2017) sought to understand why some doctoral students do not complete their studies. This study focused on 724 social sciences doctoral students from 56 Spanish universities who responded to a questionnaire. The results of this study showed that frequent motives for dropping out were difficulties with work-life balance and problems with socialization.

Why do students consider dropping out of doctoral degrees? Institutional and personal factors (Castello et al., 2017)

Gittings et al. (2018)

Gittings, Bergman, Shuck and Rose (2018) investigated the reasons why doctoral students did not persist and graduate. The authors looked at the impact of individual student characteristics as well as doctoral program characteristics on doctoral degree completion. The results of this study was that age, full-time employment, employment change after comprehensive exams, enrollment status, satisfaction with dissertation chair, and satisfaction with academic involvement all impacted doctoral completion.

The impact of student attributes and program characteristics on doctoral degree completion (Gittings et al., 2018)

Between academia and the labour market – the occupational outcomes of Ph.D. graduates in a period of academic reforms and economic crisis (Passaretta et al., 2018)

Passaretta (2018)

Passaretta (2018) examined the employment outcomes of two cohorts of Ph.D. students who graduated in 2004 and 2008 in Italy. The authors explored how academic reforms such as cuts to public funding and the introduction of fixed-term positions for assistant professors changed employment prospects for Ph.D. students. The results of this study found that there was decreasing employment in academia and increasing chances of being employed abroad or working in research-related occupations outside of academia.

Figure 23. Literature review on the theme completion of Ph.D. and employment options. Research has been conducted about why students do not complete their program.

3.4.1 Completion of the Ph.D. and Employment Options Review

The literature on factors that contribute to the completion of the Ph.D. and the employability of Ph.D. graduates are an important part of the field of doctoral studies. A significant gap in this literature is the employability skills of students who create multimodal dissertations, and whether this is a factor in the completion of the Ph.D. In the studies listed below, researchers and scholars have examined factors such as interest, passion, and pleasure affecting completion of the program; more support is needed in the technical process of dissertation writing; thesis format that is undefined in the literature, and current doctoral programmes needing to prepare the student for employment outside of academia.

Devos, Van der Linden, Azzi, Frenay, Galand and Klein (2017) compared the experiences of doctoral students who completed or quit their Ph.D. This study included 21 doctoral students: 8 completers and 13 non-completers. Several factors differentiated these two groups of students. These authors found that what differentiated completers and non-completers were if their thesis project made sense, and whether they felt progress and experienced limited feelings or distress. This entails having a clear direction, feeling ownership, and feeling interest, passion, and pleasure. This study is important to my work because it identifies that a successful completed dissertation is one that is meaningful and maintains momentum. This in turn means submitting a dissertation that is significant to the doctoral student. It remains a question if certain formats of dissertations would be a factor in successful Ph.D. completion, and whether

the ability to choose a multimodal dissertation format might make the experience more meaningful for a doctoral student.

Gittings, Bergman, Shuck and Rose (2018) investigated reasons why doctoral students did not persist and graduate. These authors looked at individual student characteristics as well as doctoral program characteristics and their impact on doctoral degree completion. The results of this study were that age, full-time employment, employment change after comprehensive exams, enrollment status, satisfaction with dissertation chair, and satisfaction with academic involvement all impacted doctoral completion. This study argued for greater understanding of the characteristics, structures, and programming that contribute to doctoral degree completion (p. 6). In particular, the authors suggested that there be more focus on providing support to students through acculturation and assimilation into the technical process of dissertation writing (p. 16). It is evident that there are many variables that affect the completion of a doctoral degree. This study helps to present different aspects of a doctoral student's lived curriculum and an important factor is the student's background of technical writing and whether they feel confident in being technically trained in writing.

Castelló, Pardo, Sala-Bubaré and Suñe-Soler (2017) sought to understand why some doctoral students do not complete their studies. This study focused on 724 social sciences doctoral students from 56 Spanish universities who responded to a questionnaire. The results of this study indicated that frequent motives for dropping out were difficulties finding a work-life balance and problems with socialization. These authors wanted to understand this issue in doctoral studies with the intention to improve the quality of doctoral programmes, particularly in Spain. In particular, the authors

sought to understand the relationship of student responses to the discipline, type of enrolment, thesis format, work modality, and gender and age. Specifically focusing on thesis format, the only available characteristics were monograph, collection of papers, and not defined, whereas work modality included characteristics such as individual or team. In terms of thesis format, 411 identified as writing a monograph, 172 chose a collection of papers, and 141 had not defined. This is an important gap that my research is focusing on – the not defined types of dissertations, or in the case of this study, defined as a multimodal dissertation.

Passaretta (2018) examined the employment outcomes of two cohorts of Ph.D. students who graduated in 2004 and 2008 in Italy. The authors focused on overall employability, type of job (academic research, research job outside academia, professional, non-research job), type of contract, and probability of working in a foreign country. The results of this study found that there was decreasing employment in academia and increasing chances of being employed abroad or working in research-related occupations outside academia. The authors discussed that doctoral studies does provide skills and knowledge that are valuable beyond the academic career. Their recommendation is the need for “universities and doctoral programs to adjust their learning objectives and activities to equip Ph.D. students with opportunities to develop relevant skills and professional connections with potential employers in the private sector” (p. 17). This area of the literature is important to take into consideration for my work because this study suggests looking ahead of the dissertation. Perhaps one of the adjustments for universities and doctoral programs can begin with the dissertation process, and allowing choice between a monograph or a multimodal dissertation.

Another gap in this research is the employability of a student who has created a dissertation in a non-traditional format.

Many questions remain unanswered in the literature regarding Ph.D. completion and employment options, especially in terms of the multimodal dissertation. There are many areas of this part of the literature that is applicable to the multimodal dissertation – Does this encourage students to finish their Ph.D.? Does this help them get a job after graduation? Although my study does not seek to answer these questions, it is important to note them for future consideration, and uncovering these answers could be an unintended result of my study.

Conventionally, the academic doctorate is the qualification for teaching in universities (Borg & Davis, 2012) and it is meant to prepare students for professorships at research-intensive institutions (Cassuto & Jay, 2014). The traditional dissertation system subscribes to a “one-size-fits-all model” (Cassuto & Jay, 2014, n.p.). Cassuto and Jay (2014) asserted, however, that not all Ph.D. graduates will become professors, and the literature is noting Ph.D. graduates often aspire to and obtain a range of jobs. The variability in discipline, project, student, supervisor, and institution contributes to why students may decide to seek positions outside of academia. At the same time, there is a growing number of Ph.D. graduates who are struggling to find work (Jaschik, 2016). Patel (2016) argued, “The depressed academic job market, sending more Ph.D. students to seek jobs outside academia has forced programs to question the purpose of a dissertation” (n.p.). Indeed, Cassuto and Jay (2014) claimed that the “structure of the traditional dissertation can hamstring them in this pursuit” (p. 86), or in other words, the

structural rules and regulations for dissertations might make it difficult for students to seek jobs outside of academia.

The University of British Columbia (2017) released a report that argued that academic institutions have a moral responsibility to adequately prepare students for alternative career choices outside of the academy. The report imagined the doctoral student of 2030 and hypothesized how faculty members can help to create access and infrastructure to support these students. Preparing for a future with access and infrastructure to support students who want a career outside of academia could mean “enhanced career opportunities for students, enhanced public perception of the value of the doctorate, and advancement of the public good” (University of British Columbia, 2017, p. 7). One of the panel topics of the symposium focused on the diverse career paths and complex problems that “speak to the need for intellectual depth and rigor in graduates, but also the capacity for creative, collaborative, interdisciplinary, and effective thought and action” (University of British Columbia, 2017, p. 11). Having a Ph.D. is a unique kind of currency and it fosters “the mindset that comes with the staying power to solve problems, and the ability to pick up a lot of different methodologies for doing that...the ability to navigate systems, to network, to be more than your job description” (University of British Columbia, 2017 p. 11), which is of value and is transferable to many different employment paths. The professional needs of Ph.D. graduates are so diverse that questioning how less traditional dissertations help serve students who do not want to be a professor requires additional investigation for the future, or how a less traditional dissertation would still help students become a professor.

3.5 Supervisory Pedagogy Summary

Vanstone et al. (2013)

Vanstone, Hibbert, Kinsella, McKenzie, Pitman and Lingard (2013) discussed interdisciplinary doctoral programs and the phenomenon of supervision in these programs. As there is a significant amount of literature in this area, these authors identified how interdisciplinary programs came to be, the disciplines involved, the areas of expertise of the faculty members and students, and why interdisciplinary work is necessary.

Interdisciplinary
doctoral research
supervision: a scoping
review (Vanstone et al.,
2013)

Johnson (2005)

Johnson (2000) compared the supervision and assessment processes of a work-based doctorate to those in the Ph.D. Johnson reviewed literature and discussion from a number of universities on the issues of supervision and assessment for work-based doctorates. The author found that work-based doctorates and Ph.D. doctorates use similar supervision and assessment processes, which raised the concern of having different designation awards.

Assessment matters: some
issues concerning the
supervision and assessment
of work-based doctorates
(Johnson, 2005)

Writing in doctoral
programs: examining
supervisors'
perspectives (Gonzalez
& Castello, 2018)

Gonzalez & Castello (2018)

Gonzalez & Castello (2018) researched how supervisors contribute to doctoral writing. They were concerned with what role and support supervisors attribute to writing. A survey was given to 61 supervisors in the social sciences and humanities. A number of supervisors reported that writing is an important and neglected activity.

Figure 24. Literature review on the theme supervisory pedagogy. This is about how faculty members supervise graduate students through their programs.

3.5.1 Supervisory Pedagogy Review

There is an extensive body of literature on doctoral supervision, as it is an important aspect to successful and timely completion of a Ph.D. degree. Since the supervisor has a significant role in helping a graduate student complete their doctoral program, it is important to review what role the supervisor plays in guiding a student through their dissertation. The review of the literature points to many areas where the supervisor has a role such as in work-based doctorates (Johnson, 2005), or interdisciplinary doctorates (Vanstone, Hibbert, Kinsella, McKenzie, Pitman & Lingard, 2013). Also, research has been done in supervisor perceptions of academic writing (Gonzalez & Castello, 2018). This literature on the role of the supervisor in work-based and interdisciplinary doctorates as well as the supervisors' perceptions of graduate student writing helps to inform what role a supervisor has in supporting a student through a multimodal dissertation.

Begin and Gérard (2013) identified that doctoral supervision is one of the primary factors affecting doctoral degree completion. In this study, 533 doctoral students completed a survey and were asked to describe their experience with their supervisor using a metaphor. The results of this study suggested that supervisors often adopt a coaching role. As this study had the intention of students describing their experience with their supervisor, several themes and meanings emerged from the metaphors the students used to describe their experiences with doctoral studies in general: challenging, experience, journey, obstacles, endurance, uncertainty, satisfaction, ups and downs (ambivalence), development, learning, self-improvement, negative, support, solitary, exploitation, and others. The findings of this study were that the

supervisor plays a more active coaching role, attempting to find the right balance between support, apprenticeship, or coaching. This study is important to my work because it makes it clear that there is a standard to be a doctoral student supervisor. What gap is identified is whether this type of supervisor 'coach' has supervised students who create non-traditional dissertations.

Johnson (2000) compared the supervision and assessment processes of a work-based doctorate to those in the Doctor of Philosophy. Johnson reviewed literature from a number of universities on the issues of supervision and assessment for work-based doctorates. The author's results suggested work-based doctorates and Ph.D. doctorates use similar supervision and assessment processes, which raised concerns about having different designation awards. Johnson clarified that a work-based doctorate could be a professional doctorate and focus on research in an applied issue or problem in the candidate's workplace or professional practice, rather than an academic research question, and this is not a Ph.D. In other words, Johnson argued that a Ph.D. is about research whereas a work-based doctorate is about research and development. Johnson argued that "examiners, both internal and external, of work-based doctorates may not have any professional experience or understanding of the candidate's working context, making assessment of the developmental and application aspects of the candidate's work difficult" (p. 90). This gap of knowledge means the addition of subject-specific practitioners into the examination of work-based doctorates; however, this is dismissed as "too difficult to achieve and results as unreliable" (p. 90). This leads to further research of whether academic supervisors would accept non-academics as equal partners in the supervision and assessment process. This paper by Johnson is related to my work

because it illuminates the complicated process of supervising and assessing work-based doctorates and how to ensure it is fair. For multimodal dissertations, there is sometimes a need to involve others from outside of academia to help advise or guide the dissertation research. The research from work-based doctorates supervision and assessment processes helps to inform my own research into the lived experiences of graduate students.

Vanstone, Hibbert, Kinsella, McKenzie, Pitman and Lingard (2013) discussed interdisciplinary doctoral programs and the phenomenon of supervision in these programs. These authors identified how interdisciplinary programs began, the disciplines involved, the areas of expertise of the faculty members and students, and why interdisciplinary work is necessary. Vanstone et al. are proponents that “creative and innovative solutions to complex problems [are] best addressed through interdisciplinary collaborations, [and] research-intensive universities are increasingly encouraging interdisciplinary projects and programs” (p. 42). In this scoping review, the authors found that in interdisciplinary research, a different pedagogy of supervision is needed, which is a gap in the research. Perhaps as the literature regarding supervising interdisciplinary programs continues to grow, this literature can help inform supervising multimodal dissertations. To me, interdisciplinary means two disciplines being integrated for new research, which closely relates to how two or more modes are integrated in a dissertation. To me, this fusion of disciplines or modes shares the same processes of logic.

Gonzalez & Castello (2018) researched how supervisors contributed to doctoral writing. They were concerned with what role and support supervisors attribute to

writing. A survey was given to 61 supervisors in the social sciences and humanities. A number of supervisors reported that writing is an important and neglected activity. Although there is an increase in research on doctoral writing, there is less research about how supervisors contribute to doctoral writing, such as

- a) What role do supervisors attribute to writing in doctoral training?
- b) What type of writing support do supervisors intend to provide to their students? And
- c) What are the relations between the role supervisors attribute to writing and the type of support supervisors offer to their students? (p. 387)

These authors found that supervising writing may become a challenge because “students and supervisors struggle with varied meanings and emotions related to writing in research genres throughout the doctoral program” (p. 388). In particular, “the meaning that supervisors attribute to the genres and writing practices across the doctoral training is an essential ingredient in the guidance of students’ writing process” (p. 389). In this study, supervisors expressed students’ lack of necessary skills and knowledge to produce “good and appropriate academic texts” (p. 392). A quarter of the supervisors who participated in this online survey expressed that writing is a tool intended to “promote learning processes, to enable knowledge construction on the research topic and to promote students’ self-regulation” (p. 393). One supervisor said,

the fact that students understand the academic genre in which their thesis is located has important consequences in the way the students think about the product that they need to build and the processes that they need to undertake to accomplish their goals. (p. 393)

Other participants echoed the same sentiment, suggesting that “writing articulates and regulates the knowledge construction that the novice researcher undertakes. It also evidences the progress and blockages that can occur during the researcher process” (p. 393). Other opinions of writing include writing as enabling researchers to share and position ideas and build connections with other academics. Most often, supervisors tell students what to do in terms of writing; they revise and edit students’ text, and discuss students’ processes and products collaboratively. This research is important to my study because it questions if students feel comfortable with academic writing, and the specific role of supervisors in teaching and supporting students through writing. If supervisors have difficulties supervising traditional academic writing, then it is important to question how supervisors will do with multimodal dissertations, and whether it will be a further struggle, and in what specific ways it will be a challenge.

In the various literature on supervisory pedagogy, and in particular supervision for work-based and interdisciplinary doctorates, there is a gap in the literature regarding the Doctor of Philosophy in Education, and how to supervise doctoral students who create multimodal dissertations. This is a unique circumstance because multimodality crosses all disciplines, and sometimes when two or more modes are being used, an expert in that specific mode (i.e. audio with music) may be needed. Therefore, it is important to review literature on supervisory pedagogy because the supervisor is a crucial component of the lived curriculum as a student.

3.6 Academic Literacies Summary

Huang & Archer (2017)

Huang and Archer (2017) emphasized how academic literacies primarily focus on writing practices in higher education. These authors accounted for writing practices in the digital age, and the importance of including multimodal composition. They provided a framework for understanding and analyzing multimodal academic argument, in particular the features that make up a text: mode, genre, discourse, and medium. In addition, multimodal resources are appropriated into argument through citation.

Academic literacies as moving beyond writing: investigating multimodal approaches to academic argument
(Huang & Archer, 2017)

Shifts in the treatment of knowledge in academic reading and writing
(Baker, 2018)

Baker (2018)

Baker (2018) explored the way knowledge is packaged through students' reading and writing in higher education. Baker used a longitudinal ethnographic study that revealed the experiences, practices, and understandings of 11 students and their engagement with texts (reading and writing). This article illustrated what counts as knowledge in undergraduate literacies.

Lea & Street (1998)

Lea and Street (1998) addressed the issue of student writing in higher education. These authors suggested that academic staff and students have contrasting expectations and interpretations about students' written assignments. The results found that identity and institutional relationships of power and authority are embedded into student writing practices. The authors outlined an academic literacies framework to better understand student writing.

Student writing in higher education: an academic literacies approach
(Lea & Street, 1998)

Figure 25. Literature review on the theme academic literacies. This is about reading and writing in higher education.

3.6.1 Academic Literacies Review

Academic literacy is reading and writing in higher education. This approach “focuses on student identity, institutional relationships of discourse and power, and the contested nature of writing practices” (Huang & Archer, 2017, p. 63). Within the research about academic literacies, scholars have looked at the problems with student writing in academic settings (Lea & Street, 1998), how knowledge is viewed through writing only (Baker, 2018), and how writing practices are changing because of new digital literacy practices, particularly through multimodality and multiliteracies (Huang & Archer, 2017). I review each in detail next.

Lea and Street (1998) addressed the issue of student writing in higher education. These authors suggested that academic staff and students have contrasting expectations and interpretations about students’ written assignments. The authors found that identity and institutional relationships of power and authority are embedded into student writing practices. The authors outlined an academic literacies framework to better understand student writing. These authors argued that

learning in higher education involves adapting to new ways of knowing: new ways of understanding, interpreting, and organizing knowledge. Academic literacy practices – reading and writing within disciplines – constitute central processes through which students learn new subjects and develop their knowledge about new areas of study. (p. 158)

Lea and Street argued that to understand academic learning, it is important to research the literacy practices of institutions, staff, and students. Therefore, problems in student

writing might be from “gaps between academic staff expectations and student interpretations of what is involved in student writing” (p. 159). Academic staff had their own defined views of what a good piece of student writing was: attention to syntax, punctuation, layout, structure, argument, and clarity. In their data, however, although academic staff can describe what is successful writing, it was difficult for them to make explicit what a well-developed argument looks like in a written assignment. In contrast, the students reported it was “important to present an argument and they knew that structure played an important part but had difficulties in understanding when they had achieved this successfully in a piece of writing” (p. 164). What they thought was a well-constructed piece of writing would in fact receive a very low grade and fairly negative feedback. This disconnect between academic staff expectations and not being able to communicate what an effective argument looks like, and students who learn from descriptions of good writing is ineffective for both staff and students alike. This research by Lea and Street highlights a part of the literature that questions whether academic argument can be taught successfully, and how that is achieved in graduate students’ dissertations. The gap in the literature would be whether explaining how to communicate academic argument can be used multimodally through a multimodal dissertation. This study also relates to my own experiences with academic writing, and whether or not I was clearly taught how to argue successfully through writing, or if I am more able to argue academically through multimodal ways.

Baker (2018) explored the way knowledge is packaged through students’ reading and writing in higher education. Baker used a longitudinal ethnographic study that revealed the experiences, practices, and understandings of 11 students and their

engagement with texts (reading and writing). This article illustrated what counts as knowledge in undergraduate literacies. This area of research sheds light on the value of knowledge and if students are unable to “articulate their knowledge ‘successfully’ in writing according to institutional conventions and criteria, they will receive lower grades, [and] might become demotivated” (p. 390). Although this study takes place in an undergraduate setting, it sheds light on whether knowledge should only be successfully articulated through writing only. My study would contribute to this literature because I have only looked at multimodal dissertations that have successfully passed and been accepted for doctoral degree completion. This means that my study could contribute to knowledge being successfully articulated through multiple modes.

Huang and Archer (2017) emphasized how academic literacies primarily focus on writing practices in higher education. These authors accounted for writing practices in the digital age, and the importance of including multimodal composition. They provided a framework for understanding and analyzing multimodal academic argument, in particular the features that make up a text: mode, genre, discourse, and medium. In addition, multimodal resources are appropriated into argument through citation. The authors argued that the academic literacies approach “focuses on student identity, institutional relationships of discourse and power, and the contested nature of writing practices” (p. 63). However, the authors stated that writing practices in the academy are changing, and digital technology is making it easier to mix and match different modes of communication (2017). These authors argued meaning in several different ways: meaning as context dependent; meaning-making as a social practice; and meaning as made through the selection and configuration of modes in texts and through the interest

of the sign-maker in a particular context. Although there is increasing literature on multimodal argumentation, some believe that argumentation is more related to the explicit use of words. Huang and Archer argued that “a move towards a multimodal approach to academic literacies offers students the opportunity to experiment with a range of genres for presenting academic argument” (p. 67). Specifically,

In composing multimodal academic texts, students need to persuade readers about the relevance and validity of the argument. This involves encoding conceptual material (through mode, discourse, genre, and medium) and establishing relationships within the discourse community (through citation). We have argued the need to redefine academic literatures in higher education through the development of a framework that facilitates awareness and analysis of multimodal textual construction. ‘Graduateness’ is about being able to articulate a critical argument, yet this need not always be realized through the written mode. We have proposed a multimodal approach to look again at the key concept of ‘argument’ and have provided a meta-level language of description of how academic argument operates in image and writing in higher education. (Huang & Archer, 2017, p. 70).

Huang and Archer have theoretically positioned academic literacy with multimodality, in which these scholars are setting a foundation for multimodal argument. This is useful to my study because I am also relating the dissertation with multiple modes through a multimodal and multiliterate approach to literacy in higher education. Due to how recent this article was published, it is a relevant area of research and more information is

needed to understand what multimodal argumentation looks like, particularly in a dissertation format.

The research in academic literacy has been developed in many different ways (Lea & Street, 1998; Baker, 2018) and it is important to recognize how this area is changing because of digital technology and multimodality (Huang & Archer, 2017). As academic literacy was previously based solely on writing, it is important to understand how this situated knowledge production and academic argumentation. The literature in academic literacy helps to inform my research because traditionally and overwhelmingly, the dissertation has been entirely textually based. My research will involve dissertations with multiple modes, and there is a growing area of literature on academic literacy with multimodality.

3.7 Changes With Dissertations Summary

Renaud & Biljon (2017)

Renaud and Biljon (2017) believed that examiners first read the summary sections of a dissertation (abstract, introduction, and conclusion). This overview of the dissertation helps examiners work through each chapter of the dissertation. This process of assessing dissertations led the authors to research the use of knowledge visualization for assessment. They found that knowledge visualizations can provide evidence that particular criteria have been satisfied within a dissertation, and they do this more efficiently than text.

The role of knowledge visualization in supporting postgraduate dissertation assessment (Renaud & Biljon, 2017)

Maxwell & Kupczyk-Romanczuk (2009)

Maxwell and Kupczyk-Romanczuk (2009) outlined the portfolio as a product of doctoral work in the Professional Doctorate. These authors compared the portfolio and shorter research reports with linking papers to the traditional mode of a single, focused dissertation. The results concluded that the portfolio is appropriate for the Professional doctorate.

Producing the professional doctorate: the portfolio as a legitimate alternative to the dissertation (Maxwell & Kupczyk-Romanczuk, 2009)

Collinson (2005)

Collinson (2005) explored the experiences of students enrolled in art and design doctorates, which is a practice-based research degree. Collinson interviewed 50 UK students at 25 different institutions to examine the occupational life-worlds of these students, and the risks they took in choosing to pursue a doctorate. This paper explored narratives of transforming from a 'creator' to a 'creator-researcher'.

Artistry and analysis: student experiences of UK practice-based doctorates in art and design (Collinson, 2005)

Re-thinking the dissertation and doctoral supervision (Paré, 2017)

Paré (2017)

Paré (2017) considered the place and purpose of the common dissertation format – book length, single-authored, print-based. This paper considered that this format does not provide adequate preparation for the work Ph.D. graduates will do within and outside the academy. Paré identified knowledge is made collaboratively and disseminated digitally and offered a number of alternatives to the traditional dissertation.

Figure 26. Literature review on the theme changes with dissertations. This includes dissertations that are different from a traditional dissertation.

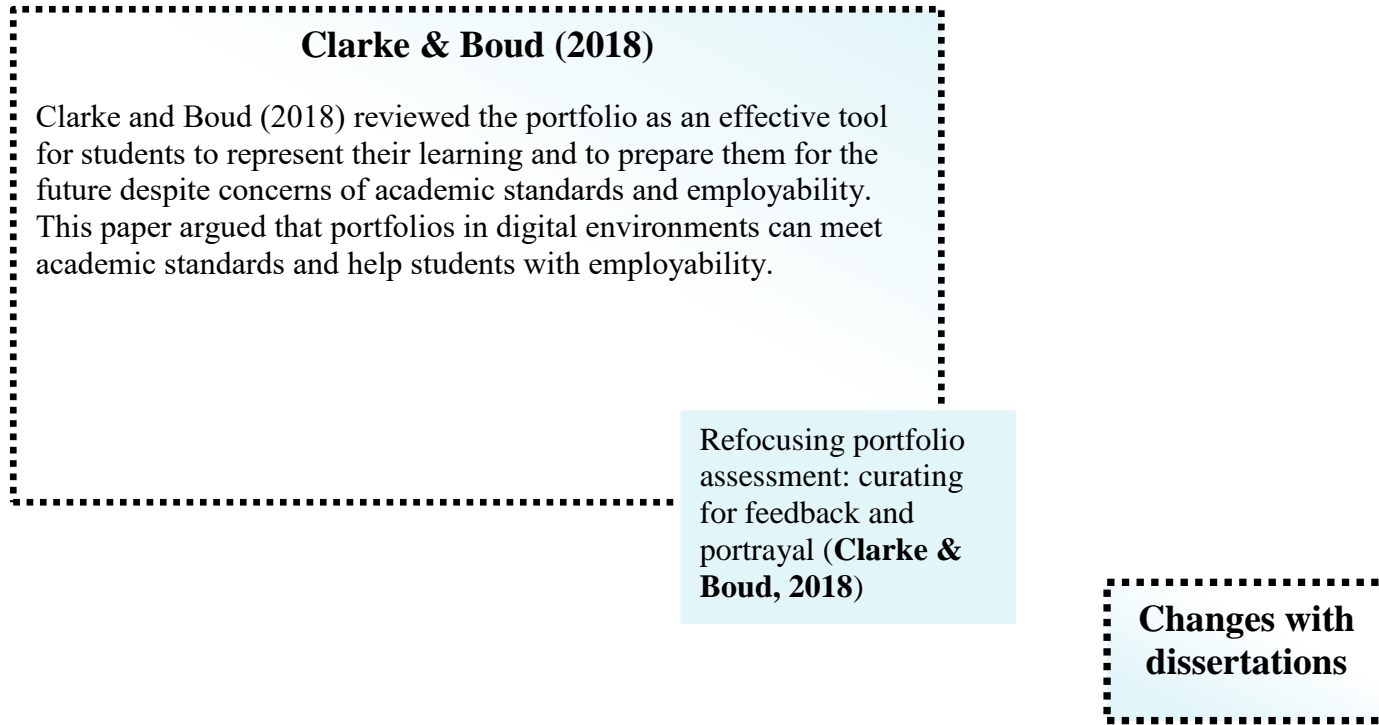


Figure 27. Literature review on the theme changes with dissertations (ctd.). Alternative options to the dissertation are portfolio, arts-based, and practice-based.

3.7.1 Changes in Dissertations Review

The literature on the implications of alternatives to the monograph dissertation are increasing, ranging from arts-based dissertations, knowledge visualizations, and the portfolio. For example, dissertations in arts-based communities or arts-based dissertations are a key part of the literature on non-traditional dissertations. In reviewing the literature on non-traditional doctoral dissertations, adjacent or additional to the changes to the dissertation caused by digital media is the place of art in dissertations. Hence, in this section I discuss the literature on how different art forms are being included into the dissertation.

There is robust literature on educational researchers who draw on artistic practices, such as narrative writing, autobiography, dance and movement readers theatre, multi-media, hypertext, visual arts, photography, music, poetry, and creative non-fiction to conduct research (Sinner, Leggo, Irwin, Gouzouasis, & Grauer, 2006). Sinner et al. claim that arts-based researchers in education “contend that the creative arts are a mode of inquiry and representation that provides significant perspectives for making decisions regarding pedagogical theory, policy and practice” (p. 1227). The methodology of a/r/tography is present in the literature as a key approach for bringing the educational research together with artistic practices. Sinner et al. reviewed more than 30 dissertations over one decade (1994 to 2004) in the Faculty of Education at University of British Columbia (UBC) to review educational research with artistic practices. They found that the methodology of a/r/tography has been largely developed through arts-based educational dissertations at UBC. The authors defined a/r/tography as a means to “inquire the world through an ongoing process of art making in any art form and writing

not separate or illustrative of each other but interconnected and woven through each other to create additional and/or enhanced meanings” (p. 1224). The researchers examined how “doctoral students utilized practices and processes of arts-based research, how graduate students theorized arts-based educational research, and how their studies connected with arts and learning environments and curricula” (p. 1228). To be included in my study, dissertations were not required to have an a/r/tography methodology; instead, I included dissertations that involve multimodality. My research is important, as students could engage in visual, spatial, and written modes through many different forms, without being experts in art. Instead, the students needed a willingness and openness to engage in art forms for learning.

Music education is another sub-set of the field of education where the literature contains discussion of dissertation formats. Sims and Cassidy (2015) discussed the role of the dissertation in a survey study they conducted to determine the attitudes toward the doctoral dissertation in music education programs. Respondents were music education program heads at doctoral granting institutions. The study found that eight participants out of 46 reported that their institution had an option for completing a doctoral dissertation in any format other than the traditional dissertation. Faculty were only moderately interested in any other format, but faculty estimated stronger interest from doctoral students.

There is a growing body of literature on the dissertation in arts-based communities (Collinson, 2005), adding knowledge visualizations (Renaud & Biljon, 2017), the portfolio (Maxwell & Kupczyk-Romanczuk, 2009), and different models of the PhD program (Clarke & Boud, 2018). This is important literature for my study, as

one of my research questions aims to understand the implications of multimodal dissertations in the social sciences.

Collinson (2005) explored the experiences of students enrolled in art and design doctorates, which is a practice-based research degree. Collinson interviewed 50 UK students at 25 different institutions to examine the occupational life-worlds of these students, and the risks they took in choosing to pursue a doctorate. This paper explored narratives of transforming from a ‘creator’ to a ‘creator-researcher’. A practice-based research degree requires that the final submission be accompanied by a permanent record of creative work; the creative work must have relevant theoretical, historical, critical, or visual context; there is an accompanied written thesis between 30 000 and 40 000 words, and the written and creative work must be of equal importance. Collinson found that there was little empirical knowledge on how students handled and achieved this combination of creative and written work, and how they sought to “resolve the tensions and contradictions between artistic and analytic dimensions of their work” (p. 714). The interviewees had a spectrum of art and design subjects: “painting, ceramics, installation, photography, printmaking, sculpture, glassmaking, and design” (p. 714) and were interviewed in a semi-structured format for between 60-90 minutes. The primary purpose was to gain an understanding of the students’ lived experience. The interview questions covered topics such as relationships with supervisors, relationships between practice and theory, practice and artistic community, practice and the self, practice and writing, and the students’ conceptions of identity. Students felt a sense of confusion trying to navigate the process of academic forms of writing while working on their art. One student described the experience:

As soon as I start putting down structures, I can’t write freely, so it becomes disjointed and difficult. Writing academically is not free; it’s very structured, with very tight boundaries for a thesis. It generally leaves me angry which is probably why it’s difficult to write... It’s just the institution that makes the rules that tie people, and in contract art practice is about enabling people to freely express themselves and subvert boundaries. So here I am struggling with those academic boundaries that I find quite restrictive, so I’ve had terrible conflicts about that. (p. 718)

Other participants also found it difficult to balance “comprehensive literature reviews, systematic documentation, historical positioning, formal analysis of practicing, theorizing and so on” (p. 719) with time for their actual art practice. Other narratives expressed were sacrifice and risk, discovery, and empowerment and transformation. The author of this paper described the sense-making activities of students who were working with academic research and integrating it with their creative practice. This study by Collinson is important to my research because I find the processes of art and multimodality relate to each other. If students who create art have strong experiences while working through their arts-based dissertation, then this can help inform the lived curriculum that graduate students designing multimodal dissertations may experience.

Renaud and Biljon (2017) believed that examiners first read the summary sections of a dissertation (abstract, introduction, and conclusion). This overview of the dissertation helps examiners work through each chapter of the dissertation. This process of assessing dissertations led the authors to research the use of knowledge visualization for assessment. They found that knowledge visualizations can provide evidence of

whether particular criteria have been satisfied within a dissertation, and they do this more efficiently than text. In this research study, the rationale was to “require the inclusion of knowledge visualizations within dissertations in order to improve their knowledge communication ability, thereby easing assessment while retaining assessment thoroughness” (p. 1477). Visualization can make “knowledge more accessible, manageable and transferrable” (p. 1477) and “visual processing is the most richly represented sensory modality in the human brain” (p. 1477). In terms of examining and assessing dissertations, common themes of what they are assessing and how they assess are: synthesis of related work, relate own work to related research, critical appraisal, research rigour, structure, argumentation, and professionalism. The authors suggested that

A literature synthesis visualization would signify [understanding] of, and engagement with, the related work. A research flow diagram would show how artefacts (e.g., questionnaires) are informed by literature and how the different sources of information are integrated. A visualization that situates the student’s research within the overall research area could help the examiner to determine how well the student understands the scope of their work, and how it relates to the work of other researchers. Furthermore, students should be encouraged to depict their final findings in diagrammatic format if at all possible to support assessment of the final outcome and potential knowledge construction. (p. 1487)

To date, no comprehensive guidelines for knowledge visualizations exist, and more research is needed; however, Renaud and Biljon (2017) used the language of knowledge visualization to signify how diagrams or charts can visually present information. This

research relates to the importance of the visual mode within the dissertation, but in the particular case of the examiner. In my study, I employed knowledge visualizations at key points of my dissertation to convey meaning to myself, and to better organize it for the reader. Renaud and Biljon (2017) have laid an important foundation for my own lived curriculum of creating a multimodal dissertation.

Paré (2017) suggested that an alternative to the monograph dissertation was a manuscript dissertation. Another suggestion was a portfolio of texts:

Contents of the portfolio, which could be negotiated with a student’s committee initially and revised as the work progressed, could include single- and multi-authored projects in a variety of media and modes, including academic and non-academic articles, edited book chapters, a blog, conference papers, video productions, and other projects. Of course, this would require us to think beyond *the* dissertation and towards a PhD experience consisting of multiple activities and products. (p. 413)

Paré included other proposed doctoral models such as the Workshop PhD as well as the PhD in Applied humanities. The first model, Workshop PhD, would be an interdisciplinary research workshop directed by a small group of faculty members with each student completing four linked projects. Each project aims towards a publication: an essay in an academic journal, a long article in a public affairs or arts magazine, an interactive website, a documentary film or radio show, an innovative theatre production, or a visual arts program. The second model, PhD in Applied Humanities, would involve a multi-disciplinary team of academics and non-academics, an internship, and an action

research project. This theoretical paper is important to the literature on changes to the dissertation because it answers important questions about the future of the dissertation.

The literature on the changes to the dissertation is important to consider because there is a push towards a sense of multimodality, as it is stated in many different ways – through the arts, through multiple projects in a portfolio, or through changes to the doctoral program such as the Workshop Ph.D. In some form these changes involve using multiple modes and engaging the student in more opportunities inside and outside of academia. The gap, however, is whether a dissertation can involve multimodality and whether this is a suggestion that can be made in the literature.

3.8 Chapter 3 Summary

The themes of the literature review were: scholarly creativity, issues in doctoral studies, completion of the Ph.D. program, supervisory pedagogy, academic literacy, and changes with the dissertation.

The dissertation is a significant contribution to the fulfilment of the scholarly criteria for a doctoral degree. Doctoral students bring their own unique knowledge and experience from an increasingly multimodal world. To date, research has focused on the dissertation as a product of writing.

Not all students learn and represent their knowledge in traditional ways, and supervisors have little experience supervising non-traditional theses.

This study explores the production of multimodal dissertations, and its implications for students, supervisors, and academic institutions.

Chapter 4

4 Methodology Summary

In this chapter I discuss the study methodology, participant recruitment, the data collection methods' trustworthiness and transferability, and data analysis.

4.1 Methodology

4.2 Participant Recruitment

4.3 Method

4.3.1 Journal

4.3.2 Semi-Structured Interviews

4.4 Recruitment and Informed Consent

4.4.1 Trustworthiness and Transferability

4.5 Data Analysis

4.6 The Story of Creation

4.7 How to Read the Data Chapter

Example: Dissertation 101

List of All the Modalities Used in Participants' Dissertations

Example: Interview 101

Example: Annie's Multimodality Stories

4.8 Chapter 4 Summary

Table 7. Summary of Methodology Chapter

4.1 Methodology

This study is built as a case study. The essential goal of a case study is that it “tries to illuminate a decision or set of decisions; why they were taken, how they were implemented and with what result” (Yin, 2014, p. 15). My case study is designed to illuminate the lived curriculum of students who have written multimodal dissertations. An exploratory case study was best suited for this research. The goal of using an exploratory case study is to use multimodal pedagogy as the focus of the study, as the case study methodology is apt for exploring multimodal pedagogy. Yin explains that an exploratory case study can investigate how and why the shift in meaning-making I discussed earlier has occurred.

My research questions seek to “explain some present circumstance (e.g., ‘how’ and ‘why’ some social phenomenon works)” (Yin, 2014, p. 4), which makes using an exploratory case study suitable for my project. Specifically, I want to know *how* students came to compose and understand multimodal dissertations and *why* they made specific design choices in their multimodal dissertation, as well as *how* they dealt with difficulties or challenges. These choices relate to lived curriculum as it allows a space for anecdotes, stories, and narratives about the experiences of creating a multimodal dissertation. My research questions (Table 8) require an “extensive and in-depth description” (p. 4) of the phenomenon of students composing multimodal dissertations.

Table 8. Research Questions

What was the lived experience of Education Ph.D. graduates who created multimodal dissertations?	What is my lived experience as someone conducting a multimodal Ph.D. dissertation in Education?
What do students understand to be the affordances and constraints of multimodal dissertations?	What do I understand to be the affordances and constraints of my research process?
What are the implications of promoting multimodal dissertations in the social sciences?	

Below, I explain the six steps that I used for the case study process. For my study, I define my work as a multi-cases study, and that each case is selected for theoretical replication – or predicting contrasting results for anticipatable reasons (Yin, 2009). First, I provide a visual of the six steps for the case study process in Figure 28.

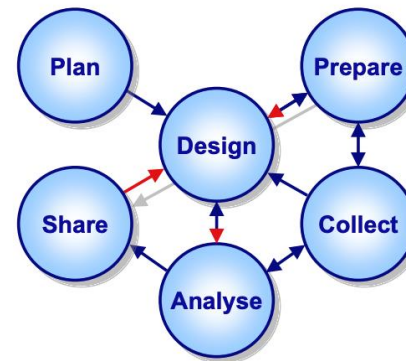


Figure 28. The Case Study Process (adapted from Yin, 2009, p. 1 as cited in Baskarada, 2014, p. 3). These are important elements to consider when using a case study methodology.

Plan

The planning stage focuses the strengths and limitations of the case study method in relation to the research questions (Yin, 2009). In this case, I know that a strength of case study research is that it involves a single unit for the purpose of understanding a larger group of units, observed over some delimited point of time (Baskarada, 2014). The units in my study are the participants who successfully completed a multimodal dissertation. Another strength of using the case study method is the researcher gains a deep holistic view of the research problem; a case study enables further description, understanding, and explaining of the research problem (Baskarada, 2014). In this case, my parallel research questions about my own lived experience provide a more holistic view of the research of multimodal dissertations, as I can describe and explain my processes of creating a multimodal dissertation. The case study is a method for learning about a complex instance, the multimodal dissertation, based on a comprehensive understanding of the literature (doctoral studies, scholarly creativity, completion of the Ph.D., supervisory pedagogy, academic literacies, and changes with the dissertation). The focus of this study is based on a contemporary phenomenon within a real-life Canadian context. My research questions deal with making links that are traced over time, rather than how often multimodal dissertations have been created. The aim of case studies is not to generalise to populations; rather, it is aimed at generalizing to theories and naturalistic generalizations. In my study, a case study with students who created multimodal dissertations contributes to the multiliteracies approach, and multimodal literacy. My study is an exploratory case study because it is being undertaken prior to the definition of the research questions and hypotheses, or in other words, it is

exploratory as it set out to generate hypotheses for later investigation, rather than for illustration (Baskarada, 2014).

Design

The design component of the case study process focuses on the case to be studied and developing theory and procedures that align with case study methodology. My research defines the case as multi-cases, where each case is a student who created multimodal dissertations. Furthermore, the theoretical framework of lived curriculum, multimodality, and multiliteracies works well with an exploratory case study. The multi-cases were a purposive case selection in order to collect the most relevant data on multimodal dissertations. My procedure using case study methodology ensured trustworthiness because I had multiple sources of data and data types which have been reviewed by my supervisor, committee member, and participants, and I had a chain of evidence through my data and findings. I have ensured transferability by adding all relevant recruitment e-mails and interview questions in the appendix, which means that the same results can be obtained by repeating the data collection procedure.

Prepare and Collect

The prepare stage involves being familiar with the main concepts and theoretical issues of my study (Yin, 2009). In this instance, my work during my comprehensive exam as well as my proposal allowed me to investigate case study protocol. Furthermore, I was able to ensure that case study protocols contributed to my trustworthiness and transferability through approval of my ethics application.

I used purposive sampling to recruit participants. The study's participant inclusion criteria stipulated that participants had to be Ph.D. graduates in Faculties of Education in North America who had successfully defended a multimodal dissertation. I chose only students in Education because programs at Canadian Universities, such as the University of Toronto, Western University, and Brock University (as previously mentioned in section 1.3.3) are increasingly including multiliteracies and multimodality as part of their curriculum and teacher development programs. So the question of how multimodal and multiliteracies pedagogy is or is not affecting doctoral dissertation work is pertinent and timely. Educationalists are meant to be at the forefront of pedagogy—composing a dissertation is about mobilizing research and sharing knowledge, which is inherently a pedagogical endeavour. Therefore, if Education is not concerned with how to share knowledge, then which discipline would be? Researchers of multimodality are best suited to help students learn how to become multimodally proficient. Accepting multimodal dissertations as a substitute option for the dissertation is the first step, but the next step is to provide pedagogies on how to compose and design multimodally. I chose only to focus on North America because significant previous research has already happened in the United Kingdom (section 3.3: Doctoral Studies Summary). Further, many students in North America are creating multimodal dissertations (section 1.6 Students in North America). Also, large associations such as CAGS) are gathering in North America to discuss the topic of multimodal dissertations (section 1.4.3. Future of Dissertations). My study only included participants who had successfully defended their dissertation, as these students have engaged in a full cycle of activity from beginning to end of while working through their dissertation. My study includes four participants. This sample size allowed me to investigate in detail and in-depth, which is fitting for an

exploratory case study. All participants were from Western Canada, specifically British Columbia, Manitoba, and Regina.

A letter of information was sent to each participant, and I collected informed consent from each participant. The potential participants were also informed of the research timeframe, the proposed nature of their involvement, and the expected practical outcomes (Baskarada, 2014), which prepared them for the case study protocol. During the collect stage I followed the case study protocol and prepared evidence from multiple sources (Yin, 2009). Data were collected through semi-structured interviews with participants and by reading their multimodal dissertations. My case study data set included interview transcripts and preliminary analyses. Using an interview as a guided conversation is “one of the most importance sources of case study evidence” (Baskarada, 2014, p. 11). Semi-structured interviews are more flexible and allow the researcher to better understand the participant's perspective. A researcher is able to refocus the questions or prompt for more information if something interesting emerges.

Analyze

The analyze stage means using the theoretical framework, literature review, and research questions to understand and analyze data (Yin, 2009). In my case study, data analysis consisted of examining and categorizing evidence into thematic conclusions. The theoretical framework helped me to plan and focus the most relevant data and organize the entire case study. The literature review assisted me in defining alternative explanations. Further, the analysis consisted of observe, think, test, and revise (Baskarada, 2014) to ensure internal consistency. The observe phase means to think

about the data to confirm existing interpretations or rule out other explanations. During the test phase additional data is collected, which I did through follow-up e-mails and interviews. The revise phase was when I held my second interviews with transcripts from my initial interviews to ensure I had the correct information. In addition, I used coding to break the data into manageable pieces. I used a variety of topic coding with issues that become apparent during data analysis, and analytical coding which “involves arranging the coded data into a more abstract framework with categories that are generally more abstract than words in interview transcripts” (Baskarada, 2014, p. 17).

Share

The share stage defines the audience, composes and displays evidence for the audience to make their conclusion, with reviewing and re-writing repeated until done well (Yin, 2009). I used direct quotations to support the main points to avoid overgeneralization (Yin, 2009). In addition, I contextualized the findings and demonstrated novel contribution, and related my findings back to the literature, as well as to the social and historical background of the research setting. Since I was reporting on multi-cases studies, I structured the analysis section around the multiliteracies approach as well as multimodality, and supported each part of the approach and theory with evidence from the cases.

My data collection strategies were designed to help me understand my participants in a way that could allow for extensive and in-depth description. This description was from a perspective that introduces a narrative research element to my dissertation, which further relates to my own lived curriculum.

This was a multi-cases study of Ph.D. graduate students who created multimodal dissertations, a phenomenon that is recent and therefore there is little research on the topic. The focus of this work was to understand the lived curriculum of graduate students, as well as the affordances and constraints of doing multimodal dissertation work. The purpose of the case study research method is to answer the *how and why* of questions (Yin, 2014), and my study sought to find out how students created multimodal dissertations through their lived curriculum. A case study helps to illuminate a set of decisions, why they were taken, how they were implemented, and with what result (Yin, 2014). In this case, understanding the lived curriculum of my participants enabled me to understand why my participants made certain design decisions in their work, and how working with different modes resulted in affordances or constraints for them. Each one of my participants made a set of decisions and had to continually justify why each choice was made, and although each participant successfully completed their dissertation, each one had a different way of reaching that end.



4.2 Method

My data sources included a research journal, participants' dissertations (artefacts), and semi-structured interviews.

4.2.1 Journal

The first type of data I collected was a self-reflective multimodal researcher journal. I created this journal in the first year of my Ph.D. and continued it towards the end of the composition of my dissertation. It documents my learning process and the design choices in my research. This reflexive element provides insight into parallel research questions of what my own lived experiences were and the affordances and constraints of creating a multimodal, complex, electronic dissertation. Janesick (1999) described journal writing within qualitative research as accomplishing the following:

Refine the understanding of the role of the researcher through reflection and writing, much like an artist might do; Refine the understanding of the responses of participants in the study, much like a physician or health care worker might do; view journal writing as a type of connoisseurship by which individuals become connoisseurs of their own thinking and reflection patterns, and indeed their own understanding of their work as qualitative researchers. (p. 506)

The journal allowed me to engage in meta-cognition and to process and document my lived experiences.

4.2.2 Semi-Structured Interviews

A second type of data I collected were semi-structured interviews. The semi-structured interview is a qualitative data collection strategy that asks participants a series of predetermined yet open-ended questions (Given, 2008). Semi-structured interviews are “especially useful in research questions where the concepts and relationships among them are relatively well understood” (p. 811). I conducted one interview with each

participant ranging from one to two hours. I had ten open-ended questions that were phrased to go beyond surface-level information gathering (see Appendix A: Semi-structured Interview Questions). As well, I avoided asking leading questions and instead tried to probe issues in-depth. Semi-structured interviews are “one of the most common and powerful ways in which we try to understand our fellow human beings” (Clough & Nutbrown, 2012, p. 141). Open-ended questions give the researcher more control over the topics or ability to use a variety of probes to elicit “further information or build rapport through the researcher’s use of active listening skills” (Given, 2008, p. 7). After conducting the initial interview, a second email was sent with the transcript of the interview and an invitation to speak if changes to the transcript were needed. Through my semi-structured interviews, I came to understand my participants’ lived experiences of the new and the known, the designs or resources were available to them, and the key moments of learning during their dissertation process.

4.3 Recruitment and Informed Consent

I received approval from the Non-Medical Research Ethics Board at Western University. My participants were under no undue influence to participate and involvement was voluntary. I purposively sampled participants who had written a multimodal dissertation. I identified potential participants through the publication of their multimodal dissertations. I also recruited by sending e-mails to Education professors asking if they have had students who have completed multimodal

dissertations or titles of dissertations that are multimodal. This was done because dissertations are not catalogued in databases, so it was difficult information to find. I used email advertisement forwarding to achieve a snowball sample. In other words, I asked Education professors to forward the recruitment email to potential participants who can contact the researcher for more information if interested. When e-mailing potential participants, they received all the information up front as the letter of information was attached directly to the e-mail. I will introduce readers to the four study participants in Chapter 5. Participants gave permission to use their real names and not pseudonyms.

4.3.1 Trustworthiness and Transferability

My personal journal, participants' dissertations, and semi-structured interviews were designed to ensure triangulation of data and ensure trustworthiness in my research. I used triangulation of data because I would gain an in-depth understanding of the phenomenon (Denzin, 2012). Triangulation of data is “based on the premise that no single method ever adequately solves the problem of rival explanations” (Patton, 1999, p. 1192). By combining different kinds of qualitative methods, such as multiple participants, theories, methods, and data sources, “researchers can make substantial strides in overcoming the skepticism that greets singular methods” (p. 1193). Furthermore, I conducted member checks (Boudah, 2010) after my preliminary data collection. I asked participants in the study to review my conclusions and observations from the interviews. Two of the four participants reviewed the transcription and provided feedback in a secondary interview. This interview was 30-45 minutes long and

offered clarification of words that were incomprehensible due to the recording quality, as well as clarification of the spelling of certain phrases or words used. The other two participants said they were satisfied with the transcription as it was.

The number of participants in my study allowed for,

thick description of the phenomenon under investigation...to provide readers to have a proper understanding of it, thereby enabling them to compare the instances of the phenomenon described in the research report with those that they have seen emerge in their situations. (Shenton, 2004, p. 70)

Data collection included interviews, member checks, and participant artefacts (dissertations), which ranged from 150-300 pages.



4.4 Data Analysis

To analyze my data, I “search[ed] for promising patterns, insights, and concepts – the goal being to define [my] priorities for what to analyze and why” (Yin, 2014, p. 132). For my reflection journal, there were concepts related to my rationale, literature review, and theoretical framework that helped prioritize when I would use which journal. For the dissertation data, I was able to see clear connections as the participants all started their story and it was a matter of choosing the right terminology. For my interview data, I noticed what they said verbally and at what points in their dissertation this information was repeated. This made clear to me the most significant attachments my participants

had to their dissertation. I used thematic analysis for my interview data and multimodal analysis for participants' dissertations. Thematic analysis is:

A process for encoding qualitative information. The encoding requires an explicit "code." This may be a list of themes; a complex model with themes, indicators, and qualifications that are casually related; or something in between these two forms. A theme is a pattern found in the information that at the minimum describes and organizes possible observations or at the maximum interprets aspects of the phenomenon. A theme may be identified at the manifest level (directly observable in the information) or at the latent level (underlying the phenomenon). (Boyatzis, 1998, p. vii)

In other words, I was able to compare participant's dissertations with the interview data. I was also able to compare my participants' perspectives with my own experiences. My ability to make rigorous comparisons visible in my results and findings, along with my interviews with my participants and the original dissertations, allowed trustworthiness.

I conceptualized themes from the study data, which I discuss in the upcoming sections (4.6). The themes are: life experiences, professions as teachers, supportive networks, supervisors, and committees, as well as other themes regarding constraints, such as technical difficulties and institutional barriers.

I also conducted a multimodal analysis of the dissertation. Multimodal analysis is a method that seeks to "break down compositions into their most basic components and then understand how these work together, how relationships can be made between

them on a page, in order to create meaning" (Machin, 2016, p. viii). A multimodal analysis "systematically describes the range of choices available and how they are used in context" (p. ix). Multimodal analysis is an analysis of "the rules and principles that allows viewers to understand the meaning potential of the relative placement of elements, framing, salience, proximity, colour saturations, styles of typeface, etc." (p. x). Taking data from interviews and the participants' dissertations, I was able to glean how participants worked through different modes of their dissertation and what that process was like for them. For multimodal analysis, I broke down the modes my participants used and analyzed how these modes worked together to create scholarly purpose and meaning in their research. Along with what my participants said in interviews, this gave me context into the choices that were available to them, and why they made certain mode choices. Finally, I used multimodal analysis to ask what the meanings refer to, as well as the dialogue, structure, and intention of the meanings, to truly understand the affordances and constraints of the modes used in their dissertation. Lastly, I include a modal configuration to my analysis, as in "modal hierarchies [...] no one mode takes precedence over all other modes at all times" (Norris, 2009, p. 98), and this is part of multimodal interaction analysis. I used modal configuration to understand what modes were most or least important to the overall meaning of the dissertation.

Their stories and processes as communicated through their interview and in their dissertation made it clear what to include and what to leave out for my data analysis. Most of the lived curriculum that I discuss below are commonly shared between all four participants, along with their challenges and achievements. For example, in three instances, each participant was clearly influenced by a very popular scholar in the field

of Education. This provided me with the realization that scholars in the field are championing the multimodal dissertation, and thus supervising only the students who want to create a multimodal dissertation. Another reason for the case study was because there was no previous research done on the topic, which meant that the participant inclusion criteria regarding the student successfully completing the multimodal dissertation was necessary.

In addition, participants also were involved in deciding what information should be excluded from this study. Most participants felt very comfortable communicating their story but still specifically requested that some parts be left out because they were private and involved other individuals. I ensured that each part that was requested to be left out was highlighted and bolded in all interview transcripts and sent to the participant to member check. This gave them an opportunity to review what had been said and to alter, add, or delete certain things. This was a crucial step to ensure participant consent, as they had the opportunity to determine how much information they wanted to express. However, it is important to note that some of the conversations that occurred during the semi-structured interview were also communicated in their dissertations. This helped make the choices easier to analyze because the participants stressed the story both verbally and in their dissertation. Although they would not remain anonymous due to the public nature of their dissertation, they were all very open and positive regarding their lived curriculum creating a multimodal dissertation. Most times participants would remember a part of something they wanted to include and would communicate it, whether in a middle of a question or at the end of the interview. Plenty of opportunity was given for participants to freely express anything regarding their dissertation

experience, and as mentioned they had the choice of leaving it out afterwards if they preferred.

My theoretical framework of lived curriculum as well as multimodal and multiliteracies pedagogy helped to inform my research questions, although the limitations of this framework was only being able to analyze the data through particular ways. The dataset was large, and it was impossible to analyze over 150 pages of transcripts in several different ways. There were other factors worth investigating such as faculty experience with multimodal dissertations or which would have led to other interesting results if I went in that direction. However, I had to continuously remind myself of my research questions to guide my analysis. There was a time when I had 20 pages of work based on analyzing the participants' dissertations through a very detailed chart of modes and their many meanings, but I decided against that approach. As this was a case study, data analysis through themes informed my theory and was intended to provide empirical research into multimodal dissertations. Also, it was important to me to use a theoretical framework that made sense of my research questions since I had a limited number of examples of dissertations to review since the field is so new. I needed to be able to find themes amongst multiple cases, and so I used my methodology and theoretical framework to answer my research questions, and open up further research for other areas of this topic (such as the experiences of faculty in supervising students creating a multimodal dissertation, or the experiences within doctoral course work, or faculty or students' opinions towards multimodal dissertations). My study is intended to contribute knowledge of multimodal dissertations as an introduction, and a stepping stone to building further research.

4.5 The Story of Creation

In section 4.6, I provide instructions for my reader on how to read the data. Here, I briefly explain what I did: I composed a section for each participant in which I included their dissertation abstract, and I organized the different modes that were used in their dissertation. For their interview transcription data, I organized what they said they were taught or what they learned about using different modes through different mediums and media during their doctoral program. I analyzed the transcriptions of their interviews based on the four components of multiliteracies pedagogy: experiencing, conceptualizing, analyzing, and applying. I included the component of experiencing to depict what was known to my participant and what was new for them. For example, my participants identified with either being a mother, teacher, poet, or musician. I used the component of conceptualizing because it helped me understand what terminology, epistemology, or ontology they used in their work. The theme of conceptualizing helped to organize what research subject matter participants' were working with in their dissertation. Next, I found that my participants were continuously questioning and analyzing their dissertation in a functional way as well as a critical way, for which I used the component of analyzing. The theme of analyzing helped to organize who was involved in ensuring that the ideas, concepts, theories, and data were all aligned. The last component I used in my analysis is applying appropriately and creatively. The application of modes was key to me to understand the modal affordances my participants

used in their dissertation. Being able to understand my data through the ways my participants applied scholarly ideas and research in their dissertation helps to understand the implications of these dissertations in the social sciences because it is possible to achieve vigorous academic standards. The theme of applying helped to understand how all of the above created a final product that was academically strong and creative.

Interwoven between these themes are the themes of designs of meaning: *available designs*, *designing*, and the *redesigned*. The theme of available designs was important to my analysis because I found that many of the participants were using artefacts in their dissertations that they had created in the past. For example, participants used poems, art pieces, and songs they had created prior to starting their Ph.D. program to include in their dissertations. My participants found artefacts that were applicable to their Ph.D. research and made sure they were adding these artefacts because of how important it was to their research topic. The theme of designing is important for me to consider because this is an important process my participants go through, especially in regards to how they make purposeful choices when combining modes and why. Finally, the theme of the redesigned was included because I argue the redesigned is the product of their lived curriculum. In other words, their dissertation is a culmination of available designs and the products that resulted from designing to create the final product or the redesigned, which is the dissertation. The final section of data analysis for each participant includes my version of their multimodality story, using quotes of what the participants said but organized based on multimodal literacy and pedagogy. These stories are written in first person, and transcriptions were all read and approved by participants. In the next section, I provide summaries of each participant.

4.6 How to Read the Data Chapter


FINDINGS

*Data analyzed and organized by researcher

FIRST

DISSERTATION 101
FOR READERS

An introduction of dissertation abstract and modalities

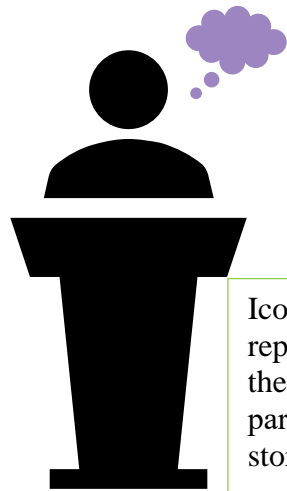
A woman with short dark hair, smiling, wearing a black dress and holding a black camera. She is positioned at the bottom left of the yellow box.

RAW DATA

*Data not analyzed nor manipulated.

EXAMPLE: DISSERTATION 101

**PARTICIPANT
NAME**



Icon representing the participant's story

TITLE OF PARTICIPANT'S DISSERTATION

PARTICIPANT'S UNIVERSITY:

PARTICIPANT'S FACULTY:

PARTICIPANT'S DATE DEGREE:

CONFERRED:

ABSTRACT CITATION:

ABSTRACT

Insert verbatim abstract here

RAW DATA

LIST OF ALL THE MODALITIES USED IN PARTICIPANT'S DISSERTATION***Linguistic mode***

Example: title of work (page number)

Spatial mode

Example: title of work (page number)

Visual mode

Example: title of work (page number)


******Although organized by separate modes, all work is multimodal, or created with a combination of modes.***

FINDINGS

SECOND

INTERVIEW 101
FOR
READERS

**A summary of the
participant and verbatim
interview answers
organized with
multiliteracies pedagogy**

A graphic on a yellow background. At the top, the word "SECOND" is written in green. Below it, a black diagonal banner contains the text "INTERVIEW 101 FOR READERS" in white and yellow. In the lower half, there is a green speech bubble containing the text "A summary of the participant and verbatim interview answers organized with multiliteracies pedagogy". To the left of the speech bubble is a black silhouette of a person holding a camera, with a realistic photo of a smiling woman's head placed above it.

EXAMPLE: INTERVIEW 101

Multiliteracies Pedagogy and Design Components

Experiencing

(What are the lives of the participant?)

Available designs

(What are the resources used in their work?)

Conceptualizing

(What is the subject matter of the research?)

Designing

(How has the participant designed the work?)

Analyzing

(Who helped rationalize the dissertation research?)

Applying

(What different modes did they use?)

Redesigned

(What is the final product?)

FINDINGS

Examples of their identities and lives

Examples of past work they included in their dissertation.

Keywords of their dissertation

Examples of specific design choices

Names of supervisor and committee members

Examples of modes and forms used in the dissertation

Final description of their dissertation

Insert stories from participant interviews here. Word choice and terminology used by participants themselves.

RAW DATA

THIRD

MULTIMODALITY STORIES
FOR
READERS



I take participant interview responses and remix them as a narrative. All narratives include verbatim quotes from transcripts

EXAMPLE: ANNIE'S MULTIMODALITY STORIES

Insert transcription of interview responses that were reorganized into a cohesive narrative about the various ways they used multimodality in their dissertation, with permission from the participant.

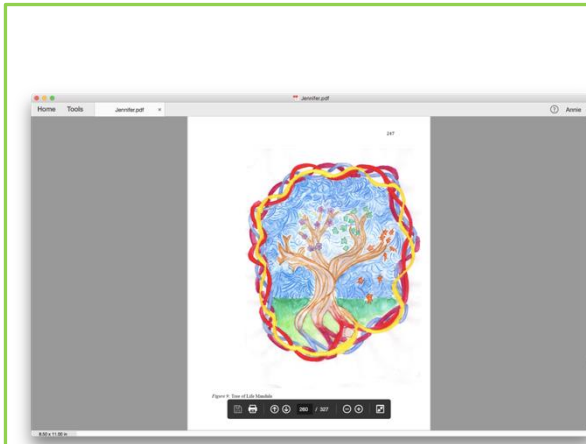


Figure 29. Example of screenshot of Jennifer Watt's dissertation.

RAW DATA

4.7 Chapter 4 Summary

The essence of a case study is that it tries to “illuminate a decision or set of decisions; why they were taken, how they were implemented and with result” (Yin, 2014, p. 15).

Education researchers are at the forefront of multimodal pedagogy and have a responsibility to help students learn how to become multimodally proficient (Patton, 2013).

A journal refines the understanding of the role of the researcher through reflection and writing (Janesick, 1999). Semi-structured interviews go beyond surface level information gathering.

I “searched for promising patterns, insights, and concepts” (Yin, 2014, p. 132).

Chapter 5

5 Data/Findings

I collected data from semi-structured interviews and participants' dissertations. I organized this chapter with an introduction to each participant, which includes an abstract of their dissertation. After, I organize my data according to the knowledge processes of experiencing, conceptualizing, analyzing, and applying for each participant. In addition, I discuss participants' *designs of meaning* (available designs, designing, and redesigned). I summarize how each participant experienced, conceptualized, analyzed, and applied their work with the use of designs of meaning. I also include my stories of participants of working through and designing their meanings through different modes. Finally, I conclude with a summary report of all four participants' stories, including specific affordances and constraints, and advice for future graduate students and their supervisors.

5.1 Introduction to Participants

Dr. Jennifer Watt	Jennifer Watt Interview	Annie's Multimodal Story of Jennifer Watt
Dr. Kathryn Ricketts	Kathryn Ricketts Interview	Annie's Multimodal Story of Katheryn Ricketts
Dr. Anar Rajabali	Anar Rajabali Interview	Annie's Multimodal Story of Anar Rajabali
Dr. Mary Barrett	Mary Barrett Interview	Annie's Multimodal Story of Mary Barrett

5.2 How to Read Participant Summaries

5.3 Summary

5.4 Annie's Story

5.5 Chapter Summary

Table 9. A summary of the data chapter.

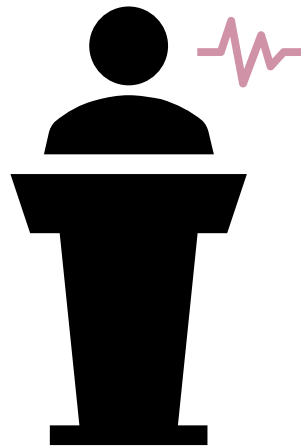
5.1 Introduction to Participants

JENNIFER WATT		
	Dissertation	p. 109
	Interview	p. 111
	Narrative	p. 113
KATHRYN RICKETTS		
	Dissertation	p. 120
	Interview	p. 122
	Narrative	p. 124
ANAR RAJABALI		
	Dissertation	p. 129
	Interview	p. 131
	Narrative	p. 133
M.J. BARRETT		
	Dissertation	p. 138
	Interview	p. 140
	Narrative	p. 142



Table 10. Overview of each participant

DR. JENNIFER WATT



Title: Practicing life writing: Teaching through vulnerability, mindfulness, and compassion.

UNIVERSITY: University of Manitoba

FACULTY: Education

YEAR DEGREE CONFERRED: 2017

COMICS, POEMS, COLLAGE, JOURNALS,
E-MAILS, PLAYS, PHOTOS, ART PIECES

Watt (2017):

ABSTRACT: In this dissertation I engage in life writing and literary métissage (Chambers, Hasebe-Ludt, Leggo, & Sinner, 2012; Hasebe-Ludt, Chambers, & Leggo, 2009) to explore and exemplify mindful, aesthetic, and compassionate practices for working through moments of crisis (Kumashiro, 2010) in teaching and learning. The dissertation is designed as a four-strand braid and organized around the active verb “practising” to dig deep into the dynamic, and often difficult, processes of teaching and learning: (1) Practising Vulnerability; (2) Practising Discomfort; (3) Practising Mindfulness; and (4) Practising Compassion. Each strand is composed of different genres of life writing: theoretical and analytical introductions, letter writing, journal pieces, comics, photos, poetry, creative non-fiction, collages, scenes from a play, and an alphabet book. The multimodal life writing pieces are worked examples (Gee, 2010) of contemplative practices and pedagogical praxis. Life writing offers concrete ways to practise mindfulness, reflection, and reflexivity, which, in turn, invite a more awakened, critical, and compassionate stance as an educator. If teachers want to move beyond simply promoting the importance of reflective practice, wellbeing, self-actualization, and compassion to their students then we need to show more teachers (and teacher educators) the messy process of doing so themselves. Reading life writing is a starting point for teachers at all stages in their careers to imagine how they could, or already do, engage in similar processes and invite them to cultivate compassion and self compassion as a grounding stance for their life projects as teachers, learners, and human beings. My autoethnographic teacher inquiry (Cochran-Smith & Lytle, 2009) was prompted when I encountered “troubling” (Kumashiro, 2009) tensions when first teaching about homophobia and transphobia to teacher education students at a faculty of education on the Canadian prairies. I began to explore the vulnerability and discomfort of this teaching moment from an experimental (Davies, 2011), multimodal (Kress & Street, 2006; Pahl & Roswell, 2006), critical literacy stance (Janks, 2010; Vasquez, Tate, & Harste, 2013). My inquiry shifted after a diagnosis of breast cancer, which became an opportunity for me to awaken to more mindful, empathetic, and compassionate ways of being, living, teaching, and researching.

Linguistic Mode

Narrative: short version of the story (p. 14)
Poem: translucence (second year of teaching) (p. 67)
Journal/E-mails: rushing river realizations (p. 68)
Closet play: into the closet (p. 72)
Act I (p. 88)
Closet play: act 2 (p. 128)
Poem: “what hurts” (p. 40)
Poem: “Big-C critical confessions, or, where the hell do they keep the big-V vomit bags?” (p. 141)
Letter: a letter of complaint (p. 146)
Journal entry: raising the white flag on “cancer is a battle” metaphor (p. 154)
Journal entry (p. 173)
Poem: Revlon 47 (p. 183) and Beacon Hill back street (p. 184)
Email: food for thought or taking 10cm of mindfulness (p. 216)
Poem: a lately realization (p. 248) **Email:** update (p. 251)

Visual Mode

Boxes with quotes of different gradient gray (pp. 1, 51, 113, 159, 221, 281)
Figure 1: The Learning Spiral (p. 10)
Comic (an abstract introduction) (pp. 33-35)
Comic (self-portrait) (p. 37)
Figure 2: four stranded braid (p. 44)
Photo: Practicing vulnerability (p. 50)
Comic (Fallen super hero: A tale of a teacher in crisis) (p. 86)
Photo: Practicing discomfort (p. 112)
Photo: Practicing mindfulness (p. 158)
Collage: filling the silence - photographed collage artifact (p. 185) and studio notes (p. 186)
Comic: Gee’s tools of discourse analysis comics: “discourse” and “conversation” (p. 201)
Collage: Bill 18 mixed media collage series: not so silent prairie landscape (p. 205), sticks and stones (p. 208), dear Manitoba (p. 211), and 100% chance of rainbows (p. 214) and studio notes
Photo: Practicing compassion (p. 22)

Artwork: tree of life mandala (p. 247)
Comic: compassion (p. 249)
Collages: countdown (p. 250)
Alphabet book: love letters to teachers (p. 253)

5.2 Jennifer Watt Interview

Experiencing

(What are the lives of the participant?)

Teacher
Mother
Cancer survivor
Husband
Kids
Mother
Sister
Students

Available designs

(What are the resources used in their work?)

She included past texts such as letters, journals, and collages in her dissertation

Conceptualizing

(What is the subject matter of the research?)

Life writing
Teacher education
Vulnerability
Discomfort|
Mindfulness
Compassion
Currere
Cancer scholarship
LGBTQ
Arts-based methodologies

Designing

(How has the participant designed their work?)

She had to see which artefact fit under which category

Jennifer was a ‘substitute teacher’ in Canada, then moved and taught in England. When she returned to Canada, she taught a language and literacy course in a teacher educator program where she invited students to do many multimodal assignments. She is a mother of two children and “wife to a medievalist.” She survived a 10.2cm tumour in her breast. She is married to someone who has done their own dissertation and described her husband as an “in-house editor and therapist.” She has done a bunch of art projects with her children over the years. She leaned on friends to meet for writing sessions. Her mother is not an academic but has read her dissertation cover to cover. Her sister, who is pursuing graduate education in nursing, will be collaborating with Jennifer on publications. She had one student who helped advise her through creating graphic novels and comics.

Jennifer used poetry in her dissertation that she wrote as an early teacher. Throughout her educational career, she has loved projects where she was invited to write as well as to create art or make a project.

She reflected on her struggles as a teacher in the dissertation and interview. She had an interest in homophobia and transphobia and how she negotiated that at a prairie university. Because of her cancer experience, she was able to view her work through the lenses of vulnerability, discomfort, mindfulness, and compassion.

Jennifer looked at all the multimodal making she had done over the years and wanted to figure out how it all works together.

Analyzing

(Who helped rationalize the dissertation research?)

Supervisor: Wayne Serebrin
Committee: Fiona Freen, Debbie Schnitzer, Warren-Cariou, Carl Leggo

Her supervisor at first did not seem like a promising match. He was interested in early years pedagogy and Jennifer was interested in senior years pedagogy. He had never supervised a Ph.D. student before Jennifer. Jennifer, however, was strongly encouraged by her supervisor and her committee to think of herself as a beginner in terms of her art-making so that she did not have to meet the standards of being an artist.

Applying

(What different modes did they use?)

85 cases of written, visual, spatial modes in 304-page dissertation

Redesigned

(What is the final product?)

Narrative, poem, journal, e-mail, play, letter, comic, photo, collage, alphabet book, art

See 5.2.1. Annie's Multimodal Story of Jennifer Watt

5.2.1 Annie's Multimodal Story of Jennifer Watt

I call it accidental research on all sorts of levels. – Jennifer Watt

I started my candidacy exams. I had these three questions, and I had three months to write them. So, I wrote it up as a story and kind of integrated it through my candidacy. I played with multimodality a lot in my candidacy exams. I created a play looking at the critical theorists that I did. And I created little puppets.

I had actually written the poetry from much more before, so some of that had already been there. And I had what I thought was a structure and form, but it was sitting very heavy (Figure 29). I wasn't comfortable entirely with what it was. I was feeling angst about it. I was very much thinking about it as 'how am I going to publish this and position myself?' I was thinking about that, you know—the time after. So much so, that my chest was heavy all the time. And then I realized, oh, that wasn't the dissertation, it was a 10.2 cm tumour that was growing as well. That was sort of the moment of embodiment. I thought this heaviness was because I was stressed about this dissertation, but no.

So, then I took a year off and I've always called it my divine pause. It was this time where I spent the year practicing what I needed to practice being healthy and to recover and to have enough energy for my family. And to live well within that framework of illness. And it was really difficult because there were days where I felt pretty good and I would think, oh maybe I should work on that dissertation a bit, but I made myself not. It was this disciplined decision to step away. But then at that time, I

DISSERTATION LINK: <https://mspace.lib.umanitoba.ca/handle/1993/32010>

Experience the dissertation through the screenshots below:



Figure 30. Jennifer starts her journey with many stories (Watt, 2017, p. 35). This is a comic about her process.

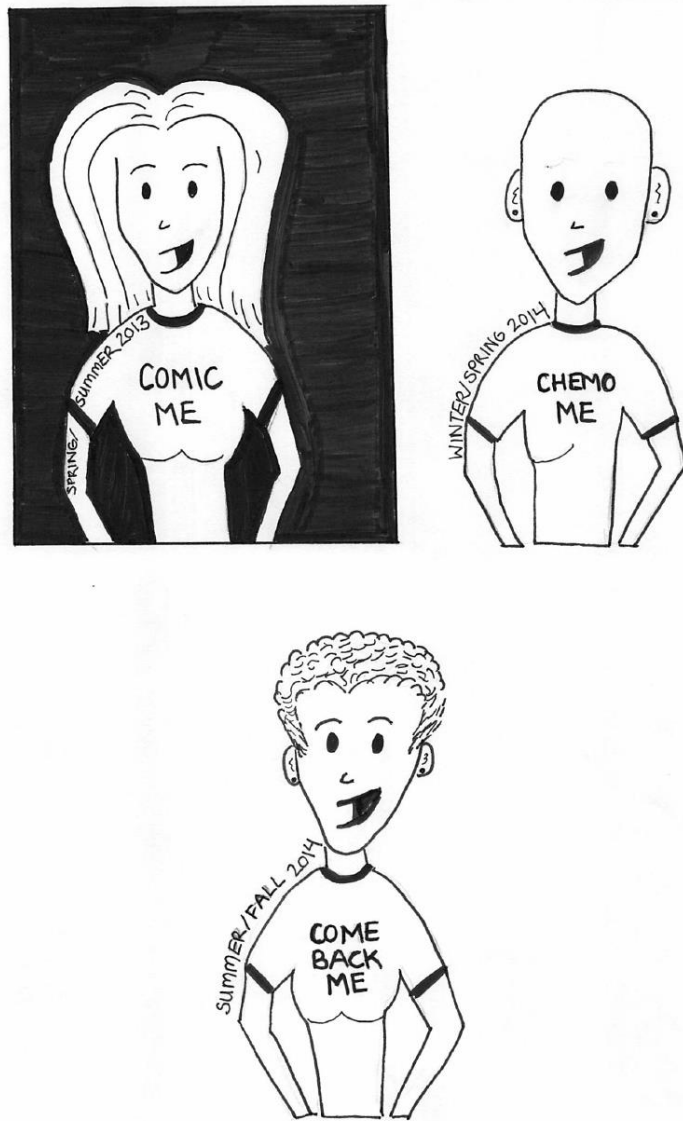


Figure 31. Jennifer honours her cancer experience (Watt, 2017, p. 37). This is a comic depicting the changes she went through within a year.

was doing lots and lots of my other writing. And other ways of making modes and making sense of things. Just how I had before. I had been and lots of my other writing. And other ways of making modes and making sense of things. Just how I had before. I had been doing some art-making before, like multimodal collages that was before cancer. You know, but I started to do that for my own recovery — my own health purposes.

So, once I kind of made it through the major stages of my cancer treatment (Figure 31) and I came back to looking at my dissertation, I wanted to do it in a way that would honour that experience as well. And in a way that would integrate those experiences because I saw how closely entwined they were. That it was about teaching and learning, and practicing through discomfort, and through those moments. And so that was how those became integrated.

The Visual Mode

I drew up a mandala for that yoga retreat, and then realized this is so much like life writing and the four stranded braid and what are these four strands that I think are essential to be a teacher and to making it through, being resilient. So that's where I was able to name the four practices of practicing vulnerability, discomfort, mindfulness, and compassion. And once I kind of had that idea, I had a structure. And then as I had the structure, then I thought, let me look back here, let me look through this multimodal making I've been doing for years and see how it works together and reframing that theoretical framework. But almost all of the pieces were there, and it was sort of deciding which one speaks more to vulnerability, which one speaks more to mindfulness.



Figure 32. Jennifer's research area explored (Watt, 2017, p. 86). This is a comic of how she came to her research topic.

My comics were learning as I went (Figure 31). I read a lot of Scott McCloud books about how to write a graphic novel and borrowing things and trying things out. I was always told by people who were very supportive, 'Do the work but make sure you do it really, really, well. You know, just don't do it and do a kind of half job on it. You're going to be interrogated harder on this kind of work because it is new, and it is innovative, so make sure it is quality, quality work.' As I am going to do a comic, it just can't be slapped down on a piece of paper. I need to think about that thinking. I need to think about how the panels and the layout are going to look. And how it will work aesthetically, as well as functionally.

I had a student who did a lot of graphic novels, and comics. He and I talked a bit when I was first starting to do comics. So yeah, using those resources of learning alongside my students and then being able to say to them, 'I know how much time it takes to do it, so if you start it and you don't finish it, that's okay. It's about the process.' I realized that actually the comic was the better form there because I could use a visual image, it didn't need words. It brought back a different image to the same story.



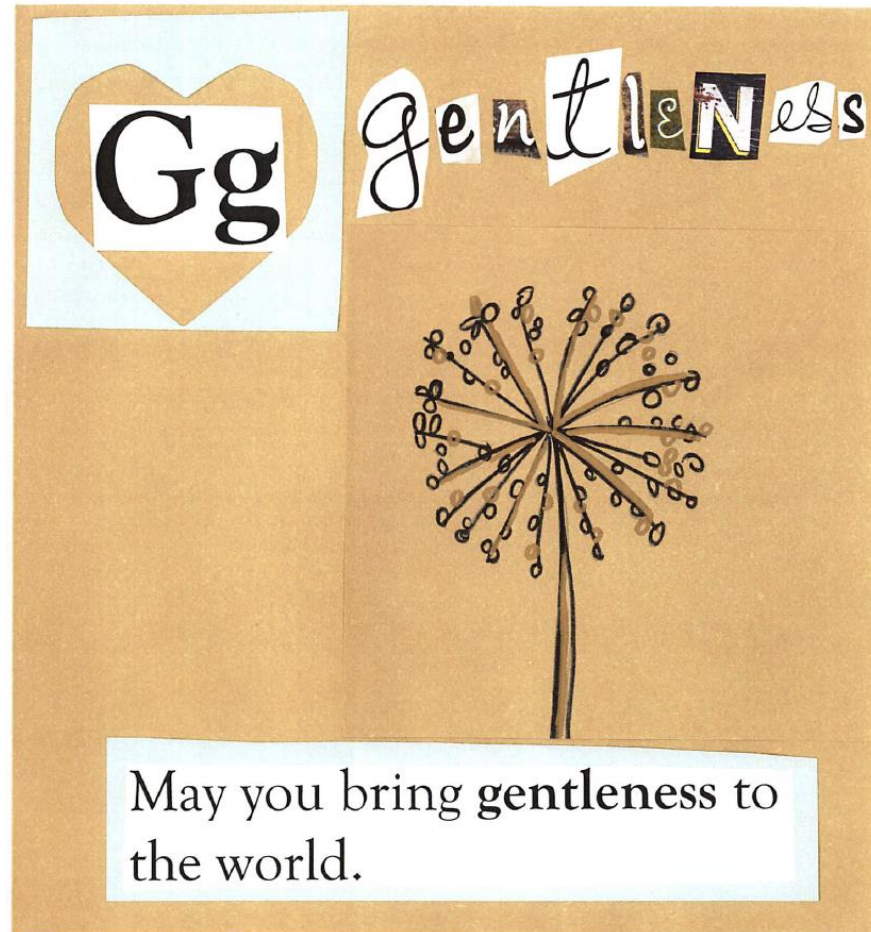
Figure 3: Filling Silence.

Figure 33. A collage representing silence by Watt (2017, p. 185). This collage was made out of clippings from a magazine.

The collage work came from the idea that we did a talking circle, many people didn't speak. And I wanted a way to represent silence (Figure 33). And so, I thought visual arts was a way to play with silence. I worked with an artist that my daughter was taking art classes with. And we created some collage around a picture to look at silence. I am used to using collage and as the big news story in Manitoba around Bill 18 which was an anti-bullying law that included GSA's being allowed in schools, that kind of exploded news-wise, then I was able to respond to that news story using multi-modal mixed-medium collage (i.e., Figure 34 Jennifer's alphabet book in her dissertation)

I laugh at it when I re-read some of my notes at that time because I decided, 'Oh yeah, wouldn't it be cool if I'm going to add these sticks and stones to them, and now while I am on that, I should try to add this on something else hmm. I should do seeds. I don't have any seeds here. It's 8 o'clock at night. I'm not going outside. I've got popcorn. Here we go! Ok I don't really know what I am doing so, let's look at what I can use from right here, in my life, and in this bunch of art projects that I've done with my kids over the years. Here are my materials, what can I make?' Kind of like that makerspace mentality that is going on in schools now.

You've got that makerspace, bring in that recycled materials and you say to kids, 'This is what we got, what can you make?' And then what does that help you learn by making? I was able to invite my children to be part of that making process too.



They certainly have influenced who I am while I was making my dissertation, so for them to be able to co-create one of the multimodal pieces was really exciting for me. So that alphabet book (Figure 33) with their illustrations was really important to me. For the visual pieces, I've always done a lot of art with my kids, so I've always done a lot of work—art work with my kids. So, I actually had quite a lot of things like the paint was in the house, and those sorts of things. I did a rather expensive little journey to Michaels craft store, and bought some canvasses and while I was there, I picked up the dried wheat that I used in one of them. And it was just looking back at the other things that I happened to have. I didn't do anything that required me to learn a whole new set of art skills. It was really playing with mediums that I was fairly familiar with. I guess I never worked with Modge Podge, so that was one thing I worked with when I was with the artist in the studio. She taught me that process, and that was kind of a neat moment because as it dries, it becomes clear and that became a really neat thinking insight moment for me.

I think because my dissertation was about telling difficult stories, difficult stories are really hard to tell and so sometimes what I couldn't tell, in certain ways, I could tell in other ways. So sometimes I can't tell something as well as I can unless I scrawl it down into poetry, or I can't, by putting it into visual images. I was able to tell a story in a more profound way than I could've before.

Figure 34. An excerpt from the Alphabet Book Jennifer made with her kids (Watt, 2017, p. 261). She made a page like this for every letter of the alphabet.

What Hurts

What hurts:

having fears exposed in front of those who make you afraid.
 hoping so much for someone, and watching them lack faith in themselves.
 working to exhaustion and not having it recognized by the ones you are doing it for.
 missing everything that feels like support, because it feels like home.
 feeling like you are always a bit on the outside.
 caring more than what is recommended.
 being isolated in the midst of others.
 hearing more criticism than praise.
 speaking and not being listened to.
 trying to be strong when you feel broken
 knowing you wouldn't change who and how you are,
 even though you know it will cause you more pain.
 facing those who expose you again and again.
 attempting to be everything to some who have nothing.
 reaching out to those who can help you.

2001, Oxford Community School

Figure 35. A poem from p. 140 of Watt (2017). This is a poem entitled “What Hurts.”

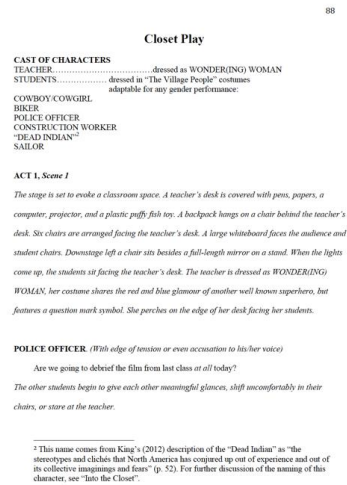


Figure 36. Play-writing (Watt, 2017, p. 88). This is a play she wrote about a class interaction she experienced.

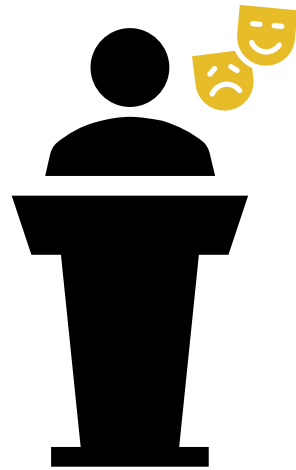
The Linguistic Mode

Poetry is something that I always gravitated towards (Figure 35). I obviously was writing it when I was teaching, so it was just something that sort of came alongside my overall writing. It tends to come out in a flurry when it comes out. I write quickly. I maybe do a little of editing but sometimes the poetic means is there. And I go with it.

Playwriting actually came from my students (Figure 36). I worked with a lot of students who were reluctant readers or had what would be considered emerging literacy skills. And when I would work with these students, I found that if I put things in script form, they would be so much more willing to read aloud in class. So, we did a lot of taking complex texts and I write them into scripts, so I would have these readers that were struggling, be willing to read it and to get the story so I was kind of used to doing it and I liked it and it was fun. I knew my idea of the wondering woman because there was this student sitting next to me in the class, when we did the talking circle, they were in costume, so that made it all the more theatrical. So, wondering woman was sitting next to me in the class, so I was like oh that makes a great name for a teacher, so that’s a great teacher character, and then I was thinking of them all being in costume and then I thought about the village people and that just seemed perfect so that’s how my characters kind of emerged. I liked the idea of playing around with the idea of a play. I also like the idea of the pedagogy of play. Putting play with play is kind of a nice work. So that was kind of fun. And I think one of my biggest struggles all the way along was I love theory, and I am kind of a theory junkie, but I don’t like reading really dense theory that is inaccessible. I find that frustrating, and I find that it is putting barriers, especially being part of this transformative cohort, we read a lot of critical theorists and it’s all

about power, and it's all about empowering people, and yet often, the theory is so dense, it's totally inaccessible. And I'm thinking, that seems hypocritical almost. I wanted work that was accessible to regular teachers.

DR. KATHRYN RICKETTS



Title: The suitcase, the map, and the compass: An expedition into embodied poetic narrative and its application toward fostering optimal learning spaces

UNIVERSITY: Simon Fraser University
FACULTY: Education
YEAR DEGREE CONFERRED: 2011

POEMS, PHOTOS, REFLECTIONS

Ricketts (2011):

ABSTRACT: Embodied Poetic Narrative is a triangulation of body, story, and object in creative and shared play as a way to surface new understandings of self and other. This curriculum model carries multiple entry points whereby the teacher/participant can enter from creative writing and/or movement in combination with shared stories developed from objects of value. With these imaginative explorations, I invite the body's centre of gravity to shift and thereby provoke the axis of knowing to be disrupted. This process results in lived experiences re-interpreted, re-storied, and then re-imagined with others. When fracturing the signifiers of our everyday(ness) participants come to shared understandings and create intersections of commonalities thereby cultivating spaces of reciprocity where a community is formed. By moving away from text centered processes through immediacy and viscosity, we access our first, most creative impulses. I posit a body in movement reveals lost thoughts and treasured images and with an increased heart rate and rapid breath we provoke availability to the imagination and deeper understanding of self and other.

I ask questions such as,—If I am a museum of lived experiences what are my artefacts?;—What is embodied literacy in the curriculum of the world?;—How can co-authoring personal stories cultivate compassion within a community of practice and further a global community?

My thesis explores my relationship with and through dance into embodiment, including reflections on spectatorship. It continues on to explore the culturally-inscribed body within our ever-growing world of fluid borders and hybrid identities. I critique text centred learning strategies as a primary factor in forcing the body into silence as well as examining the notion of self and other within an autobiographical and collective storying process. I trouble our privileged position of naming objects in relation to the everydayness of their use and finally, I explore the interpretive voice by examining readings of embodied acts. Embodied Poetic Narratives presents a tool to create powerful, dynamic pedagogic environments whereby forgotten or suppressed memories, can activate personal agency and self-politicized action towards transformative learning.

Linguistic Mode

Poem: Suitcase (p. 19)
 Reflection: The skin of emotion (p. 22)
 Poem: In the beginning (p. 39)
 - Leggo (2004)
 Poem: Reflections on Kathryn's lug (p. 72) – From Jim
 Poem: What if (p. 75)
 Reflection: The cannery: the ramp (p. 77)
 Reflection: The station: the suitcase (p. 77)
 Reflection: The cannery: the can (p. 78)
 Reflection: The station: the passport (p. 78)
 Reflection: The cannery: the machine (p. 79)
 Reflection: The station: the conductor (p. 79)
 Reflection: The cannery: the knife (p. 79)
 Reflection: The station: the door (p. 79)
 Reflection: The cannery: the transition (p. 80)
 Reflection: The cannery: the packaging (p. 82)
 Reflection: The station: the paperwork (p. 82)
 Poem: The esses of summer (p. 95) (Miller, n.d.)
 Poem: Rap song (p. 103)

Poem: Jabberwocky (p. 115) (Carroll, 2001)
 Poem: Bodypsalms (p. 131)
 Poem: Yo-yo (p. 145)
 Poem: Loganamnosis (p. 173)
 Poem: How to eat a poem (p. 225) (Merriam, 1990)

Visual Mode

Photo: lug 1 (p. 18)
 Photo: embodied theories at play: 1 (p. 21)
 Photo: embodied theories at play: 2 (p. 22)
 Photo: a/r/tography class 1, 2, and 3 (pp. 46-47)
 Photo: Lug: Yaletown 1,2, and 3 (p. 51)
 Photo: Lug: Yaletown 4 (p. 52)
 Photo: Strathcona project 1 (p. 60)
 Photo: Strathcona project 2 (p. 61)
 Photo: Lug: speaker's corner 1 (p. 64)
 Photo: Lug: speaker's corner 2 (p. 65)
 Photo: Lug: speaker's corner 3 (p. 66)
 Photo: Lug: speaker's corner 4 (p. 67)
 Photo: Lug: speaker's corner 5 (p. 69)
 Photo: Lug: Chinatown (p. 71)
 Photo: Lug: Cannery 8 (p. 83)
 Photo: Lug: Cannery 9 (p. 84)
 Photo: Lug: Olympics 1 (p. 85)
 Photo: Lug: Olympics 2 (p. 86)
 Photo: Lug: Olympics 3 (p. 87)
 Photo: Lug: Olympics 4 (p. 88)
 Photo: Lug: Olympics 5 (p. 89)
 Photo: Lug: Olympics 6 (p. 90)
 Photo: Lug: Olympics 7 (p. 91)
 Photo: Lug: Olympics 8 (p. 92)
 Photo: Burnaby central project 1 (p. 109)
 Photo: Burnaby central project 2 (p. 109)
 Photo: Burnaby central project 3 (p. 110)
 Photo: Friends of Simon 1 (p. 116)
 Figure: Arrivals/departure (p. 140)
 Photo: Embodied theories at play 7 (p. 164)
 Photo: Embodied theories at play 8 (p. 165)
 Photo Montage: Embodied theories at play: montage 1 (p. 166)
 Photo Montage: Embodied theories at play: montage 2 (p. 167)
 NOTHING WAS THERE: The sea of stories project (p. 170)
 Photo: Rickett's dance co. 1 (p. 175)
 Image: Burnaby central project 4 (p. 179)
 Image: Burnaby central project 5 (p. 180)
 Image: Burnaby central project 6 (p. 181)
 Image: a/r/tography class 4 (p. 182)
 Image: a/r/tography class 5 (p. 182)
 Image: a/r/tography class 6 (p. 183)

Image: Elliot Lewis gallery project (p. 192)
 Figure: Event of the object (p. 208)
 Photo: Lug: Cannery 1 (p. 76)
 Photo: Lug: Cannery 2 (p. 77)
 Photo: Lug: Cannery 3 (p. 78)
 Photo: Lug: Cannery 4 (p. 79)
 Photo: Lug: Cannery 5 (p. 80)
 Photo: Lug: Cannery 6 (p. 81)
 Photo: Lug: Cannery 7 (p. 81)
 Figure: Mobius' strip (p. 140)
 Figure: Double helix (p. 143)
 Photo: New vic project (p. 154)
 Photo: Embodied theories at play 3 (p. 161)
 Photo: Embodied theories at play 4 (p. 162)
 Photo: Embodied theories at play 5 (p. 162)
 Photo: Embodied theories at play 6 (p. 163)
 Image: Muybridge, man walking (p. 215)
 Image: Longo, men in the cities (p. 218)
 Image: Ricketts' dance co. 2 (p. 221)
 Photo: Ricketts' dancer (p. 222)
 Photo: Embodied theories at play 9 (p. 233)
 Photo: Lug London 1 (p. 245)
 Photo: Lug Yaletown 5 (p. 250)

5.3 Kathryn Ricketts Interview

Experiencing

(What are the lives of the participant?)

Teacher
Dancer
Mother
Sons
Friend
Community
Photographers
Universities

Available Designs

(What are the resources used in their work?)

All of her work written in course work could be included

Conceptualizing

(What is the subject matter of the research?)

Poetic narrative
Embodiment
Literacy
Cultural identity
Interdisciplinary

Designing

(How has the participant designed their work?)

She had to decide which Lug performances to choose

Kathryn is a professional dancer who ran a post-secondary dance conservatory. She was a learning and educational consultant. Her sons came to her dance workshops, helped clean things up, and were a part of her Ph.D. process. She says their grades went up tremendously during her dissertation writing because she modeled working at the table at night. She had a friend who was dying of AIDS and who was a strong collaborator with her in dance. When he could not move, he gave Kathryn images and metaphors for her to dance as a fully trained and healthy body. She also knew many community partners in museums, libraries, art galleries, and immigration centres. Every time she performed, she would connect with photographers who captured her work to share it with her. She has used 15-20 photographers in her dissertation. The universities also provided equipment, studios, and numerous resources.

By the time Kathryn finished her course work, all of her projects and papers were geared towards her research. She had a library of different projects of writing. She knew her trajectory with her Lug character and that she was trying to explore and define dance as a scholarly form, which is relatively new.

Kathryn moves away from text-centered processes to creative writing with movement about stories of value. She uses a triangulation of body, story, and object in her work.

Kathryn had to figure out how to organize all of her work, as she felt she had a collection of multimodal artefacts she did in a year and a half.

Analyzing

(Who helped rationalize the dissertation research?)

Supervisor: Celeste Snowber
Committee: Vicki Kelly, Lynn Fels, Carl Leggo, Heesoon Bai, Stephen Smith, Karen Meyers

Kathryn described her supervisor and committee members as “completely on board around the ways I was pushing the envelope of scholarship.”

Applying

(What different modes did they use?)

90 examples of written and visual modes in a 251-page dissertation

Redesigned

(What is the final product?)

Poems, reflections, photos

See 5.3.1 Annie’s Multimodal Story of Kathryn Ricketts

5.3.1 Annie's Multimodal Story of Kathryn Ricketts

I think a little bit about the affordances of that multimodal aspect of my work is that it affords the reader to move into their own meaning-making opposed to a prescribed meaning. – Kathryn Ricketts

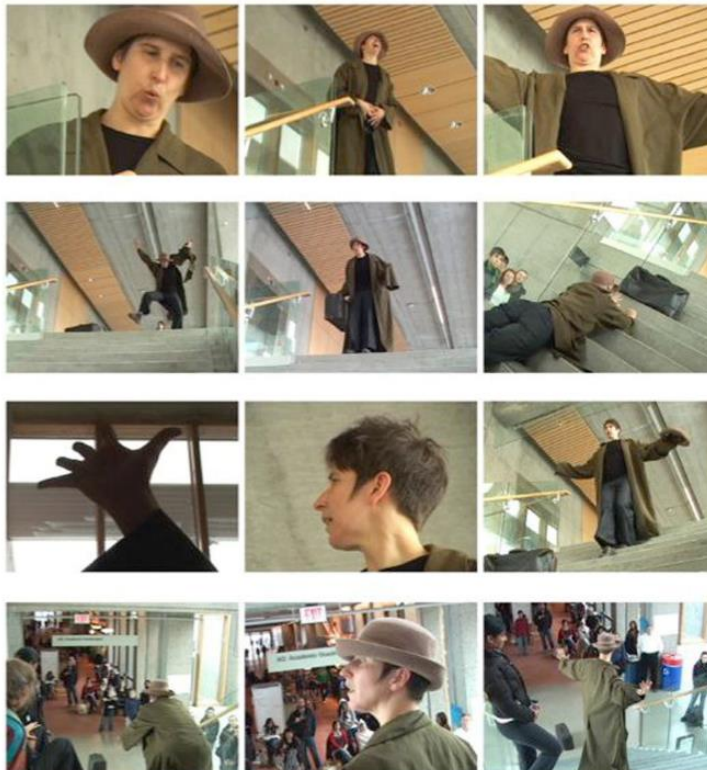
When I started to perform, it was my first graduate class and I was doing my final presentation. Often what I'll do is collect sources for me to improvise from the audience. I ask them to write a letter to or from a loved one and then I choose one that was very potent and put it in my suitcase. I don't read it out loud. I read it silently and let it fill me with the emotions that the letter carried. When I finish my improvisation, everybody thought that I had read their letter.

That was a really important piece for me to understand that I could be kind of a conduit for other people's stories (Figure 37). So that started to blur the boundaries of performance in what I improvise and perform based on material that audiences would give me. At the end of what would be perceived as the performance, we would do a conversation afterwards around what was triggered and often when people talked about that, it triggered more and more and more. The performance became more of the catalyst for the dialogue that ensued. That became the most important thing for me because I realized that was a community building piece that would strengthen and empower various silenced members and disenfranchised members of our community. So that's when I started to think about doing it in areas like youth at risk or elders, newcomers or mixed abilities. People who might have silenced stories through their lives and in the telling of those stories, they would start to feel a sense of belonging and a

DISSERTATION LINK: <http://summit.sfu.ca/item/11561>

Experience the dissertation through the screenshots below:

Figure 49. Embodied Theories at Play: Montage 2



Note. Hof, 2010, unpublished, used with permission.

Figure 37. One example of Kathryn's performances included in her dissertation (Ricketts, 2011, p. 167). This is Kathryn's Lug character.

Figure 32. Lug: Olympics 7



Anonymous said...
 Although I have seen a few versions of Lug before, I found that the location of this particular performance enhanced and shaped further my enjoyment of it. The industrial container, the concrete courtyard, the massive, imposing architecture, made the performer--the immigrant, appear even more vulnerable and heroic as she tried to pull the weight of her memories and travels along with her. Also, within the physical and conceptual context of hundreds of people from all over the world, gathering, shouting, singing in the courtyard, her suitcase full of countries, spilling out into that courtyard added a poetic dimension that added to the magic of the Olympics. Thank you for this.
 March 7, 2010 9:37 AM

Anonymous said...
 In this dance performance, I enjoyed the fact that we got to follow the dancer and the saxophonist through the shipping container. The performance made me think of the Vancouver 2010 Olympic experience where it did not matter where in the world you were from—ie. what flag you represented—you were welcome and able to join in the wonderful energy at the venues and on the streets. That which divides us as nations, represented in the multitude of country flags that tumbled out of the suitcase, was countered by the image of the globe which serves to unite us as one global entity. The sense of harmony, respect, and togetherness that I witnessed at the 2010 Olympics, are things I hadn't expected to experience. I think it is so unique to experience such a massive international event where you live.
 March 3, 2010 11:27 AM

91

Figure 38. Kathryn's Lug Character (Ricketts, 2011, p. 91). Her "Lug" character includes a suitcase, hat, and trench coat.

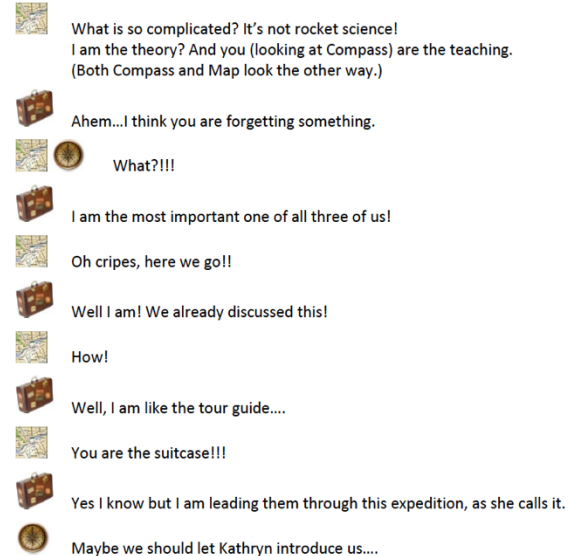
stronger sense of humanity. So that really affected the modalities I guess—the forms in which I was researching.

The Gestural and Tactile Modes

My performance venues were not a black box theatre, where lights would come up on stage, then go down and people would go home. Not a lot of magic, not a divisive line between the performer and the spectator, super, super participatory, and creative situations where audiences would submit writing as they were coming into the performance space. I would be able to access that writing and then also allowing that to work with other artists, so it really invited a huge component of collaboration between visual artists, musicians, digital artists who also felt comfortable working with spontaneously sourced material.

I started to map out what were the components of my research that I was doing these performances called Lugs. I knew what my trajectory was with this Lug character (Figure 38). I have one overcoat, more or less that I always wear. More or less, I have one hat, although there are a few more. They are the same kind of felt Beckett kind of looking chaplain-esque kind of hat. But the suitcases I collected many, many different ones. And partly because I am a collector, a hopeless collector. But partly because sometimes the improvisations would call for a small one or a large one or a really old one or several.

When I did kind of a mapping of my dissertation work, I realized that there was a kind of performative playfulness that went through all of my research and I also knew that it was



The Voices

This thesis is presented through three major voices.
These voices are the suitcase, the map, and the compass.

5

Figure 39. The suitcase, map, and compass in conversation (Ricketts, 2011, p. 5). These are symbolic characters that speak to one another.

highly qualitative. I needed to create some self-criticality in that, so that it wasn't just a journal entry. And what I did was create those three characters that kind of problematize my point of view all the way through—the map, the compass, and the suitcase (Figure 39).

I knew what I was trying to explore and define with my Lug character. All my projects and papers were towards that. By the time I finished all my course work, I had a library of a lot of different projects and writing and I had to kind of figure out how to coalesce it because I really felt that most of my thesis was in this kind of consortium of all this work that I had done in the year and a half.

The Visual vs. Oral Modes

I don't really like to record improvisations because it is so ethereal, it is so fleeting. So, what's more important to me is the conversations afterwards from the people and then the Lug Logs after that. So, there's these kinds of iterations that happen and so in the end my dissertation became almost auto ethnographic in that I was reconfiguring all of my reflective observations on the impact of Lug on these target groups. Like for example, in the Olympics (Figure 40), I knew people were just moving through. I was in a container—a shipping container, so there wasn't room for a lot of people in there. I knew it wasn't the kind of environment where I could sit people down and talk to them. I mean they were on their way to see the Olympic torch, so I had postcards made and they just said, 'What did you see here tonight? And the blog website?' And they would—a lot of people would submit entries to the blog about what they saw and what it reminded them of and that made its way into my dissertation.

hoping I could move the trail of suitcases—A wedding trail of lost histories—a steam engine working against all odds—the impossible arrival. The image of a single traveler trying to pull this pile of steaming suitcases scattered metaphors of departure/arrival throughout the crowd—the crowd of hybrid identities, multiple countries living in one soul. Who to cheer for and why? “I am Dutch but live here so I cheer for Canada and Holland, my wife cheers for India.” The Olympics, with the burning cauldron in the background of the performance site—stirs the pot—provokes us to question identities and loyalties within the fluid borders of our current world. I break free of the coat and shed the haunting weight of the suitcases and am propelled forward with one, it is closed but peeking out from a corner is a small piece of red fabric and offering it to an audience member he pulls as I allow the suitcase to explode open—a bundle of flags tumble out—and I quickly rifle through them in search of what? My own flag? I am desperate when what rolls quietly out from the colourful mess onto the pavement but a small globe—I dive down to the ground hovering over the precarious object and in an instant I return to standing and face the crowd with the globe clutched between my teeth. My global language—a plea for understanding. The crowd follows me into the shipping contain where I release the globe like a whisper gently placing it on the ground I cover it protectively with my hands then gently, tentatively back away from the audience who are crowded into one end of the container. Leaning over each other to catch the moment. The moment is a tiny globe laying on the floor of a shipping container and a character in an overcoat and hat backing away slowly and quietly whispering “take care...”

The second performance immediately after the first was entirely different Although it was in the same site with the same beginning—the handling of the objects and resulting metaphors were completely different.

Figure 27. Lug: Olympics 2



Tug of war with a Canadian Flag
Flags in my mouth
The silent scream
And an odd communion
These are all fleeting memories of the night, the crowd and each impulse somehow merging from

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Figure 40. A photo of Kathryn performing at the Olympics (Ricketts, 2011, p. 86). This was a special performance for her.

When I did the Olympics in 2010, I had a coat made that resembled the coat that I usually wear but it was like a wedding dress, so it was a long train. And I had all my suitcases on the trail of that coat and that piece was called a suitcase full of countries.

And all the suitcases had flags from all over the world in them (Figure 40). So often the suitcases will contain an artefact that is a trigger, another kind of metaphor for storying. And in that case, I decided to use all of my suitcases, but I would say the suitcase and the artefact are variables in terms of my costumes and then sometimes I have visuals behind slides of images and words. And often I work with other artists, live musicians and digital artists, and spoken word artists.

The other story I tell often is the way I came into running a dance company in Copenhagen is that I was looking after a man who was dying of AIDS, who was a really strong collaborator with me in dance and even though he couldn't move in the studio, he would give me images and metaphors and I would interpret them as a fully trained and healthy body and then the dancers would then reinterpret what I was giving them. So, there was this kind of beautiful train of interpretations and that it was then that I started to think about how important that is to extract what matters and then re-disseminate it and I think a little bit about the affordances of that multimodal aspect of my work is that it affords the reader to move into their own meaning-making opposed to a prescribed meaning. At one point, my character went to Speaker's Corner in Hyde Park, London, England because I wanted to see if I could be as powerful as political speakers on their soap boxes, without saying a word. And so, it was pretty scary to do because I was by myself and all the other speakers didn't really want me to have a space because they wanted people to be listening to them.

I can never rehearse what I am going to perform but I can undo a lot of my biases and predispositions before I perform. So that I can be the best receptor I can in the room, to be able to read the room, the environment and all the partners that help me make choices in my performance. And then when I start to perform, the very first thing that I do, sets a whole ecosystem into play because it becomes part of a new history and then the next thing I do is in relation to that first thing. So, as I continue to make my movement, I'm building a history of movements that I will pay attention to and keep working within that performance.

I did several different improvisations and I could hear this clicking all the time. Then I realized that there was someone who was taking a lot of photos of me, so I went over, as you do as a grad student, you're always squirrelling away things. I went over and asked him if he wouldn't mind sending me some of those photos. And he did and

they're in my thesis and they are the most beautiful photos that I could've wished for. So, I found out he was a street photographer so he was used to snapping quickly and so I actually went back to England and am working with him again a second time. I probably have a collection of maybe 15-20 photographers in the thesis itself. Different people who capture.

I think any good writer goes to the device of show, don't tell. And I definitely feel that a spoken word poem or image can actually evoke a multitude of interpretations of the reader as opposed to one singular interpretation. A huge part of embodied poetic narrative, which is sort of the method that came out of my doctoral work, is about extracting what is the essence of something and poeticizing it in order for other people to reinterpret it.

DR. ANAR RAJABALI



*Title: (Re)turning to the poetic I/eye:
Towards a literacy of light*

UNIVERSITY: University of British
Columbia
FACULTY: Education
YEAR DEGREE CONFERRED: 2017

POEMS, SPOKEN WORD, MUSIC,
PHOTO

Rajabali (2017):

ABSTRACT: Rumi once wrote: “When I stop speaking, this poem will close and open its silent wings” (as cited in Barks, 1999, p. 66). This arts-based dissertation is a personal, poetic, and pedagogical study into the kinship between poetic discourse and spiritual expression where I attend to the question: what does it mean to dwell poetically? (Heidegger, 1971; Hölderin, 1984). I contextualize poetry as “the articulation of contemplative perception” (Laude, 2004, p. 11), “a phenomenology of the soul” (Bachelard, 1964, p. xxi), wherein poetic knowledge is a *theoria* (Lakhani, 2010). I refer to *theoria* as a way of intellectual seeing that recognizes the sacred in the mundane, which becomes central to my own poetic vision. In enacting this (re)search where writing is the inquiry (Richardson, 2000), I use phenomenologically informed perspectives of *a/r/tography* in qualitative research that “seeks to show and evoke the presence of a lived experience” (Todres, 2007, p. xi), where theorizing through the inquiry process brings forth understandings (Irwin & Springgay, 2008). In this meta work of researching poetry through poetry, I consider each poetic turn a mediation and meditation in “living a life of deep meaning through perceptual practices that reveal what was once hidden” (Irwin, as cited in Pinar, 2004, p. 10). In a research endeavour that is revelatory, this research site becomes insight. I draw upon Deleuze and Guattari’s (1987) metaphor of the rhizome, the underground root system of plants and theoretical underpinning of *a/r/tography*, which I reconceptualise in the sky to represent my dissertation as writing into a poetics of light. In visualizing what I imagine as a “sky of inquiry,” I make a call for research that has a “wider epistemological embrace” (Todres, 2007, p. 180) in the poetic gaze changing how, what and whom we see (Leggo, 2004a; Cheetham, 2012). Through lyrical ways, each layer of my inquiry sheds light towards understanding poetry as a contemplative pedagogy. In (re)turning to the poetic I/eye, this research represents a pledge to pedagogical encounters that nurture spiritual literacy where purposeful engagement in creative practices can become a gateway to the realms of spirituality.

Linguistic Mode

Poem: prologue (p. 1)
 Poem: point of light: fire in my eyes (p. 49)
 Poem: Revelation (p. 57)
 Poem: I write poetry (p. 64)
 Poem: I am a flicker from your flame (p. 66)
 Poem: dawn of desire (p. 74)
 Poem: bringing home Yasmine (p. 82)
 Poem: Rahima (p. 84)
 Poem: Three (p. 87)
 Poem: promise (p. 102)
 Poem: Rath Trevor beach (p. 119)
 Poem: the god in me (p. 126)
 Poem: 4:15am (p. 133)
 Poem: Aunt Yasmine (p. 140)
 Poem: cart pusher (p. 145)
 Poem: fear (p. 162)
 Poem: on teaching a poem (p. 170)
 Poem: the poems make me feel (p. 183)
 Poem: dear sheltered self (p. 191)

Audio Mode

Spoken word: rhizome in the sky (p. 36)
 Spoken word: sandals in the snow (p. 69)
 Spoken word: Ali (pp. 148, 150)
 Spoken word: Karim (p. 157)
 Spoken word: mother tongue (p. 159)
 Song: sama (p. 60)
 Song: waiting (p. 80)
 Song: evoking you (p. 94)
 Song: Epiphany (p. 130)

Visual Mode

Photo: luminous sky (p. 203)

Spatial Mode

Poem (pp. 3, 6, 29, 31, 36, 52, 113)

5.4 Anar Rajabali Interview

Experiencing

(What are the lives of the participant?)

Teacher
Poet
Singer
Sister
Parents
Students

Anar has been teaching in some form (community, religious, tutoring) since she was 19. She runs a centre for ESL (English as a Second Language) students. She has been writing poetry since she was young and was in a studio years ago recording music. Her sister also helped record the songs in her dissertation. Her parents taught her poetry, and they were artistic. Her mother would listen to Roberta Flack, disco, and pop musicians, which Anar has included in her dissertation. Her students write metaphors and similes and critically analyze poetry in her classes.

Available designs

(What are the resources used in their work?)

She included songs that were recorded years ago

Her faith as an Ismaili Muslim was important in her poetry and art. When she writes poetry, she wants it to sing and to be able to communicate to others.

Conceptualizing

(What is the subject matter of the research?)

Poetic knowledge
Contemplative pedagogy

Anar researches poetry through poetry.

Designing

(How has the participant designed their work?)

She had to see which poems needed to be lifted off the page

It was important to Anar that her work was “emotive, evocative, and provocative,” but it also had to be strong and scholarly. She chose poems that gave her the most learning.

Analyzing

(Who helped rationalize the dissertation research?)

Supervisor: Carl Leggo
Committee: Rita Irwin, George Belliveau

Her supervisor would always make sure she was on the right track because he wanted to ensure the dissertation was strong on many levels. Her committee also had plenty of faith in Anar.

Applying

(What different modes did they use?)

30 examples of visual and audio modes in a 207-page dissertation

Redesigned

(What is the final product?)

Poems, spoken word, songs

See 5.4.1 Annie's Multimodal Story of Anar Rajabali

DISSERTATION LINK: <https://open.library.ubc.ca>

Experience the dissertation through the screenshots below:

Epiphany⁵⁰ (Rajabali, Rajabali, and Cruz, 2004)

Day embraces the dark of night
As my soul wakes to the light
Love, itself, fills the room
And I am lost in you

Your beauty consumes all of me
Every breath flows rhythmically
Time stands still eternally
And I am feeling you

*Life, sweet life
Joy through the pain
Sun in every rain
Life, oh sweet life
Love is the key
To all its mystery*

⁵⁰ Please see supplementary audio track for song "Epiphany."

*Black is white
Death is life
When I'm with you
The wrongs are right
You illuminate, rejuvenate, reciprocate
You are my fate*

When I fell you gave me wings
To fly above this pain within
I am the kite you are my wind
And I am loving you

A shooting star captured in my heart
This flicker is now a flame
As every time I connect with you
I get to a higher plane...



Figure 41. Lyrics to Epiphany (Rajabali, 2017, pp. 130-131) and supplementary audio track for Epiphany at <http://www.yasminemusic.com/music.html>. Her poems were in her dissertation, and the music was on YouTube.

5.4.1 Annie's Multimodal Story of Anar Rajabali

Years ago, I had someone say to me, 'Your voice is your gift.' – Anar Rajabali

For me this is a life journey and it had to be represented in various ways. But also, I wanted it to be reaching out more. I felt that sometimes the page, it wasn't enough. And the music was such a big part of it at the end that I didn't even know that would have been possible. When I learnt that it was possible, I said, 'Oh well, what songs are necessary? What songs continue to add to my thesis?' So, it wasn't as if I put stuff in there. I had to say, 'Is it important? So, what?' and 'Is the thesis going to stand on its own? Like if I don't have any of that in there, and people don't want to go on the links, will it stand on its own?'

As a younger person, I've always written songs. For me, that's where I really started out. I started with poetry as a young person, like 10/11 years old. I was writing poems. Then I went from poems to writing out songs. Like writing out songs that had melodies and ideas that I would have that were more song format.

When I got into UBC, I started getting into poetry again. So, all of this poetry, I mean 99% was all new that I had written during the course of my Ph.D. Then I would pull back, but this song could kind of go there or this song lyric could go there, so it all kind of came together. For me, it's really the poetry that is the integrity of the work and the song is another way of being in this journey (Figure 41). The music has always been part of who I was.

Evoking You ⁴⁰ (Rajabali, Rajabali, & Cruz, 2012)

My ancestors are here
I feel their spirits near
Echoes of a distant land
Ground me to the grains of sand

The tide doesn't come home
But I know its journey is my own
Your love is going to bring it here
There is nothing left to fear

*Everything I see evokes You
A rose in my heart eternally bloom
The sky surrounds a brilliant hue
Resonates your name, evoking you*

My soul's uplifted, a sound sublime
Signalling the coming of the tide

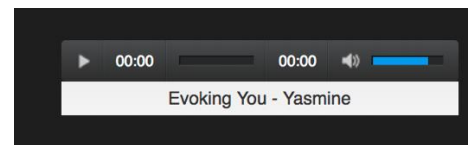
³⁹ Yasmine, Joe and I returned to studio in 2012 after a long hiatus to write and record "Evoking You."

⁴⁰ Please see supplementary audio file for song "Evoking You."

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Hope, renewal, gratitude
In the very 'nature' of You
And I
Will never feel alone
Safe in God's abode
A sureness of my soul
And You
Giver of life
Keeper of the night
This light upon light upon light...

*Everything I see evokes You
A rose in my heart eternally bloom
The sky surrounds a brilliant hue
Resonates your name, evoking you*



Linguistic and Spatial Modes

I'm a late bloomer, it took me awhile for things, to figure out where I really wanted to go. But I knew this type of dissertation would be reaching. It would allow me to reach.

I'm here studying poetry, spirituality, my own process. And I wasn't expecting to record any of these poems. I don't even know how good they are. But I knew that they were something that I just felt that I needed to put a voice on it. And there were times when the feeling was there. And I thought, 'Ok, I'm going to do that.' And of course, I had to make decisions of which ones do I want in there, which ones do I not? But when I met with my committee, they said it was really effective. I didn't even think they would end up in the final and then looking at it holistically, I think it was able to be more reaching. It gave another experience. I was able to lift the words off the page at places where I wanted to (Figure 42). This was about what it means to dwell poetically, with the mystical, and spiritual and so I think the voice had to be there. Although I hope it stands alone too.

I built it very carefully, in the sense that I had read widely. I read about lyrical inquiry. I read about poetic inquiry. I looked at arts-based dissertations. So, I was looking at what people had done before me. It had to have integrity. I couldn't just go in and do. I mean this is an academic piece. I hope it speaks to education, I hope it speaks to contemplative pedagogy. I hope it speaks to teacher inquiry. So yes, I was thinking about all of these things when I was pulling it together and every time that I

Figure 42. Evoking You Poem and supplementary audio file at <http://www.yasminemusic.com/music.html> (Rajabali, 2017, pp. 94-95). Her poems were in her dissertation, but music was found on her website.

Ali ⁵⁴

*Gardens are a place
where the ephemeral meets
the eternal
where the eternal
meets the hand of man⁵⁵—
the hands of my father
down deep in the ripe rich soil
dwelling in the garden
for 40 years of
weeding
watering
pruning
rootfeeding
tending to*

⁵⁴ Please see supplementary audio file for spoken word track "Ali."

⁵⁵ Excerpt of a speech made by the Aga Khan at the inauguration of the Aga Khan Park in Toronto on May 25th, 2015. Retrieved from <http://ismaili.net/heritage/node/31816>

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the flowers
he brings for me
on special days like
the rhododendron
he planted
when I was ten
to bloom only on my birthday
in May
petals of grace peeking
outside my bedroom window
to the graceless child
a father
who knew the wisdom of plants
cultivating a silent form of love
I could not see then
his heart in the soul of a flower
ruby red in rough hands
how his faith came in these moments
blossoming

built a section, even if it was a tiny section, I wanted to make sure it was grounded. Because I think if we are doing this type of work, I think we have to work pretty hard in terms of really grounding it. Or else, what does it become? Particularly in the academic space. I was always mapping things out and I think with this type of work in particular this academic space, it wasn't like ok, well I had all these poems, I'm going to throw them in there. It was never like that. It was like mapping out my argument. I had a lot of notes. I built this work bit by bit. I would read, would take notes and make notes off that, and if I knew that one particular chapter where I was writing on one aspect of this, I needed voices I wanted to bring in, I had a poem that I might want to bring in and I allowed myself to also play with that. And that's why in the dissertation when I was writing, I kind of went off to the side and thought, 'Well okay, I am just going to keep it that way because that was really raw and that was real.'

What I did in terms of just recording the poetry (Figure 43). I just set up a mic, with a little tiny studio and just with my Mac, not very professional but enough that I could just get on the mic and just read out what I thought I felt that I needed to. I did read several poems and then decide these were the ones that I wanted. It was basically when I had finished writing the work and it was all there, that's when I came in and decided that I wanted to just record a few and see where they would go. And just do it in the comfort of my own home with a mic and headphones and a few little things and just basically I used GarageBand. I'm not a professional when it comes to that, but I just wanted my voice on there. I think with the recording the quality was okay. I think that being able to get on the mic and even for myself, it just heightened my own experiences and understandings of my work. Just to be able to find another way of expressing it. If

Figure 43. Ali poem with supplementary spoken word track (Rajabali, 2017, pp. 150-151). Anar had to put her audio files in footnotes.

(Re)turning to the poetic I/eye : towards a literacy of light : [supplementary material]

Rajabali, Anar

2017



The screenshot shows a digital repository interface. At the top, there is a 'Show Media' button and a dropdown menu listing several audio files (mp3 format) with names like 'ubc_2017_may_rajabali_anar_ali.mp3'. Below this is a 'Item Metadata' section with a table of information.

Title	(Re)turning to the poetic I/eye : towards a literacy of light : [supplementary material]
Creator	Rajabali, Anar
Date Issued	2017
Description	The attached files are supplements to the author's doctoral dissertation at http://hdl.handle.net/2429/61048
Type	Sound
Language	eng
Date Available	2017-04-06
Provider	Vancouver : University of British Columbia Library
Rights	Attribution-NonCommercial-NoDerivatives 4.0 International
DOI	10.14288/1.0343488
URI	http://hdl.handle.net/2429/61130
Degree	Doctor of Philosophy - PhD

Figure 44. Supplementary spoken word file for Ali available at: <https://open.library.ubc.ca/cIRcle/collections/ubctheses/33426/items/1.0343488>. This was how her audio work was represented in an online repository.

you're able to draw something out, if you're able to speak something out, it just becomes so much stronger for you.

Oral and Audio Modes

I'm confident on the page. I'm confident with writing. That's what I do. But when I go on the mic, there was a whole different something else that came in. But I just knew that I had to do it, even if it isn't the highest quality that I would've liked them to be, I thought it was so necessary.

The songs were there already (Figure 44). I had been in the studio and I had a vision years ago, and I had lyrics at a particular time in my life. I wanted to do this album and my sister was in music at the time, I mean she was doing other things, she's a very successful career woman but music was her passion and we thought we'd go in and we'd do it. So, we kind of fell into a project.

It's interesting, because all of the songs came up years later and my sister said, 'I totally get what you're trying to do now and I'm so glad for you there was a final.' Because for me, it wasn't about commercial success, although the songs got out there in different ways, but it was all about a contribution in a way of seeing the world and some of those songs are devotional. I mean studio is not easy and we were working with hiring musicians, people in and out. Having people master the work. So even for me and my sister just working here, there are a lot of things and experiences here that happened. And that's why for me, when I was able to bring it into this work, it was just

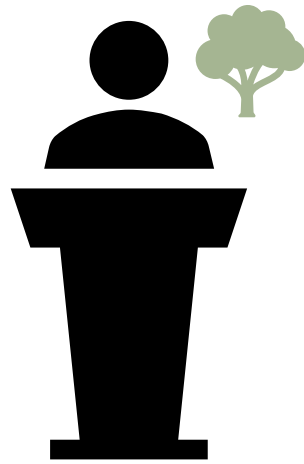
like full circle again. This is why years ago, I wrote those lyrics and here is my Ph.D. and here's my thesis and it's sitting in there. It was just a sense—such a rewarding sense. But also, purpose, I knew there was purpose to the work. And I had never felt that way until it was actually able to come into this work. And time, would I have been able to do those songs now and the Ph.D. and the work? Probably not to the quality that they were.

A lot of those songs, most of those songs came from years ago. But they made their way back into here, as I talk about the *Whirling*, which was something that

profoundly changed my life. And then the whirling, all of a sudden, becomes a way that I'm seeing the world.

The dissertation was really about being vulnerable and allowing myself to be vulnerable. That was really a part of this work. I mean if you're studying poetry and spirituality, and even teaching, these are all vulnerable things. So, I wanted to be able to capture them. The dissertation I was hoping it is a journey, it is an experience. The reader will just come into it with me and I'm hoping they can drop in at any point. It was a journey going forward, and hopefully every little chapter, not even that I call it a chapter, is maybe giving a different type of understanding.

DR. MARY BARRETT



*Title: Beyond human-nature-spirit
boundaries: Research with animate
earth*

UNIVERSITY: University of Regina

FACULTY: Education

YEAR DEGREE CONFERRED: 2009

[HYPERLINKED DISSERTATION](#)

Barrett (2009):

ABSTRACT: This study develops a methodology, methods, and form of representation that supports researching beyond socially constructed human-nature-spirit boundaries – a process which requires moving beyond the limits of Western epistemologies. It is based on an animist ontology, which disrupts anthropocentrism and involves relating to other-than-human beings as communicating subjects. Using a dialogic method(ology) and multimedia hypertextual representation, the research decentres the privileged position of the human intellect in knowledge production, and in doing so, opens up possibilities for knowledge-making processes to be collaborative and inclusive of insights from an animate Earth. It also offers possibilities for research, representation and reading experiences congruent with the epistemological and ontological bases of the thesis.

I use the hypertextual form to research and write through (rather than about) ways of knowing that exist worldwide but have been denied acknowledgement in most academic inquiry. Form and prose work in tandem to both identify and work beyond Western epistemological frames. Together, they develop my primary argument: more space needs to be provided for inclusion, and acknowledgement of, contributions of animate Earth (plants, animals, and spirit) to research/representation. Research questions are: (1) how might a researcher intentionally and respectfully engage with and acknowledge animate Earth and spirit as key sources of knowledge in the process of academic inquiry? (2) in the field of education, what are some of the discourses which have made the twinned acts of research/representation in ongoing dialogue with animate Earth and spirit difficult to engage and acknowledge? And, (3) what kinds of representation might be congruent with the epistemological and ontological premises of animism?

The research draws on poststructuralism, feminism, and anti-racist theory; on literature from anthropology, religious studies, quantum theory, and the practice of energy work; on knowing that comes through music, poetry, prose, photography, and other forms of visual art; on meditative insights obtained through body, heart, mind and spirit; on decolonizing research practices, arts-based inquiry, and discussions of spirit and indigenous epistemologies within the academy. The main argument is epistemological, and is based on the ontological assumption that there is much more to the universe than material reality.

Linguistic Mode

Poem (Beyond grammar)
 21 pages pdf (Executive summary)
 Paper (Taking representation seriously)
 Poem (Writing through)

Visual Mode

Photos (Beyond grammar)
 Custom art piece (Home)
 Use of the earth colours (Brown, Green)
 Photos (Introduction)
 Photos/Slideshow (Reading this dissertation)
 Photos/Painting (Researching with)
 Photos (Study context)
 Photos (Study sites)
 Photos/Painting (Writing through)
 Photos (Abram – planet shivers)
 Photo (Abram – sensuous bodies)
 Photo (Astin – transrational)
 Photos (Bai – re-animated perception)
 Photo (Beringer – resacrilized)
 Photo (Berry communion)
 Photo (Berry on energy)
 Photo (Berry – social construction of nature)

Photo (Iterability)
 Photo (Cixious)
 Photo (Davies – knowledge troubles)
 Photo (Denzinlincoln – future of qualitative research)
 Photo (Dillard – representation)
 Photo hyperlink (Fawcett – animal consciousness)

Audio Mode

Recording (Researching with)
 Recording (Beringer – resacrilized)
 Recording (Berry – communion)
 Music (Reading this dissertation)
 Music (Study context)
 Sound Clip (Abram – sensuous bodies)
 Music (Berry – communion)
 Music (Berry – psychic-spiritual)
 Music (Dillard – representation)

Spatial Mode

Use of charts
 Hyperlinks
 Reader's journey

5.5 M.J. Barrett Interview

Experiencing

(What are the lives of the participant?)

Teacher
Outdoor educator
Community
Programmer
Photographer
Nature

M.J. has taught since 1989 in outdoor education, and primarily in high school. She is now an assistant professor. She is associated with a group of women (Singers of the Sacred Web), and their music is embedded throughout her dissertation. She described the community of women as all learning to listen to the land together. She worked with a programmer to build her hyperlinked website as a dissertation. She also used work from a photographer, Cherie Westmoreland, and placed the various images throughout her hyperlinked website.

Available designs

(What are the resources used in their work?)

Included work that was created within the years

This includes collages and poetry.

Conceptualizing

(What is the subject matter of the research?)

Animism
Ontology
Epistemology
Decolonizing research
Hypertext
Research representation
Research methodology
Arts-based inquiry
Energy healing
Environmental education
Spirit

M.J. began exploring embodied knowing early in her doctoral process. M.J. attended an outdoor education conference when she was a teacher, and she used embodied intuition to select one of the workshops. This led her to a workshop on painting. She describes this experience as, “my intellect would not have chosen that. It’s odd. It’s outside my realm. I had to practice with knowing the body.” She stayed away from the university because this act was a decolonizing process—meaning, if she walked into the faculty building, through its structure and the way people moved in the building, she would encounter colonizing thoughts and processes. She calls this conversation the “‘Hi, how are you, busy?’ conversation, in which there is the assumption that in order to be a proper academic, you need to be insanely busy.” She believes that the common discourse is that art is not research, and instead has turned to the practice of energy healing (defined as mental awareness) to shift the discourse to art as research.

Designing

(How has the participant designed their work?)

She said she needed to use her embodied knowing to help her design the hypertext path.

She hyperlinked her dissertation completely intuitively. She did not want a link that was about a tree to be linked specifically to a tree.

Analyzing

(Who helped rationalize the dissertation research?)

Supervisor: Paul Hart
Committee: Connie Russel, Carol Schick, Shauneen Pete

Her supervisor was someone who helped doctoral students early on in their doctoral process in understanding how epistemology, ontology, methodology, and representation align. She described her supervisor as very trusting: “Paul was someone who attracted students with such creative work but is linear in his own writing. He is good at creating space for students to do creative work.”

Applying

(What different modes did they use?)

404 individual links

Redesigned

(What is the final product?)

Poems, photos, sound clips, musics, recordings

See 5.5.1 Annie’s Multimodal Story of M.J. Barrett

DISSERTATION LINK: www.porosity.ca

Experience the dissertation through the screenshots below:

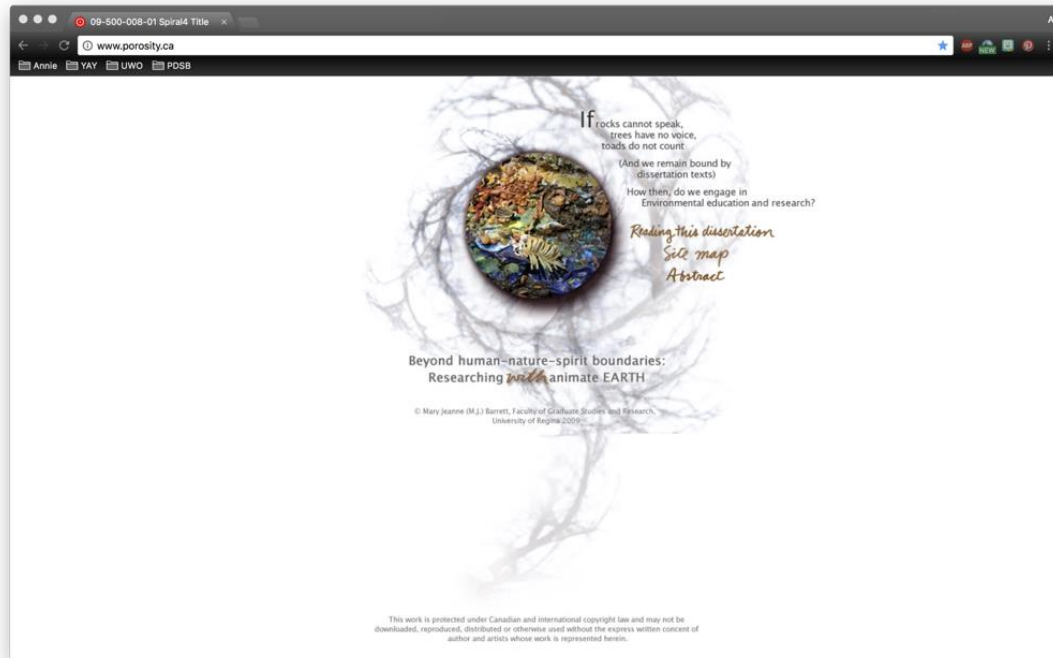


Figure 45. M.J.'s Hyperlinked Website Dissertation (Barrett, 2009). This is her home page.

5.5.1 Annie's Multimodal Story of M.J. Barrett

My dissertation emerged. – M.J. Barrett

There were a few points where I was starting to chunk my dissertation into what I thought were chapters and I had folders on my desktop that said chapter 1 and chapter 2, and all of a sudden, I was getting rather excited about that because finally it was starting to turn into some kind of form. But it also didn't feel quite right.

One day I was out for a run and I just said, 'Okay, help me out with this format.' And what happened was I was in a subdivision and I would run down the main road and I would turn into a side road and go in a little way and turn back. I would carry on and I would turn on another side road for a very short distance and come back and then I would go on another side road and go another long distance and come back. I came home from that run and just said, 'It has to be hypertext.' It has to allow for these multiple avenues of exploration that are connected and not linear (Figure 45).

Gestural Mode

I remember there was one really significant meeting with my supervisor that was about three hours long on a Saturday or a Sunday afternoon. We met at the university and I had a lot of little pieces of paper with bits and I laid them out. This is after I knew it would be hypertext. I put them out on the paper, so he could physically see how these things would cluster together. And I talked him through that whole process, and he was working pretty hard to follow.

I didn't want readers to read through the dissertation with their intellectual linear connection. It's not that the academic intellectual mind is the problem, the problem is it dominates... that often requires deliberately telling the academic mind to be quiet for a while and having practices that support those other ways of knowing. You need to follow your hunches and instincts and where you're drawn to go. So, try to read through your rational linear mind, it drives you nuts. Because it's structured so you can't! (Figure 46)

There was a period of time where I actually couldn't write thoughts and sentences because as soon as I started writing them in sentences, my logical thinking academic mind dominated, and I actually had to write them down the page in truncated poetry thoughts. Some of them ended up going back into sentences later and some of them stayed at poetry pieces. But it was a real decolonizing process that had to happen in order to do this dissertation because whenever I got trapped in my academic mind, I couldn't listen to the land anymore. I stayed away from the university a lot because it was a decolonizing process. I would walk into that building and immediately, even through its structures and the way people moved in the building, encounter colonizing thought and processes. Conversations I sometimes refer to as the 'Hi, how are you, busy?' conversation. There's this assumption in order to be a proper academic, you need to be insanely busy.

There is also an assumption that it's important for everybody to know the same thing. That everyone gets to the same place at the same time in the same way. And that's just

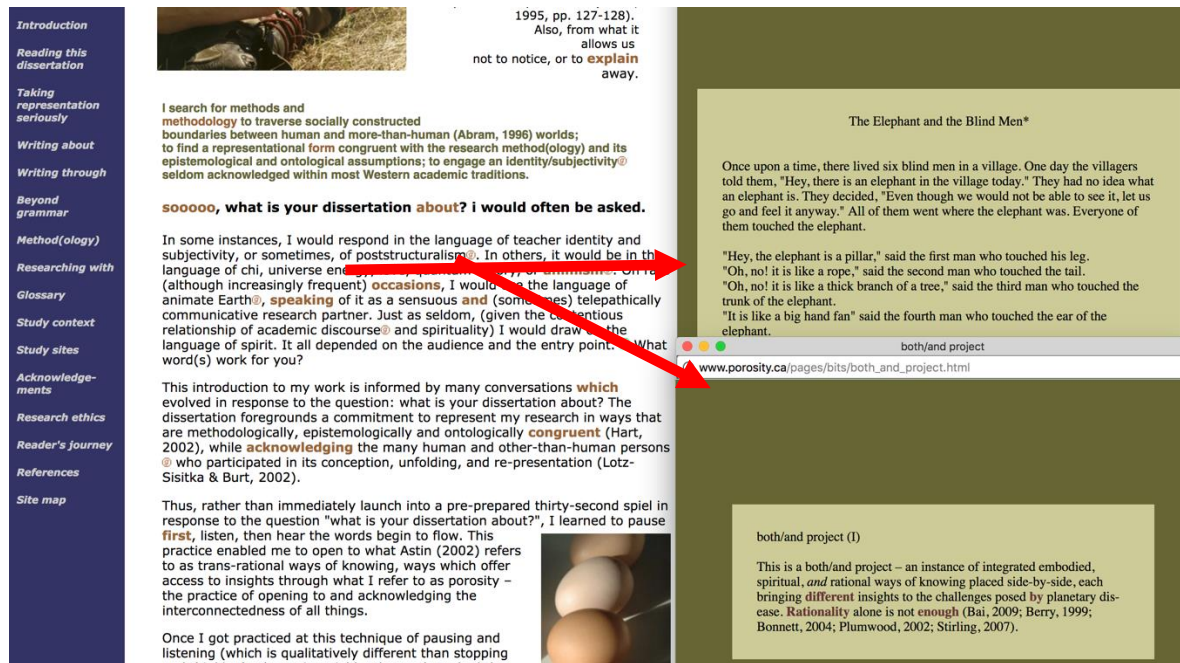
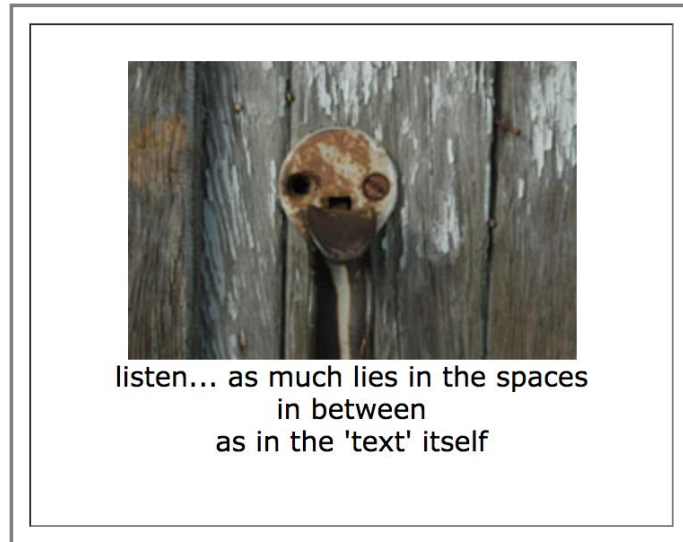


Figure 46. Example of hyperlinks that do not follow rational linear thought (Barrett, 2009). Red arrows are new windows that open when you click on a hyperlink.



My intention for this work is for each 'reader's' movement through the dissertation to be the 'perfect one' for him/her, and the planet at each moment of listening.

Figure 47. The Reader's Journey is a part of M.J.'s Dissertation that maps out where each reader has visited (Barrett, 2009). She believes everyone's reader journey will be different.

not true. Part of that is easy for me to grasp because I come from an educational background. And students will get to whatever end point they need to get, and it's not always the same endpoint that I determine as a teacher. And certainly, the way they enter into it may be completely different. And I started to recognize that with the dissertation writing, and the process that it eventually became dialogic reading. Where I would sit with a paper and pay attention to where I would want to go first. And that might be a paragraph on page three first, and then read a paragraph on page two and then go to page ten and by reading in that order, I get at the essence of a paper like that. So, the author has to make decisions about the order in which he or she has to present the piece. Hypertext allow readers to enter the reading in their own way. Different entry points were really important. Some people were able to walk directly into it and say this is completely comfortable with me. Most people had to come from a direction they were comfortable with (Figure 46 and Figure 47). Hypertext allows you to do that and allows you to read the story to take you where you need to go.

There was never a monograph. Remember when I talked about the nice tidy chapters. Basically, those folders were folders of all kinds of bits and pieces. And remember the story of the embodied walk with the running I was writing lots of bits. And that's what I called them, I call them bits. And depending on what story I wanted to tell, this bit a and c, or bit a and d would fit together. So, they would never solidify into a solid narrative.

When you design a website, which I had no idea about, you are to start with the end in mind. Well this is a creative process and it doesn't work that way. I went to the computer science department and asked, 'Is there anybody there who could help me?'

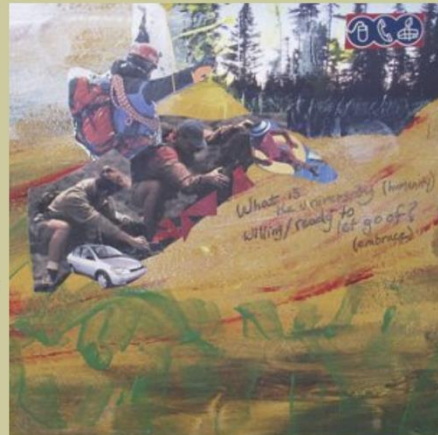
knowing in/through collage



After sitting on my desk for months, I left this first incomplete collage behind to begin the *mountain & crevasse*, and later, *meLand* (see Barrett, 2007, p. 216 onward). As I continued my work on the hypertext, and used energy work to shift limiting discourses encountered along the way, I was

able to pick this particular piece up again.

Following the lead of *my hands* (see Lipsett, 2001), more images were layered on over a period of several days. As has been the case with many parts of this dissertation, my task was then to use my intellect to figure out the metaphor that had emerged through my embodied, pre-discursive perception. Several weeks later, after sitting with the images of the climbers, mixed with various consumer items, the words came:



*what is the
university(humanity)
willing/ready to let go of?*

a few weeks later, I added one more word, in (hopeful) parentheses

(embrace)

Ultimately, insights attained through this embodied "earth connection" were most often 'heard' through the movement of my hands, then combined with my own and other humans' thoughts

I've got this project and I can't do like myself.' So, there was somebody who was very, very, helpful and patient with me. I would say, 'This is what I envision, and can it be done, first of all? And then, how complicated is it?' One of the things I had learned through my own trying to do some of the work, and I did do a lot of it, like once things were set up, a lot of the web page design I did myself. Its structure is where I really needed someone else to help me out. And I would go and say, 'This is a new structural piece, this is what I'd like to do. Can you tell me a) is it possible? And b) how complicated and how much time would it take?' Sometimes things I think would be really complicated but 'no that would take ten minutes' and other things I wanted, would be 'that's two days' worth.' It's very hard to know, from someone who doesn't know, what is easy to do and what's not.

Visual Mode

My first collages, I kept trying to think my way through them. And I know that as long as I kept thinking my way through them I was trying and getting nowhere, that it wasn't the right way to go. I had to let go of that process. There was nothing in the way except internal discourse. So that's when I turned to the practice of energy healing to shift the discourse. And it was almost instantaneous. Half an hour of working at a discourse and letting it go and then I can paint. It became an important part of my own decolonizing process—to attend to where those discourses are so deeply inscribed that no matter what willpower or external kinds of situations can support a different mode of being—the internal discourse is just until that gets released, it's hard to do things differently (Figure 48). So, you see the art work in part of the dissertation and there are

Figure 48. M.J.'s process of working with collage (Barrett, 2009). It was her way to decolonize her research.

some pieces of the process of doing art. Doing art in connection with the more-than-human world allowed me to begin to trust my embodied knowing process. The internal discourse is art is not research. That's the old story—the old discourse and the new discourse that replaced it was art is research. So, once I was able to shift that internalized discourse saying art is not research, then I can paint.

That painting, there were a number of words on it that were some of the old discourses and I kept painting over it and over it with some of the new discourses. So that too was part of that decolonizing process. Eventually, I got to the large collage I called MeLand (Figure 49), which is the merger of self and the land. By the time I got to that one, I was fully immersed in the place, letting my body lead the painting. So, connecting to the land and letting my body lead it. It was made with grass, seeds and acrylic paint and medium, bits of fabric, magazines which is where the tiny, tiny bit of colour—a lot of that is on the methodology page. And tissue paper landed in the clouds.

I hired a consultant to help me design the front page because I knew I needed to have some real artistic flair that I didn't have. I had all kinds of ideas and key messages and I just needed someone to physically create that and could see what could be done and that was actually, the partner of one of my community members who did professional web designs. The image on the front is from a collage—the large collage called MeLand, which is me embedded in land that I used in an artistic process of listening to the land, creating the collage itself. It's about an interesting collage because it was probably my third one. This is a collage I wrote the text and that artwork is a piece of the collage and he helped me make those. I said I want trees in there somehow,

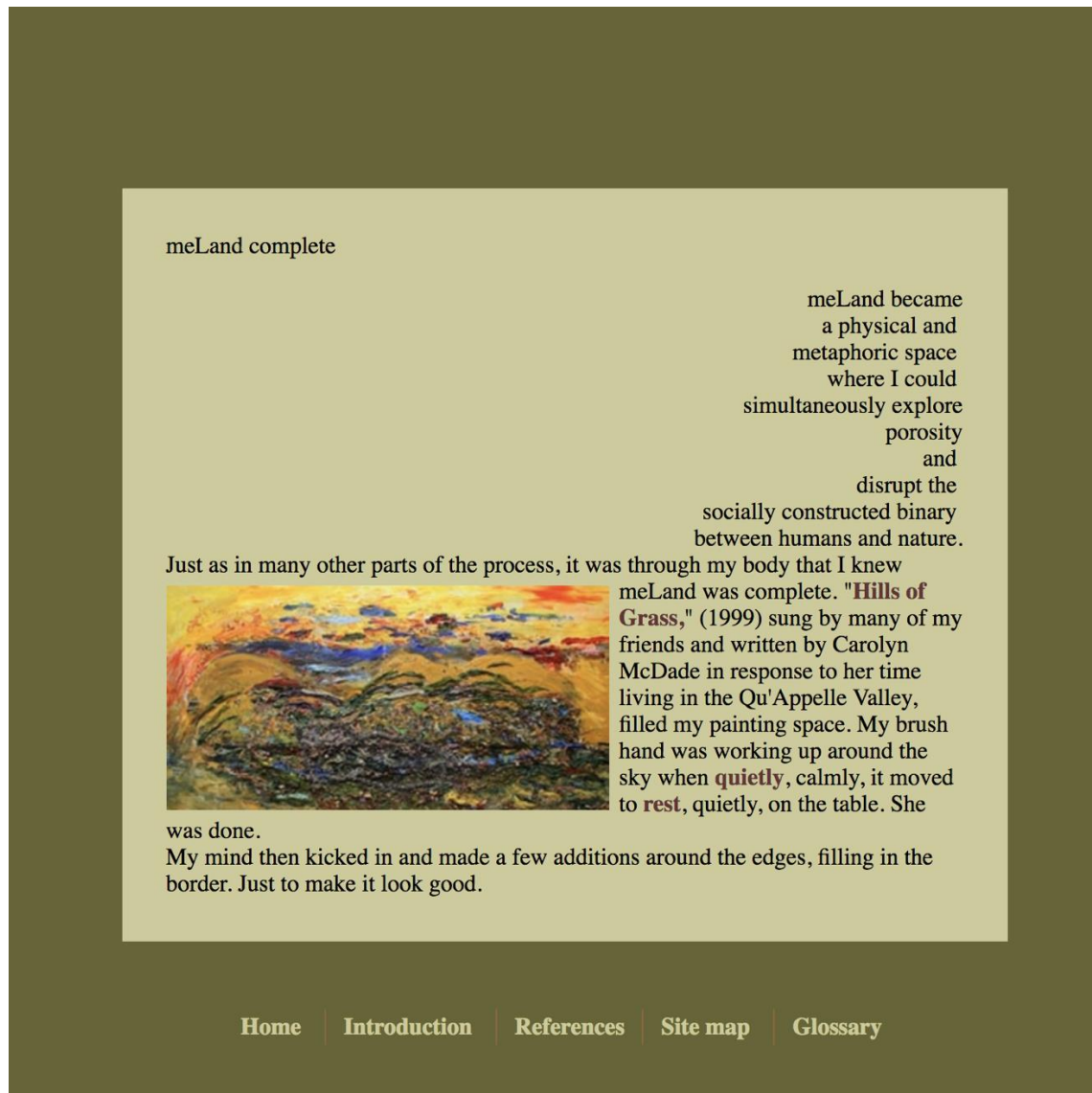


Figure 49. M.J.'s painting entitled MeLand (Barrett, 2009). This was a meaningful piece of work to her.

and he started with them swirling around. He was able to physically electronically do that.

I also collaborated with a landscape photographer, Cherie Westmoreland. And I ended up spending a lot of time with her kind of looking through her images. Some of the music that was embedded in the dissertation at the same time that I was kind of

shifting in my own connection with the land that was supported by spending time with a group of women who were in Regina, called 'Singers of the Sacred Web' and so their music is embedded throughout the dissertation. They were incredibly supportive because we were all learning to listen to the land together. And so, in combination of walks and talks spent on the land and time spent together celebrating in song, that also could deepen the connection and frankly keep me out of my head.

5.6 How to Read Participant Summaries

The following section is an overview of data related to the four participants: Jennifer, Kathryn, Anar, and M.J.. Below are instructions on how to read the following pages.

Multiliteracies Pedagogy	Jennifer Watt	Kathryn Ricketts	Anar Rajabali	MJ Barrett
Experiencing	Teacher Mom, breast cancer survivor Husband, kids, artist, friends, mom, sister, students	Teacher Dancer, mother Sons, friend, community, photographers, universities	Teacher Poet, singer Sister, parents, students	Teacher Outdoor educator Community, programmer, photographer, nurse
Conceptualizing	Life writing, teacher education, vulnerability, disclosure, multiliteracies, compassion, culture, cancer scholarship, LGBTQ, anti- based methodologies	Poetic narrative, embodiment, literacy, cultural identity, interdisciplinary	Poetic narrative, embodiment, literacy, cultural identity, interdisciplinary	Autism, ontology, decolonizing research, hypertext, research representation, research methodology, anti-based empire, energy healing, environmental education, spirit
Analyzing	Supervisor: Dr. Wayne Suebels Committee: Fiona Freeman, Debbie Schatzler, Warren- Curtis, Carl Leggo	Supervisor: Dr. Carl Leggo, Committee: Rita Irwin, George Belliveau	Supervisor: Dr. Paul Hart Committee: Connie Russell, Carol Schick, Shannon Pele	Supervisor: Dr. Collette Sawyer Committee: Vicki Kelly, Lynn Fels, Carl Leggo, Hironori Ito, Stephen Smith, Karen Meyers
Applying	Narrative, poem, journal, e- mail, play, letter, comic, photo, collage, alphabet book, art	Poem, reflection, photo	Poem, spoken word, song	Poem, photo, sound clip, music, recording

Figure 50. Page 119. This is an infographic summary of my work.

The infographic on page 119 (Figure 50) is organized by knowledge processes for each participant. The table is designed as a way for the reader to see similarities and differences in a summary format.

Designs of Meaning	Jennifer Watt	Kathryn Ricketts	Anar Rajabali	MJ Barrett
Available designs	She included past work such as letters, journals, and collages.	All of her work could be included	She included songs that were recorded years ago.	Included photos that were taken years ago.
Designing	She had to see which artifact fit under which category.	She had to decide which Eng performances to choose.	She had to see which poems needed to be lifted off the page.	She needed to use her embedded learning to help her design the hypertext.
(Re)designed	85 examples of written, visual, spatial modes in 304 page dissertation	90 examples of written and visual modes in a 231 page dissertation	10 examples of visual and audio modes in a 207 page dissertation	401 individual links

Figure 51. Page 120. This is infographic summary.

The infographic on page 120 (Figure 51) is organized by the designs of meaning (available designs, designing, and redesigned) for Jennifer, Kathryn, Anar, and M.J.. This table explains how each participant designed meaning in their multimodal dissertation.

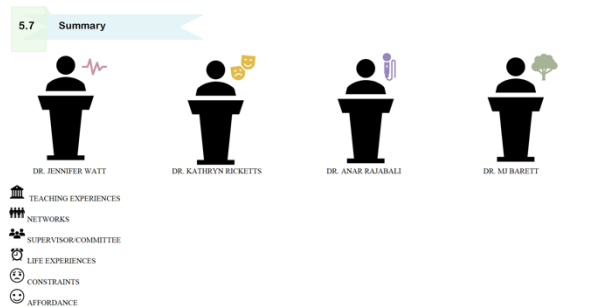


Figure 52. Page 121. This is an infographic summary.

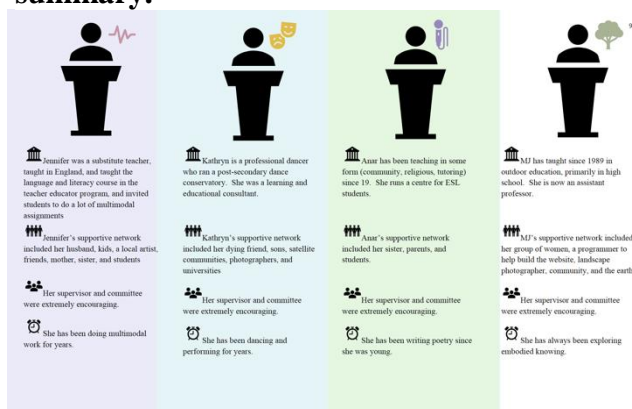


Figure 53. Page 154. This is an infographic summary.

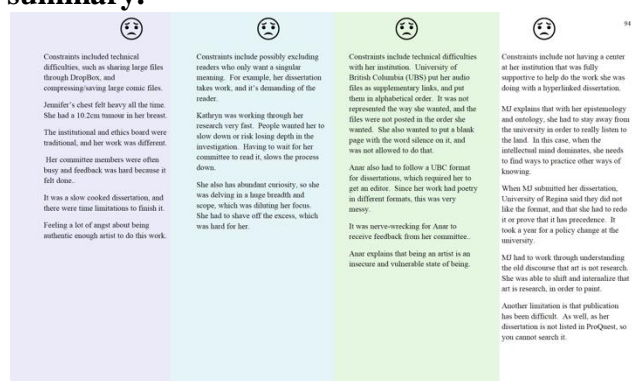
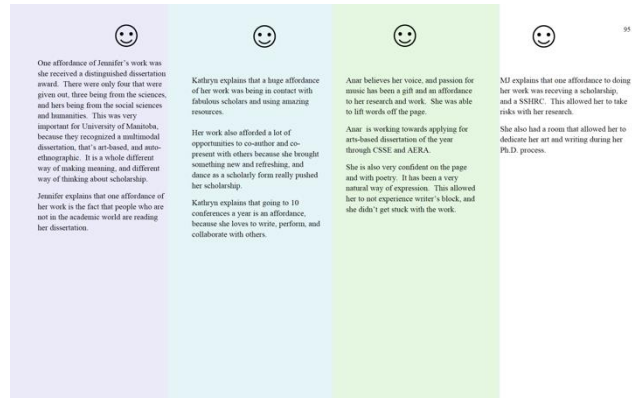


Figure 54. Page 155 & 156. This is an infographic summary.



On page 121 (Figure 52) I represent each participant with an icon relative to their story: Jennifer has a heartbeat to signify her cancer survivor story; Kathryn has theatrical faces to represent her life of dance; Anar has a microphone to signify her spoken word and songs; and M.J. has a tree to signify her embodied knowing. I also include icons to represent key themes I identified amongst the participants: the pillars of institution represent teaching experiences; people holding hands represent networks; the team of three represents their supervisor and committee members; and a clock represents their life experiences. All of this information is on page 154 (Figure 53). A sad face represents their constraints and a happy face (Figure 54) represents the achievements and challenges related to their lived curriculum. All of this information was gathered in interview data and transcribed. However, I summarized the content in this section.

Multiliteracies Pedagogy

Experiencing

Jennifer Watt

Teacher
Mom, breast cancer survivor
Husband, kids, artist, friends,
mom, sister, students

Kathryn Ricketts

Teacher
Dancer, mother
Sons, friend, community,
photographers, universities

Anar Rajabali

Teacher
Poet, singer
Sister, parents, students

M.J. Barrett

Teacher
Outdoor educator
Community, programmer,
photographer, nature

Conceptualizing

Life writing, teacher
education, vulnerability,
discomfort, mindfulness,
compassion, currere, cancer
scholarship, LGBTQ, arts-
based methodologies

Poetic narrative, embodiment,
literacy, cultural identity,
interdisciplinary

Poetic narrative, embodiment,
literacy, cultural identity,
interdisciplinary

Animism, ontology,
epistemology, decolonizing
research, hypertext, research
representation, research
methodology, arts-based
inquiry, energy healing,
environmental education, spirit

Analyzing

Supervisor: Dr. Wayne
Serebrin
Committee: Fiona Freen,
Debbie Schnitzer, Warren-
Cariou, Carl Leggo

Supervisor: Dr. Celeste
Snowber
Committee: Vicki Kelly, Lynn
Fels, Carl Leggo, Heesoon
Bai, Stephen Smith, Karen
Meyers

Supervisor: Dr. Carl Leggo,
Committee: Rita Irwin, George
Belliveau

Supervisor: Dr. Paul Hart
Committee: Connie Russel,
Carol Schick, Shauneen Pete

Applying

Narrative, poem, journal, e-
mail, play, letter, comic,
photo, collage, alphabet book,
art

Poem, reflection, photo

Poem, spoken word, song

Poem, photo, sound clip,
music, recording

Designs of Meaning

Jennifer Watt

Kathryn Ricketts

Anar Rajabali

M.J. Barrett

151

Available designs

She included past work such as letters, journals, and collages.

All of her course work writings could be included.

She included songs that were recorded years ago.

Included photos that were taken years ago.

Designing

She had to see which artefact fit under which category.

She had to decide which Lug performances to use.

She had to see which poems needed to be lifted off the page.

She needed to use her embodied knowing to help her design the hypertext.

Redesigned

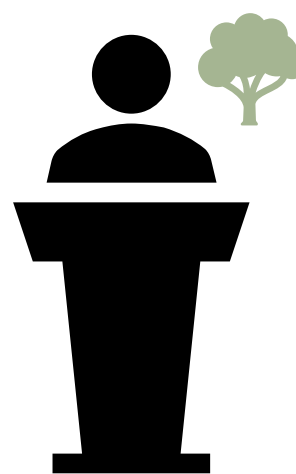
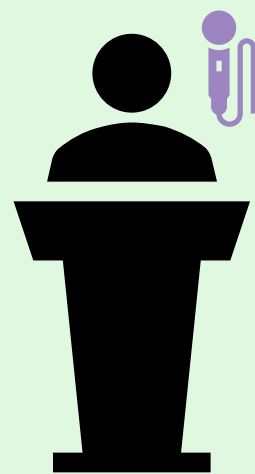
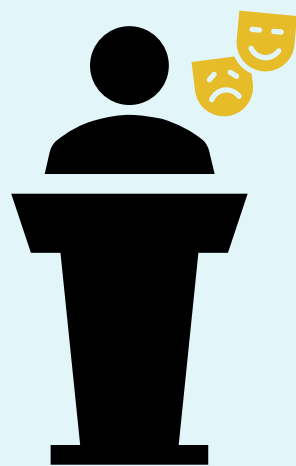
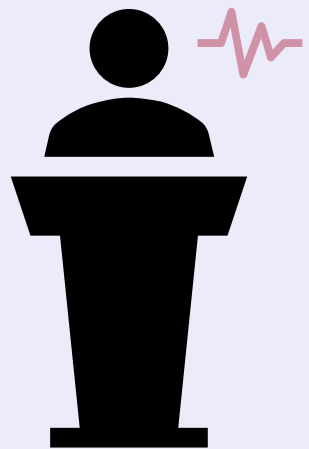
85 examples of written, visual, and spatial modes in 304-page dissertation

90 examples of written and visual modes in a 251-page dissertation

10 examples of visual and audio modes in a 207-page dissertation

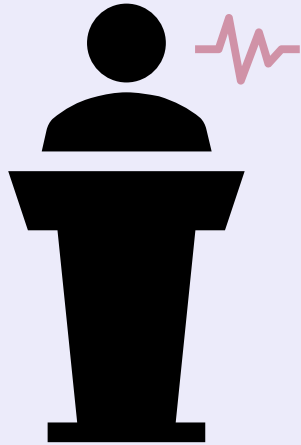
404 individual links


5.7 Summary





-  TEACHING EXPERIENCES
-  NETWORKS
-  SUPERVISOR/COMMITTEE
-  LIFE EXPERIENCES
-  CHALLENGES
-  ACHIVEMENTS


DR. JENNIFER WATT



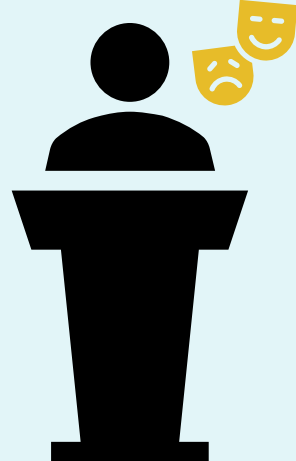
 Jennifer was a substitute teacher, and taught in England. She taught the language and literacy course in a teacher educator program and invited students to do a lot of multimodal assignments.


 Jennifer's supportive network included her husband, kids, a local artist, friends, mother, sister, and students.


 She described her supervisor and committee as encouraging.


 She has been doing multimodal work for years.


DR. KATHRYN RICKETTS



 Kathryn is a professional dancer who ran a post-secondary dance conservatory. She was a learning and educational consultant.


 Kathryn's supportive network included her dying friend, sons, satellite communities, photographers, and universities.


 She viewed her supervisor and committee as encouraging.


 She has been dancing and performing for years.


DR. ANAR RAJABALI



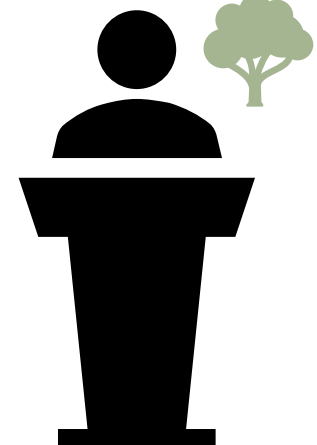
 Anar has been teaching in some form (community, religious, tutoring) since she was 19. She runs a centre for ESL students.


 Anar's supportive network included her sister, parents, and students.


 She said her supervisor and committee were encouraging.


 She has been writing poetry since she was young.


DR. M.J. BARETT



 M.J. has taught since 1989 in outdoor education, primarily in high school. She is now an assistant professor.

 M.J.'s supportive network included her group of women, a programmer to help build the website, landscape photographer, community, and the earth.

 She stated her supervisor and committee were encouraging.

 She has always explored embodied knowing.



Challenges included technical difficulties, such as sharing large files through DropBox, and compressing and saving large comic files. Jennifer's chest felt heavy all the time. She had a 10.2cm tumour in her breast. The institutional and ethics board were traditional, and her work was different. Her committee members were often busy, and requests for revision were hard because her dissertation felt done to her. It was a slow-cooked dissertation, and there were time limitations to finish it. She felt a lot of angst about if she was an authentic enough artist to do this kind of work.



Challenges included possibly excluding readers who only want a singular meaning. For example, her dissertation takes work to read through and understand, and it is demanding of the reader. Kathryn worked through her research very fast. People wanted her to slow down or risk losing depth in the investigation. Having to wait for her committee to read it slowed the process down. She has abundant curiosity, so she researched her topic in breadth and scope, which diluted her focus. She had to remove the excess in her dissertation, which was hard for her.



Challenges included technical difficulties with her institution. University of British Columbia (UBC) put her audio files as supplementary links and put them in alphabetical order. Her dissertation was not represented the way she wanted, and the files were not posted in the order she had indicated. She also wanted a blank page with the word "silence" on it, but her institution's guidelines did not allow this. Anar also had to follow a UBC format for dissertations, which required her to hire an editor to look through her work. Since her work had poetry in different formats, inserting these different layouts of poetry was very messy. It was nerve-racking for Anar to receive feedback from her committee. Anar explained that being an artist is an insecure and vulnerable state of being.



Challenges included not having a centre at her institution that was fully supportive to help do the work she was doing with a hyperlinked dissertation. M.J. explained that she had to stay away from the university to really listen to the land. To stop her intellectual mind from dominating, she needed to find ways to practice other ways of knowing. When M.J. submitted her dissertation, the University of Regina said it did not like the format and that she had to redo it or prove that it had a precedent. It took a year for a policy change at the university for her dissertation to be submitted. M.J. grappled with the common discourse that art is not research. She was able to shift and internalize that art is research in order to paint. Another limitation of her dissertation is that publication has been difficult. As well, her dissertation is not listed in ProQuest, so it is not searchable.



One achievement of Jennifer's work is that she has received a distinguished dissertation award. There were only four awarded at her institution: three in the sciences and hers in the social sciences and humanities. Receiving an award within the social sciences and humanities field from University of Manitoba was important, as it means the institution recognized a multimodal dissertation that was art-based and auto-ethnographic. Jennifer's dissertation was a whole different way of making meaning, and different way of thinking about scholarship. Jennifer explained that one affordance of her work was that non-academics are reading her dissertation.



Kathryn explained that an achievement of her work was being in contact with scholars and using various resources. Her work also presented many opportunities to co-author and co-present with others because she brought something new and refreshing. The use of dance as a scholarly form really pushed her scholarship. Kathryn explained that she goes to ten conferences a year because she loves to write, perform, and collaborate with others.



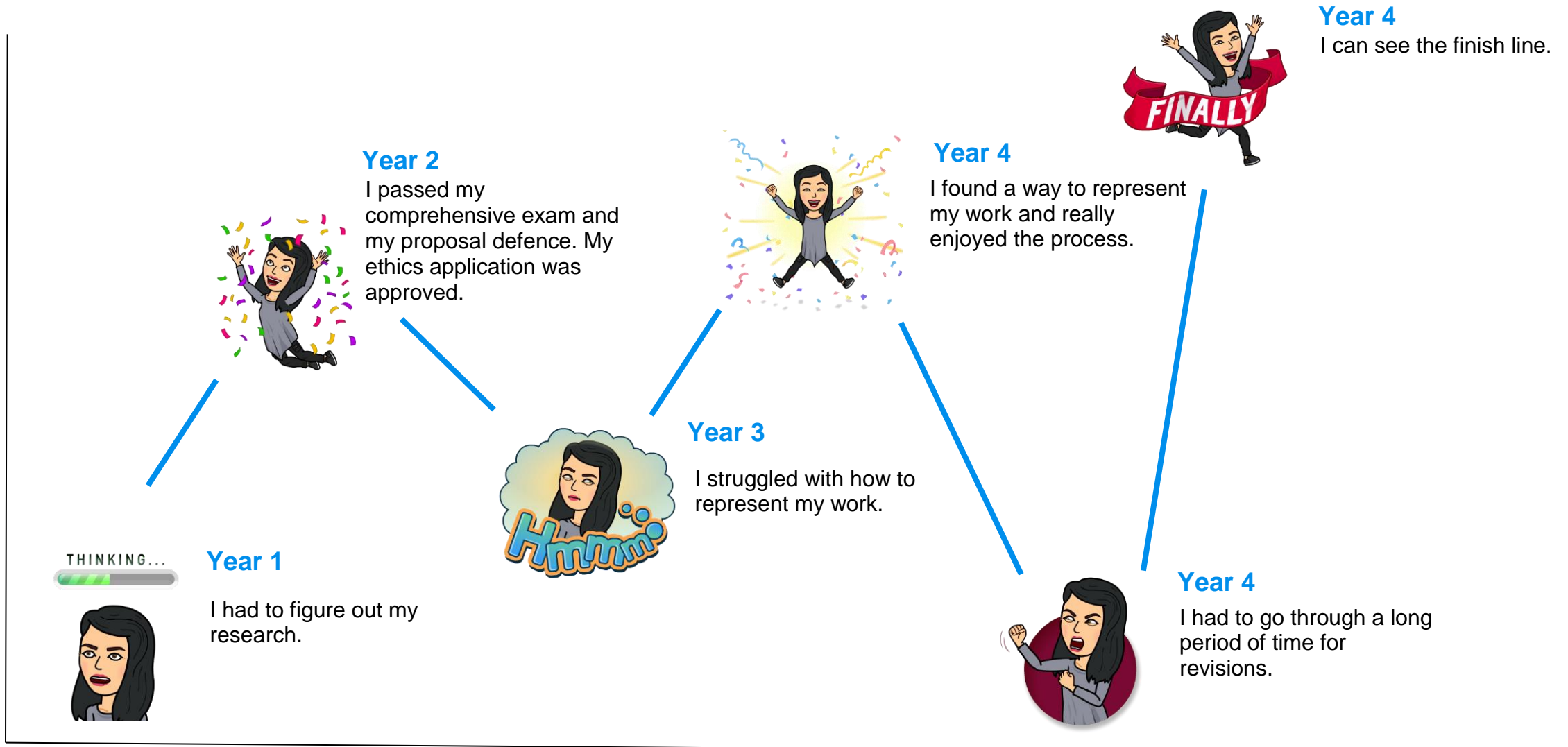
Anar believed her voice and passion for music has been a gift. She was able to lift words off the page because it brought her work to life. Anar is working towards applying for the arts-based dissertation of the year through CSSE (Canadian Society for the Study of Education) and AERA (American Educational Research Association). She is also very confident on the page and with poetry because it comes very naturally to her. Using poetry helped her avoid writer's block.



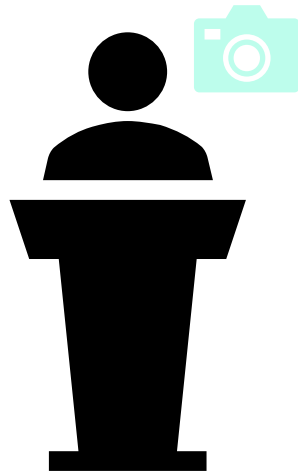
M.J. explained that one achievement of doing her work was receiving a scholarship from SSHRC (Social Science and Humanities Research Council). Financial opportunities like this allowed her to take risks with her research.

5.8 Annie's Story

Overall reactions



ANNIE TRAN



Title: Multimodal Dissertations: Opportunities for Multimodality in Higher Education

UNIVERSITY: University of Western Ontario

FACULTY: Education

YEAR DEGREE CONFERRED: 2019

INFOGRAPHIC-STYLE

Tran (2019):

ABSTRACT: In an era when communication and higher education are rapidly changing, there is much to learn about multimodality and the dissertation. For example, how can multimodality be used to forward an argument or inform research in a dissertation? How is technology changing the format of the dissertation? And how might multimodality and technology change the experience of composing a dissertation? This study addresses dissertations and the problem of understanding how research can be argued, represented, and presented in multimodal ways, and considers the lived curriculum of Ph.D. graduate students. My work addresses the learning needs of contemporary graduate students so that they may present their dissertation in multimodal ways. The research questions explored in this study are: what are the lived experiences of Ph.D. Education graduate students who created multimodal dissertations? What is my lived experience as someone conducting a multimodal Ph.D. dissertation in Education? What do students understand to be the affordances and constraints of multimodal dissertations? What do I understand to be the affordances and constraints of my research process? And what are the implications of promoting multimodal dissertations in the social sciences? In this study, I define a multimodal dissertation as one that employs multiple modes in meaningful ways to communicate research. Using a multiliteracies theoretical framework, this exploratory case study includes four participants who have successfully defended a multimodal dissertation in a Faculty of Education in North America. Data collection methods include a personal journal, interviews, and a multimodal analysis of the participants' dissertations. The findings reveal my participants' lived curriculum (the stories they had as individuals, with their scholarly community, and with their dissertation) was very important to the creation of their dissertation. Further, my participants' multimodal dissertations have resulted in accolades such as winning awards and receiving SSHRC grants; however, these positive experiences have been tempered by challenges such as technical difficulties and institutional requirements. Recommendations for further research include how to best support students who want to use a multimodal format for their dissertation, how supervisors and examiners assess these dissertations, and how the lived experiences of the graduate students currently completing multimodal dissertations impacts their work. This study contributes to the body of knowledge in my field by creating new

opportunities for alternative dissertation formats for future graduate students. It also contributes to the literature on multiliteracies and multimodality in higher education and the ways technology and communication are changing how students research, learn, and disseminate their findings.

Visual Mode

Collage: (pp. xix)

Mind-maps: (pp. 7, 58, 59, 61, 62, 63, 68, 72, 76, 80, 84, 85, 181,

Photographs: (p.

Art: (p. xvi, xvii, xviii, 4, 14, 150, 151,

Screenshots: (pp. 30, 32, 107, 115, 116, 117, 118, 119, 120, 126, 127, 128, 129, 135, 136, 137, 138, 144, 145, 146, 147, 148, 159, 164, 165, 166, 167, 169, 182, 183, 184, 185, 186, 187, 188, 189, 190

Figures: (pp. 41, 67, 92,

Spatial Mode

Tables 1-12: (pp. 15, 38, 50, 53, 57, 66, 90, 91, 109, 110, 172, 80)

5.8.1 Annie Tran

Experiencing (*lifeworlds*)

Teacher
Photographer
Student
Learning Experience Designer

I have been substitute teaching for three years from kindergarten to grade eight. I have had three long-term teaching positions (grade three French Immersion, kindergarten to grade six visual arts and drama, as well as grade five). I have been engaged in photography since 2012. I created a business in 2013 and have been photographing families, events, engagements, and weddings. I have been a student consecutively taking only a year off between undergraduate and graduate degrees. Currently, I work as a Learning Experience Designer, designing online courses incorporating user experience with the fundamentals of pedagogy.

Available designs (*resources of meaning*)

I had different layouts from previous drafts of my dissertation and journal entries from previous courses

I looked through my old documents and folders and curated journal entries, various assignments, and ways of designing that I had experimented with prior.

Conceptualizing (*ideas/themes*)

Multiliteracies
Multimodality
Higher Education
Technology
Communication
Dissertations
Graduate Education

I have been researching multiliteracies and multimodal pedagogy for the past five years.

Designing (*re-representation*)

I made sure I included instructions for key sections of my chapters

I designed various parts in each chapter of my dissertation.

Analyzing (*rationale*)

Supervisor: Rachel Heydon
Committee: Kathy Hibbert

My supervisor's research concerns literacies across early years, elementary, secondary, and late in life. She is very knowledgeable about multiliteracies, multimodality, and strong academic writing. My committee member is an expert in multiliteracies.

Redesigned
(transformations)

Tables, icons, figures

Applying

12 tables/75 figures of visual, spatial, and linguistic modes in a 216-page dissertation.

See 5.3.1. Annie Tran's Multimodality Story.

5.8.2 Annie Tran's Multimodality Story

I remember when I finished my master's degree and stumbled upon the topic of non-traditional dissertations. I was lucky to have this topic in mind when I went into my first year of my Ph.D. I worked through my course work seamlessly, because I knew my trajectory. By the time I reached my comprehensive exam, I was digging as deep as I could within my research. Luckily, the exam went smoothly, and I passed. After I finished my proposal presentation and received ethics approval, I was free to start my study.

It was a very exciting time for me. I picked up momentum when I received many replies to my recruitment e-mail that was sent across Canada. After recruiting my participants, I was able to schedule interviews within a month and transcribed all of the interviews within two weeks. My data collection was complete, so I began to create my dissertation.

I began writing my dissertation as a normal word document. I wanted to complete my dissertation, and there were several reasons for this: I have been in school my whole life. My friends were starting their careers and getting settled into marriage, mortgages, and taking major steps in their careers, whereas I was stressing about school, finances, debt, and what I will do with a Ph.D. On top of this, I was trying to maintain separation between my teaching career in a publicly funded school board and being an academic. Thus, I struggled. It was time for me to really start my life. And the easiest way was to start a normal word document for my dissertation.

But, creating a normal Word document would have been a limitation for me. When I allowed myself the opportunity for the traditional structure to disappear (i.e., "I will make this table of contents look pretty"), then I felt like I was allowing myself to incorporate all my previous experiences and knowledge into composing my dissertation. I could not write about multimodal dissertations and not create a multimodal dissertation.

So, I entertained ideas of taking a coding or data visualization course, but financial responsibilities got in the way. I spent hours finding ways to make videos, only to come to dead ends because using different apps and programs would be very expensive. I wanted to include comics, only to realize there may be copyright infringement. I had no prior experience with Photoshop or Adobe products to make my PDF (portable document file) interactive. I wanted to visualize my data, but I realized that many resources for teaching data visualization involved quantitative data, an area of expertise I did not have. I wanted to create an infographic but felt constrained by the lack of free programs to use. I wanted to build a Prezi dissertation, only to realize how incredibly messy that would have been. I wanted to incorporate photography, but my favourite types of photographs were of flowers and beautiful wedding décor, which was not a good fit with this dissertation’s subject matter. At the end of the day, I wanted to design my dissertation.

I stared at my Word document and felt wholly unsatisfied. I felt defeated. I was ready to be done and finished with school. But then I thought maybe I should just let all of the rules go. I already had a Word document that was formatted to the specifications of my institution, and I could create something that looked entirely different without worrying about what the rules and regulations were. So I opened a new document and started to design.

I was happy. I could see the before and after of my drafts and thought to myself, “This is what it needs to look like.” I started to design my title page (Figure 55) and loved the transformation. Then I could not stop—it was tables, icons, and colours galore moving forward. I was finally enjoying what I was creating. Throughout these past few months, I felt a sense of purpose again.

When I was designing my title page, I wanted to incorporate icons that represented multimodality. But I felt like I needed an icon to represent myself as an “author” or a “writer” or a “creator” of my dissertation. I finally settled on the thought bubble because to me, my research represented a constant thought; I think about my research all of the time...it does not end. I struggled with the right words to describe my dissertation process – Was I creating? Producing? Designing? Writing? Developing?

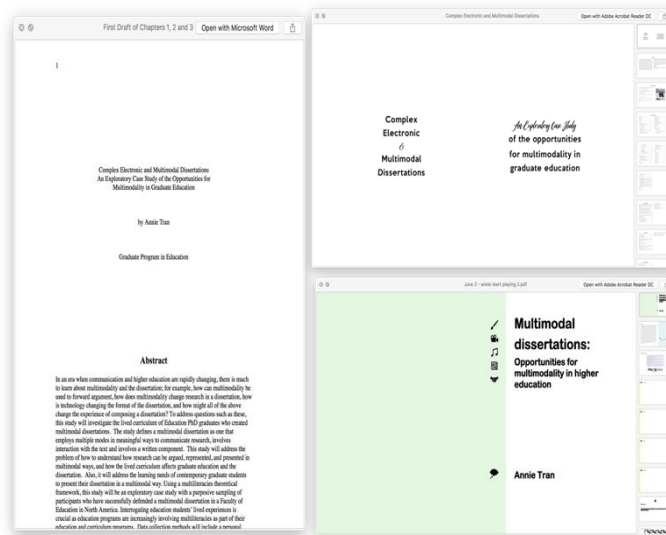


Figure 55. Transforming the title page. I transitioned from only text, to two columns, to what I have today.

Anatomy of a multimodal dissertation



Figure 56. Collage of multimodal dissertations and theses (Shaw, 2017; Sumanth, 2014; Wilson, 2017; Zak, 2014).

Figure 56. Visualization of multimodal dissertations. These help readers understand better.

One thing that I knew I was doing since the beginning of my Ph.D. process was that I was thinking. I was always thinking about my research, and to me, that represents what I did during my dissertation process. Colour was particularly important to me because I believe that it gives the readers’ eyes a break from the black and white of a Word document (text and page) and directs them to what I want to highlight as most important. I have seen most graduate students dedicate their dissertation to others as written text at the beginning of their dissertation. I thought that one way that I could incorporate my love of photography into this dissertation was to add photos I have personally taken of my family. I felt like the photographs that I captured of them help communicate how much I care for them.

It was important to me to provide a visualization of what a multimodal dissertation looks like (Figure 56) because people are often unsure what I mean when I use the term “multimodal dissertation.” I often describe a multimodal dissertation as being a non-traditional dissertation such as a series of YouTube videos, or a set of art pieces with an accompanying written piece. However, I wanted to make clear that multimodal dissertations could be a PDF document with images, videos or audio. Given the unclear definition of a multimodal dissertation (whether it is called non-traditional, portfolio-based, arts-based, or other), it was important to me to include a range of what multimodal dissertations can look like in Figure 57.

1.7 Students in North America

To better understand the multimodal dissertation work, in this section I outline examples of successfully defended non-traditional, complex, multimodal dissertations and theses from North America. These are non-traditional examples of multimodal dissertations that have been composed across a variety of fields and disciplines across North America. Next is a survey of the examples of such dissertations. Below is a database of all the examples I have found that fit in section 1.3.

There are two cases reported in social media of students creating rap albums for their final thesis and dissertation. At Cornell University, S.J. Carson produced rap albums for his dissertation in the African, communication, and information design Ph.D. program. His dissertation used the platform YouTube (Figure 5) and is composed of 24 [songs](#) that explore themes such as identity, justice, recovery, intertextuality, and language (Car, 2017). His work has been streamed and downloaded more than 100,000 times. Along similar lines, at Harvard University, Chad Shaw was the first to submit a [rap album](#) as a senior thesis in the English Department (KNC, 2017). Shaw used the platform SoundCloud (Figure 6) to present and distribute his work. His senior thesis was composed of 17 tracks that combined songs that reported on topics such as racism within the criminal justice system. Carson and Shaw produced rap albums as their dissertations and were the first to do so at their institutions.

There are several students who have created dissertations in different ways, such as interactive websites, graphic novel videos, newspaper-like, and on online scholarly book links. [Amanda Sumanth](#) (2015) from the University of Michigan designed and coded a website (Figure 7) as a fully online and interactive dissertation on James Joyce's *Ulysses* and *Portrait of the Artist as a Young Man*. Sumanth's dissertation explored how websites, first-time readers, book clubs, fan-blogs, and their relations could enhance *Ulysses* (Joyce) with related interpretations.

DATA BASE OF NON-TRADITIONAL DISSERTATIONS

<p>RAP ALBUM 2017 ALI, CAREN CORNELL UNIVERSITY, COMMUNICATION</p> <p>CLICK</p>	<p>RAP ALBUM 2017 SHAW, CHAD HARVARD UNIVERSITY</p> <p>CLICK</p>	<p>DIGITAL DISSERTATION 2015 AMANDA SUMANTH UNIVERSITY OF MICHIGAN, ENGLISH</p> <p>CLICK</p>	<p>GRAPHIC NOVEL 2016 SUN, SOUKRAN COLUMBIA UNIVERSITY, EDUCATION</p> <p>CLICK</p>	<p>MUSIC 2016 LARISSA MEDIA UNIVERSITY OF MANITOWA, EDUCATION</p> <p>CLICK</p>
<p>GAME 2017 STEVE WILCOX WYOMING UNIVERSITY, DELRWARE</p> <p>CLICK</p>	<p>GRAPHIC NOVEL 2016 ALEX GALARRAGA, MICHIGAN STATE, HISTORY</p> <p>CLICK</p>	<p>SELF-INVESTIGATION 2016 PATRICK STEWART UNIVERSITY OF BRITISH COLUMBIA, INTERDISCIPLINARY</p> <p>CLICK</p>	<p>YOUTH BELLETO 2016 JESSIE A. JAR BRUNN UNIVERSITY, EDUCATION</p> <p>CLICK</p>	<p>GRAPHIC NOVEL, PHOTOS 2016 MARGIE SANDERS UNIVERSITY OF GREENSBORO, VISUAL ARTS EDUCATION</p> <p>CLICK</p>

Figure 57. Student examples of multimodality. I made a database so it's easy to review.

The reason why I included my hyperlinked identity (Figure 7) was because I wanted to communicate to the reader how important digital technology is to me. I rely heavily on digital technology in both my professional and personal life. I would not be comfortable separating technology from my work, personal, and academic life because I make meaning easily in an online space. I have used technology since 1999, approximately 20 years of having access to a computer, cellphone, or the Internet. I have had a long period of my life when I accessed information through online multimodal texts. I am confident consuming and producing



Figure 58. "Tangram" dissertation. I did not want to explain this as it was a piece of artwork for me.

multimodal texts, for example in Figure 58, where I decided to create a tangram dissertation (each piece represents a piece of my dissertation). For a large portion of my undergraduate degree, I felt I did not have the option to submit non-traditional texts for my assignments. I always had to submit a paper or write an exam. This was a challenge for me, as I was studying with mind maps, colours, sticky notes, highlighters, and index cards. I was trying to make meaning multimodally as I studied, but I felt like my knowledge and understanding was not successfully communicated through a paper or an exam. Only within the last six years of my education have I been able to incorporate my multimodal meaning-making into the ways that I am being assessed. I feel that the work I do on a personal level (designing and creating multimodal texts) is finally being invited to my academic life.

One of the more meaningful pieces of photography to me was the mind map that I created during the first year of my master's program (Figure 7). I sadly lost this mind map during my move back to Toronto, but it is a piece of work that I am proud of. If I could show what my persistence and determination looks like in mind-map form, this would be it. Who thought parchment paper could be such a great learning tool?

I spent a long time considering how to communicate specific examples of multimodal work created by my participants. I thought of taking a screen cast video of each multimodal component (comic, video, music) of my participants' work. But video format is tricky, and unreliable. I wanted to make sure that my dissertation would be accessible to everyone.

I learned so much about Microsoft Word during this time. I grew up using Word as a program to write essays and print them. Now I have been able to take a tool that I am familiar with and insert icons, manipulate layouts, and even draw in order to design my dissertation. To me, it was important to take what I have and know and use it to make something new and learn something new.

Admittedly, perhaps I wanted to be creative (original and artistic) for the sake of being creative (Figure 58), but I made sure I was clear in the way I presented ideas, such as how to communicate my data. For example, I wanted to create a piece of art for what a dissertation looks like, and at that time I was inspired by tangrams. Officially, tangrams are a puzzle of seven shapes

I wanted to do doctoral work that I was proud of—something I could learn from and be happy to talk about. During my PhD I attended a national conference in Regina, Saskatchewan, and while there I was able to connect with graduate deans and post-doctoral fellows who were interested in my work on non-traditional dissertations. I always felt a sense of loss with my master's process; I felt I did not make it as meaningful as I could have. Now that I was making connections with the larger academic community, I felt more proud of my work and was eager to discuss it with anyone interested. But the time during my doctoral research was also deeply personal, as I was also a participant in my study.

I had my first completed draft and sent it off to my supervisor. Dr. Rachel Heydon learned how to write and has to keep learning how to write, but I am very confident in her mentorship when it comes to writing. And so, 860 comments later, I had about two weeks of revisions ahead of me. On top of this, I sent my draft to an editor and received another 2100 revisions. I had a total of 2960 revisions and counting to deal with before sending it to my second reader.

But there was a breath of fresh air in between all of this. I reached out to the School of Graduate and Postdoctoral Studies to inquire whether my PDF met the regulations, rules, guidelines, and policies for a dissertation. I received an e-mail from the Associate Vice-Provost, who made the time to speak to me on the phone, and briefly looked at my work. He wholeheartedly supported my dissertation, put me in contact with someone who is highly qualified in information technology to help advise me on technical difficulties, and the Dean of Graduate Studies at the Faculty of Education at Western University gave approval. This was a monumental stepping stone in my process. I felt a rush of excitement and relief that my work could be reaching, and that I was free to design. It was a huge relief that my work would not face any institutional policy problems.

After receiving my next set of revisions from my second reader, Dr. Kathy Hibbert provided me with fewer comments, albeit the ones she did offer were deep and important in quality and meaning. These comments took me four months to work through, which was much longer than usual as I love to get my work done as soon as I receive feedback. I felt like the areas I had to work through were vulnerable and extremely time-consuming, and she was correct—the literature review, methodology, and discussion were

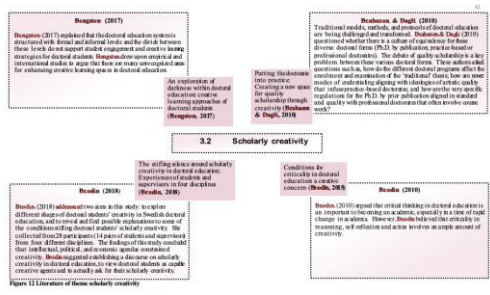


Figure 61. Flipcard Grid. This is also a mind-map.

Chapter 3

3 Literature Review Summary

In this chapter, I discuss what is historically known in the literature, and what is currently happening on the scholarly discussion around my topic of multimodal dissertations. These various themes identify what is known in the literature, and what is not known. The table below shows the table of contents for this chapter:

3.1 Literature Review
3.2 Scholarly Creativity
3.3 Doctoral Studies
3.4 Completion of Ph.D./M.A. Prospects
3.5 Supervisory Pedagogy
3.6 Academic Literacies
3.7 Changes with Dissertations
3.8 Doctoral Students' Experiences

Table 4 This table summarizes the literature review

3.1 Chapter 3 Summary

The themes of the literature review were: scholarly creativity, issues in doctoral studies, completion of the Ph.D. program, supervisory pedagogy, academic literacy, and changes with the dissertation.
The dissertation is a significant contribution to the fulfillment of the scholarly criteria for a doctoral degree. Doctoral students bring their own unique knowledge and experiences from an increasingly multimodal world. To date, research has focused on the dissertation as a product of writing.
Not all students learn and represent their knowledge in traditional ways, and supervisors have little experiences supervising non-traditional theses.
This study explores the production of multimodal dissertations, and its implications for students, supervisors, and academic institutions.

Figure 62. Summaries. These are very important to my readers.

weak points. So I let my work marinate. I had rushed through my work within three years, and it was time for me to reflect and think. I am glad I did. Not only did the literature on my topic blossom within the last five years, but also it was very encouraging that much opinion and debate was occurring in the scholarly field. Without time, I would not have been able to completely re-vamp my literature review and dig deeper into every aspect of my dissertation to fully tie all of the parts together. This was something that was missing four months ago. Kathy ended off her comments encouraging me that I was so close and to be brave. This was not necessarily something I wanted to do after the struggles I had finishing my master's degree. I wanted to follow the rules and get it finished. To be brave was very uncomfortable to me, but as I reach the end of my four years working through my Ph.D. program, I feel the maturity and confidence to do so.

As I started my new job as a Learning Experience Designer a few weeks ago, I have been able to understand structure, design, user experience, and pedagogy in a new way. I am able to see logical paths of learning, using different blocks or elements of design, such as when to use a timeline, or a sorting activity, or to make an interaction. As I have created a new literature review, and the aesthetics and layout were inspired by my new job, as I imagined a flashcard grid of sorts (Figure 61) in my dissertation. Through reviewing the literature again, I was able to confirm some design choices. For example, the idea of knowledge visualizations to help my readers (Renaud & Biljon, 2017) was something that Rachel and I had decided to add about a year ago. One of my favourite parts of my dissertation has been to visually incorporate the introduction summaries and conclusion summary charts in each chapter (Figure 62).

I had to come down to reality about my way too optimistic timelines. I had hoped to finish my Ph.D. during the last term of my fourth year, wrap everything up before my 30th birthday, and graduate on a beautiful summer day in July 2019. I am once again reflecting on my dissertation process. The wonderful Rachel Heydon sent me 'a billion' (her words, not mine) comments with one of my last dissertation drafts. No doubt I was overly optimistic when I thought I could manage it within two to three weeks. I was working full-time and there were 1500 comments. I needed to reorganize my paragraphs and check for passive and active voice (I did not know the difference until Rachel taught me). Finally, I had to tackle APA formatting issues, which I found very hard to spot. Fortunately... the only way I was able to work through one of my last drafts was by printing my dissertation,

sitting down, and working line by line on my work. Seeing my dissertation printed was so cool. I was able to really breathe and take in ALL THE WORK I have done within the last four years; it was A LOT. The experience was completely different from working on the screen. I loved being able to write directly on top of my work—to move out of the margins and write all my ideas. I loved the sense of actual revisions because almost every single page has been marked up. I was finding the APA mistakes that Rachel talked about. I was able to re-organize my paragraphs because I could easily flip to pages and sections. I loved the tactile sensation of a dissertation printed out. I loved the tactile sensation of a full draft completed. I even loved the visual of seeing every single one of my dissertation pages marked up by purple pen. I saw learning and growth. I was really falling in love with my dissertation, a feeling that was suppressed for a really long time.

Seeing the transformation from my earliest drafts of my dissertation to this current final draft is not only relieving but also satisfying. In some parts, it is evident that I took risks and made the most of what I had in Microsoft Word. It was so important to me to use the resources I had and to turn them into something new. I tried my best to practice what I preach—to be as multimodal as I could—through the visual (icons, charts, colours, shapes), textual, spatial (charts, infographics, images), and gestural (hyperlinks and cross-references). Although I am not a professional graphic designer, I learned an extensive amount about taking what you have and designing a dissertation to the best of your ability.

As I reach the end of my multimodality story, I realize how beautiful my process was. I was fortunate that I only had a few hiccups, which were entirely normal and to be expected. My affordances were more than I could have expected. If dissertation stories were like a fairy tale, then this story has a happy ending. I am looking forward to what the future has in store.

Multiliteracies Pedagogy

Annie Tran

Experiencing

Teacher
Photographer
Student
Friends, community, colleagues

Conceptualizing

Multiliteracies, multimodality, higher education, technology, communication, dissertations, graduate education

Analyzing

Supervisor: Dr. Rachel Heydon
Committee: Kathy Hibbert

Applying

Infographics, comics, visual, journal entry, icons, colours, spatial layouts

Designs of Meaning

Annie Tran

Available designs

I included past journal entries and parts of my comprehensive and proposal.

Designing

I had to first see it in a formalized word document before I could design it with infographics.

Redesigned

12 tables/75 figures of visual, spatial, and linguistic modes in a 216-page dissertation.

DR. ANNIE TRAN



Challenges included being uncomfortable with the word document file and needing to design in different ways. The amount of revisions and time after completing an initial draft was difficult but very needed. There were some issues with technical difficulties and financial constraints.



My research was particularly generative, and that I was very much engaged throughout my program. I felt continuously supported and gained confidence as I progressed. Having the support of faculty of other institutions during conferences was also sustaining.



I am a teacher and have taught French immersion, visual arts, and grade 5. I have taught undergraduate students multiliteracies pedagogy.



Jennifer's supportive network included her partner, friends, and family.



My supervisor and committee member were very caring and encouraging.



I have been doing multimodal work for years.

5.9 Chapter 5 Summary

Jennifer Watt created a dissertation that involved narratives, poems, journal entries, e-mails, closet plays, photos, comics, artwork, collages, and an alphabet book. She is a teacher and cancer survivor. Her research involves topics such as life writing and teacher education.

Kathryn Ricketts created a dissertation that involved poems, reflections, and photos. She is a teacher and dancer. Her research involves topics such as poetic narrative and embodiment.

Anar Rajabali created a dissertation that involved poems, spoken word, and songs. She is a teacher and poet. Her research involves topics such as poetic knowledge and contemplative pedagogy.

M.J. Barrett created a dissertation that involved poems, PDF files, photos, art, photos, music, recordings, sound clips, and paintings. She is a teacher and outdoor educator. Her research involves animism and energy healing.

I created a dissertation that involved icons, tables, screenshots, and infographics. I am a teacher and photographer. My research involves multiliteracies and multimodality.

Chapter 6

6 Chapter 6 Summary

In this chapter, I discuss the lived curriculum of my participants, as well as their achievements and challenges. I explore the affordances and constraints of using multiple modes in their dissertations. After I discuss all of my participants, I consider my own lived curriculum, affordances, and constraints as someone conducting a multimodal Ph.D. dissertation. I end the chapter discussing the implications of promoting multimodal dissertations in the social sciences, offer advice, and provide a conclusion.

6.1 Discussion and Conclusion

6.2 Lived Curriculum of Education Ph.D. Graduates Who Created Multimodal Dissertations

6.3 Achievements

6.4 Challenges

6.5 Affordances and Constraints of Modes in Dissertations

6.6 My Lived Curriculum, Affordances, and Constraints as Someone Conducting a Multimodal Ph.D. Dissertation in Education

6.7 The Implications of Promoting Multimodal Dissertations in the Social Sciences

6.8 Advice

6.9 Conclusion

Table 11. This table summarizes the key areas of chapter 6.

6.1 Discussion and Conclusion

My rationale for doing this research is multifaceted, as discussed in Chapter 1. But I am also doing this research to avoid confusion. How can I be a multimodality researcher and not create a multimodal dissertation? It is fair to believe that I must practice what I preach and align my research topic with my research form. My theoretical framework of multiliteracies and multimodal pedagogy is very important to my own understandings, epistemologies, and ontologies. I whole-heartedly view learning as meaning-making, and students as meaning-makers. I am a proponent of the fusion of literacy and digital technology and using combinations of modes in everything I teach and learn. It was important to me to use case study methodology because I needed an in-depth investigation into the participants' lived curriculum of creating a multimodal dissertation. Using a semi-structured interview allowed me to have a baseline of questions but also afforded the opportunity to deviate to gather further information when the opportunity arose. I used thematic analysis informed by my theoretical framework because of the ways it emerged within the transcription of interview data. Also conducting a multimodal analysis of my participant's dissertations allowed me to understand the affordances and constraints of using each mode. Each one of my participants had unique and personal stories about how they came to work with a multimodal format. As each participant successfully graduated many implications arise, which I discuss in detail in section 6.7.

In the first part of this chapter, I discuss the lived curriculum of the participants who created multimodal dissertations and their achievements and challenges using a thematic analysis. I also include my own experiences with creating a multimodal dissertation. Then, I provide a comparison of what modes participants used in their dissertation and analyze the dissertations through the five purposes: reference, dialogue, structure, situation, and intention. What do the meanings refer to? How do the meanings connect the people who are interacting? How does the overall meaning hold together? In what context are the meanings located? What are the purposes of these meanings and whose interests do they serve? I also provide a modal configuration (Norris, 2009) to help situate the way various modes were used in my participant's dissertations and the importance of it to the overall meaning. Lastly, discuss the implications of promoting multimodal dissertations in the social sciences.

6.2 Lived Curriculum of Education Ph.D. Graduates Who Created Multimodal Dissertations

Lived curriculum evolves through the Ph.D. process between the supervisor, the graduate student, and the multimodal dissertation. Intertwined in this relationship are various other individuals (committee members, community, cohort members, families, and friends), as well as their ideologies and beliefs. On top of these various interactions, the university, program, institution, policies, and regulations all contribute to the lived

curriculum of a graduate student. In the next section, I interrogate key tensions, implications, and challenges regarding the individual graduate student, the committee, and graduate school, and the participants' process of creating their dissertation.

To understand the lived curriculum of Education Ph.D. graduates who created multimodal dissertations, I used what I knew about their individual experiences, available designs, and situated practice to organize this section. A large part of their lived curriculum was being a teacher prior and during their doctoral program. Jennifer, Anar, Kathryn, and M.J., all have several years of teaching experience in different capacities, such as teaching abroad, English as a second language, dance, and outdoor education, and all have contributed professionally as educators in various ways. Their lives as teachers affected how they approached their research in their multimodal dissertations because of the way they have taught their own students. As all my participants graduated with a Ph.D. in Education and have similar teaching backgrounds, there is a deep connection to the work that happens with their students through multimodality, and they have incorporated these modes into their dissertation work. My participants were able to align their outside of school lives with their school lives and utilized the modes they know are helpful to their students to communicate knowledge in an academic way. This is not to suggest that all those who create multimodal dissertations need a teaching license; however, in the field of Education it is particularly important to realize that if multimodality is being used through K-12 then it could also work in higher education. Jennifer, Anar, Kathryn, and M.J. had varying experience in modal proficiency, such as poetry, dance, paint, spoken word, or music, and all four participants needed to communicate and represent through multiple modes in their

dissertation to deeply understand their research. Being able to incorporate their life experiences into their work is important because having passion for their research helped sustain their work. Whether they had been working with poetry and dance for a long period of time, or whether they just wanted to learn how to use paint for the first time, being able to incorporate these rich experiences into their dissertation was important to their lived curriculum.

By understanding graduate students' prior knowledge, experience, community background, personal interests, concrete experience, individual motivations, and the study participants' own lived experiences (Cope & Kalantzis, 2015a), we can begin teaching and learning how to create multimodal dissertations. For example, the many years of teaching experience that Jennifer, Anar, Kathryn, and M.J. had meant they all used specific strategies and techniques in teaching and learning. These strategies were critical to the way they processed their research areas and how they experienced lived curriculum in their program.

Another aspect of the participants' lived curriculum was using available designs. Most often, these participants had collected artefacts (e.g., Anar used songs she created in the past; Jennifer included past e-mails, poetry, and letters in her archives; Kathryn used years of photographic evidence of her performances; M.J. used songs from a community choir) over the years as a means of expression, representation, and communication of their research. All four participants were able to transform all of these available designs and design them into a transformed design (redesign), which is their multimodal dissertation. This is particularly relevant to suggestions for portfolio work that takes into consideration the entire program (Clarke & Boud, 2018). All of the

participants were able to incorporate past work into their dissertation, which is an interesting part of the study because normally inserting a publication or an essay from another course into another publication is considered plagiarism. However, using old poems, songs, or photographs is not viewed in the same manner. This also brings up the importance of including artefacts that were created during the doctoral candidacy time period. Four years is a long time for a student to make creative pieces that might not be included because it would be considered plagiarism. I know this from my own experience, as I wanted to include games and comics into this dissertation but did not because of copyright, ownership, and publication issues. Being able to use available designs in their multimodal dissertations is an important part of the participants' lived curriculum because they were able to use what they learned from various parts of their lives to enrich and bring further meaning to their work. Being able to use work from the past that is particularly meaningful in current work is a popular pedagogical strategy called 'spiraling', which revisits "concepts multiple times over the course of the year in order to build upon student's learning with engaging activities" (Overwijk & So, 2017, n.p.). Being able to revisit old work to build upon new work is a key area of my participants' lived curriculum.

It was clear that Jennifer, Anar, Kathryn, and M.J. were eager to learn and experience new practices. Jennifer was keen to learn more about comics by reading research and examples. Anar reached out to people in the music industry to collaborate in the studio. Kathryn was consistently finding resources available at her institution to use in her research, and M.J. was very open and dedicated to learning how to hyperlink websites. All four participants were proactive in learning what was new to them in order

to achieve the use of multiple modes in their dissertation. Taken altogether, Jennifer, Anar, Kathryn, and M.J. invited their situated practice into their work, acknowledged their known and new experiences, and have engaged in designing and transforming their work to create a multimodal dissertation. This is all new learning that my participants did in their own time to make their doctoral experience and dissertation more meaningful. There are things they learned without a prescribed curriculum telling them to do it. Instead, fuelled by their own passions, my participants were continually learning more outside of traditional schooling.

All of the participants had people in their lives who were key to their doctoral process, such as their children (Jennifer and Kathryn's children), their families (Anar's sister), or their community (M.J. and Kathryn had a supportive network of local artists). Their community backgrounds are important because these people constantly shaped the participants' way of thinking. Having a strong support network was crucial to my participants' success. As research suggests that one of the issues towards non-completion of the Ph.D. is socialization skills (Castello et al., 2017; Devos et al., 2017; Gittings et al., 2018; Passaretta, 2018), it is an interesting result that each participant had important people in their lives who helped sustain their research. Perhaps a component of creating multimodal dissertations is building a community that can help inform or advise the doctoral work further. This suggests that an important component of lived curriculum for graduate students creating a multimodal dissertation is the support to sustain your work. This support network teaches you things you cannot learn from a book or a course, such as how to remain emotionally strong, mentally stable, and how to enjoy yourself through this process.

Furthermore, all four participants were deeply motivated by key events in their lives and brought their lifeworlds into their research in their doctoral studies. For example, Jennifer's story as a breast cancer survivor, and her deeply personal experiences teaching homophobia and transphobia in her classroom, led her to her research on vulnerability, mindfulness, and compassion. Anar had created poetry and music her whole life and they were natural ways of thinking and teaching in her world. Kathryn had performed dance for a majority of her life. Her Lug character in her performances became a concrete and strong identity. M.J. had been studying embodied knowing from within the world around, and she was deeply ingrained in these practices. These personal stories are such a big part of their identities, and it is interesting to see how they were able to merge their personal selves with their academic selves. Their dissertations become what some described as their life work—many of the key pieces of their lives were part of their dissertation. This makes their multimodal dissertation very valuable; not only does it contribute to the academic community, but also it has contributed to the greater community where non-academics can read and enjoy their work. In addition, it becomes a piece of work that is not shelved away never to be read again, but rather a piece of work that is shared with family, friends, and the greater community, as it is work that was influenced by others and others had impact on them. Lastly, it becomes a significant and meaningful piece of work to be able to express and communicate life-changing parts of their lives in one space. Although most traditional dissertations may already include this in their work, the value of various modes makes the experience more salient. In psychology, it is commonly viewed that a smell, sight, or sound can be attributed to a specific memory (Willis, 2016). This means that when using various modes, it can make the experience more salient and relevant to the creator of the

dissertation. In addition, as readers of a multimodal dissertation, it is possible that the use of various modes can help the reader make connections more explicitly and summarize information quicker (Willis, 2016). However, this is a part of my research that requires further investigation. My participants' personal experiences needed a space within their dissertation work because they were living through and with these experiences while working through their dissertation. These parts of their lives were not happening separately. Their dissertation work lasted four years or more, and many things happened that needed acknowledgement.

In all of these circumstances, prior knowledge and experience, community backgrounds, and individual motivations were key to understanding how all four participants were enabled in composing their multimodal dissertation. The implication of understanding lived curriculum of Ph.D. students is that there is a strong foundation to build upon what they already know and how to grow from that knowledge. Educationalists are aware that an important component of pedagogy is to get to know one's students (Powell & Kusuma-Powell, 2011). Valuing graduate students' lived experiences can help faculty members in determining where the student is, where the student needs to go, and how best to get the student there (Ontario Ministry of Education, 2010). If a large part of a graduate students' experience involves dance, there needs to be support at various levels (supervisor, faculty, institution) to see how dance can be incorporated in a final dissertation. There needs to be more of an effort, invitation, and openness from those in higher education to value Ph.D. students' lived experiences.

6.3 Achievements

The achievements of creating a multimodal dissertation were specific and individual to Jennifer, Anar, Kathryn, and M.J.. Jennifer received a distinguished dissertation award, with only four given out within her institution. She explained that there were three awarded to those in the sciences, and only one in the social sciences, which was her area of research. Jennifer's dissertation was recognized as a multimodal dissertation, as it was art-based, auto-ethnographic, offered a different way of making meaning, and brought about a whole different way of thinking about scholarship. It was important that the University of Manitoba acknowledged her dissertation with this award because it meant the institution celebrated students representing knowledge and research in non-traditional ways.

Kathryn co-authored and co-presented with others to bring new and refreshing aspects that pushed her scholarship. Anar hopes to apply for arts-based dissertation of the year at conferences such as the Canadian Society for the Study of Education (CSSE) and American Educational Research Association (AERA). M.J. was awarded a scholarship from the University of Regina, and a Social Studies and Humanities Research Council (SSHRC) award for two years. All four of these women were afforded with opportunities for awards, co-authorship, co-presentation, and teaching resources from the work they did in their multimodal dissertations and made strides in the scholarly community. This will contribute to the literature on the completion of the Ph.D. and subsequent opportunities. An Internet search later revealed that Anar did

receive an award from CSSE! Through my search, I uncovered, "Anar Rajabali is the 2018 recipient of the ARTS (Arts Researchers and Teachers) PhD Graduate Award at CSSE" (University of British Columbia, 2018). This is important to the theme of lived curriculum because two out of the four participants were awarded for their multimodal work in the past two years. The achievements and opportunities that follow the participants' completion of their multimodal Ph.D. is very promising, as it demonstrates this type of work is being recognized by the academic community.

Jennifer's deep and enriching experiences teaching students and her cancer experience really helped her research, as she was passionate about finding ways to practice mindfulness, vulnerability, and compassion in her pedagogy and for teacher candidates. Kathryn had a long and accomplished career in dance, which gave her the professional credibility to engage with dance as scholarship as she was an expert. Anar worked with poetry and music her whole life, and M.J. was deeply passionate about outdoor education and how people can connect with the land. My participants were able to invite their life experience into their work, as they were passionate about their philosophies and hobbies.

Lastly, family and community were crucial to creating multimodal dissertations. Jennifer, Kathryn, Anar, and M.J. all acknowledged how important various people were in their lives and how they played a role in their dissertation. Their community provided a sense of support and resources. For example, M.J. was able to network with people in her community to create the image on the homepage of her website. Kathryn was able to use resources at her institution to locate spaces to perform. Anar used her sister and the music community to create songs, and Jennifer used her children to participate in the

alphabet book that is at the end of her dissertation. All of the ways the community supported Jennifer, Anar, Kathryn, and M.J. were enabling factors; they were not alone in their doctoral process and often the process can be lonely. In one interesting result, three out of four participants had Dr. Carl Leggo, an academic known for his arts-based research, involved in supervising or examining these multimodal dissertations. Furthermore, every participant spoke highly of their supervisor and committees. This contributes to the literature on supervisory pedagogy, in particular how the participants' supervisor was very supportive.

6.4 Challenges

Each student faced different constraints with their multimodal dissertations. Overall, shared challenges included technical difficulties and how they navigated being an artist. In Jennifer's case, she found it difficult to share her work with her supervisor because her dissertation was such a large digital file. For example, Dropbox, an online file storage site, would only allow a certain limit of storage and to download a large file takes time. Further, she was worried how her comics would look once they were compressed. She had concerns if the digital quality and the digital upload would stay true to what she created. Lastly, Jennifer felt a lot of angst about whether or not she was an authentic enough artist to do this work. She felt she had to know as much as she could about comics to produce one, and she worked with an artist to learn as much as she could about collage-making. She had to accept that she was a beginner practicing with

different modes, and the learning process was more important than creating a masterpiece.

Kathryn explained her challenge with dance as scholarship. She also revealed that her way of producing a dissertation (through the suitcase, map, and compass) excluded some readers who really prefer a singular meaning. She described her work as something that “demands the reader. There are people who want to see a landscape painting. They don't want to see an abstract painting. They want to understand that they are seeing a bridge, a field, a tree, a bird, and then there are others that [would] rather see a Jackson Pollock and read their own meaning into it.”

Anar faced technical difficulties, institutional challenges, and time constraints as well. As her work included many links to songs and spoken word audio files, her institution wanted her links to go into supplementary files. She had requested that the links be put in a specific order, but unfortunately they were uploaded to the repository in alphabetical order. This was a problem—not having the freedom to represent her dissertation the way she wanted it to be represented. Also, UBC has a particular format and template for dissertations, but Anar did not write in that template because poetry required spatial elements such as lines and indents. She had to get an editor at the end of her dissertation creating experience to assist with adhering to the format and template. This process turned out to be messy in terms of time and following the institution's regulations. Hiring an editor to meet these requirements also cost additional resources. In another unique case to her multimodal dissertation, Anar wanted a blank page with “silence” written on it, but this was not allowed. Anar explained that UBC had certain rules, and she felt that the institution was strict, even for art-based work.

M.J. had challenges with institutions as well, as she found there was not a technology support center on campus that was fully able to support her kind of work. She also found the university was a colonizing place, “where to be a proper academic, you needed to be insanely busy.” She was continuously struggling with the “academic mind” and allowing herself to practice other ways of knowing, specifically embodied knowing. Embodiment, for M.J., was understanding knowledge through the body and through nature, attending to the world around oneself. This multimodal process requires attention and using your senses, and thus understanding modes through visual, audio, and spatial modes. One of the last constraints M.J. experienced was waiting a year to defend her dissertation, because she had to change policy at the university in order for her dissertation to be accepted. This policy change meant that her institution would accept her multimodal dissertation and the change also brought about important discussion at her institution on hyperlinked websites as a dissertation. All four of my participants had issues with their scholarly creativity, in which a large part of the literature has been reviewed. In each case, my participants had to deal with institutional requirements and traditions, which contributes to the literature on academic literacies.

Taken altogether, these Ph.D. graduates had issues with not having their work represented the way they wanted, and in some cases needing to make policy changes at their university to have their dissertation accepted. Other issues raised are similar to creating a traditional dissertation, including time constraints and feedback; however, these issues were possible to overcome, as the participants still successfully completed their Ph.D. The challenges of composing multimodal dissertations are important to

recognize. This recognition aids in finding solutions to support future generations of graduate students who want to compose multimodal dissertations.

To understand the affordances and constraints of multimodal dissertations, I used Cope and Kalantzis’ (2016) grammar of multimodal meaning (Table 12 on pp. 180-181) to understand the meanings behind the various modes used. As well, I used modal configurations (Norris, 2009 as represented in Figure 63 on p. 182) to analyze the importance of each mode in relation to each other based on the most or least importance to the overall meaning to the dissertation. After I provide my data analysis, I offer a summary of the affordances and constraints of multimodality in a dissertation in a short discussion.

Table 12. A grammar of multimodal meaning (Cope & Kalantzis, 2016, p. 242).

<i>Reference... raises the question, ‘What do the meanings refer to?’</i>	What is the reference point?
	What does it denote?
	What is its subject or subjects?
	– remembering of course that answers to this question may be fluid, ambiguous, and a matter of interpretation.
<i>Dialogue... raises the question, ‘How do the meanings connect the people who are interacting?’</i>	How do happenings appear, who/what makes them happen, and what are the effects of their happening?
	How are the people interacting connected?
	What interpersonal relations, person-to-thing or thing-to-thing relationships, do the meanings try to establish?

	<p>– remembering of course, that the social participants may not see the social connections in the same ways.</p>
<p><i>Structure... raises the question, 'How does the overall meaning hold together?'</i></p>	<p>What makes a meaning cohere?</p>
	<p>What is its composition?</p>
	<p>What are its parts, and how do the parts fit together?</p>
	<p>What are its organization and structure as a whole?</p>
	<p>What is its structure?</p>
	<p>– not everyone will necessarily feel that their own meanings or the meanings they encounter are always totally coherent, or that it is possible to get to the bottom of everything that is meant.</p>
<p><i>Situation... raises the question, 'In what context are the meanings located?'</i></p>	<p>How is the meaning connected to its surroundings?</p>
	<p>How does the meaning fit into the larger world of meaning?</p>
<p><i>Intention... raises the question,</i></p>	<p>Why are the meaning-makers involved in meaning-making activities?</p>
	<p>What motivates them?</p>

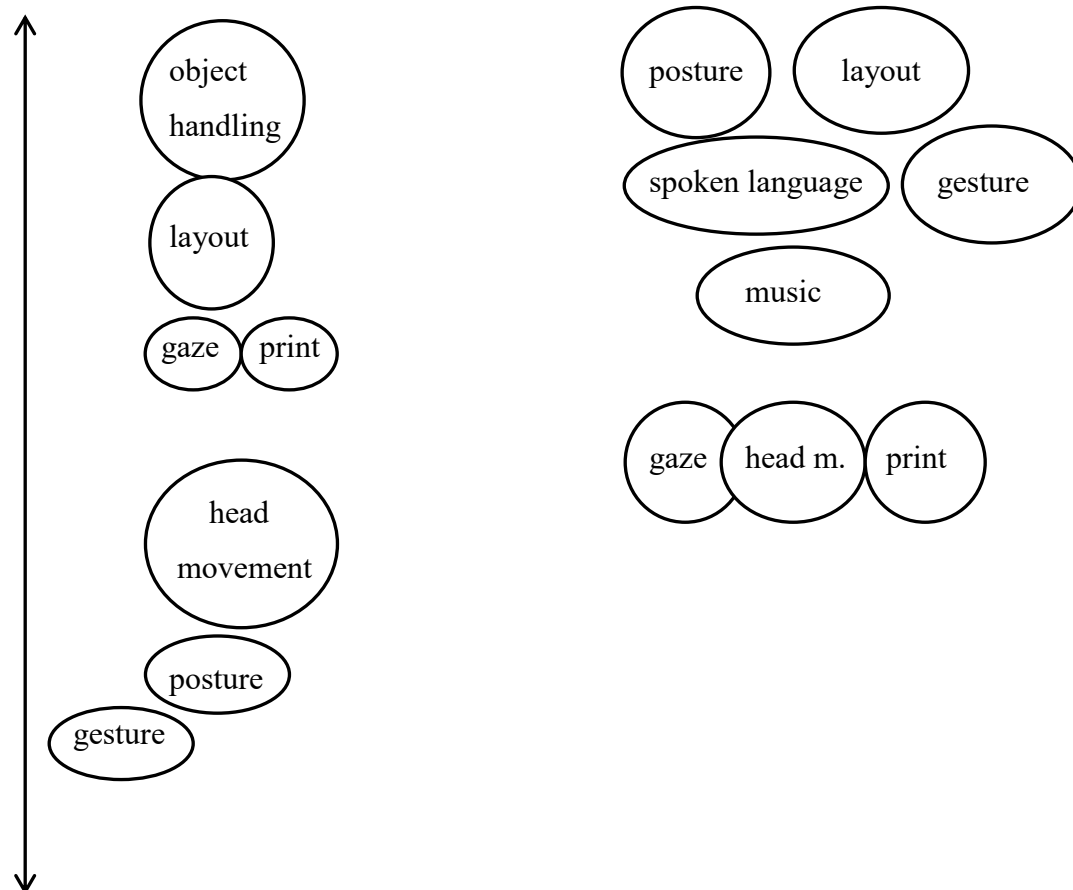
<p><i>'What are the purposes of these meanings and whose interests do they serve?'</i></p>	<p>How does the meaning, its context, and its reception reveal the interests of those involved?</p>
	<p>How does the communicator regard their audience?</p>
	<p>Who is more and less powerful?</p>
	<p>The interests of different message-makers always vary. Message-makers always bring their interests and identities to bear in what they make of the meaning.</p>

Figure 63. Modal configuration: Norris (2009, p. 89). Modal configuration evaluates “modal hierarchies and that no one mode takes precedence over all other modes at all times” (Norris, 2014, p. 98), and it is part of multimodal interaction analysis. This is a tool to look at multiple modes at the same time and to prioritize how the modes affect the overall meaning.

Most important

to least

important



6.5 AFFORDANCES AND CONSTRAINTS OF MODES IN DISSERTATIONS

Visual, Linguistic, Spatial Modes

COMIC



Figure 64. Comic from Watt (2017).



Figure 65. Comic from Annie Tran's Journal.

Grammar of Multimodal Meaning

Reference:

- The main character in this comic represents the author of this dissertation.

Dialogue:

- The audience is both academics and non-academics.

Structure:

- The text is humorous.
- Images based on familiar concepts.
- Layout was similar to left-right, top-bottom reading direction.

Situation:

- These comics represent uncomfortable times during the Ph.D. process.

Intention

- To communicate the stories we have to tell.

Affordances of multimodality

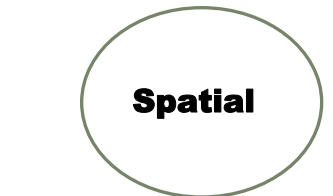
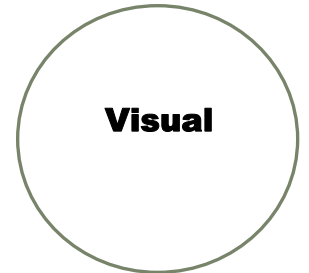
- Communicates a story deeply.
- A variety of readers will understand this.
- It allows the author to step outside and view their story as a third-person point of view, which allows separation of emotions.

Constraints

- Some popular references might not be understood (e.g., The Scream by Van Gogh).

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

Visual, Linguistic Modes

COLLAGE

185



Figure 3: Filling Silence.

Figure 66. Watt (2017).

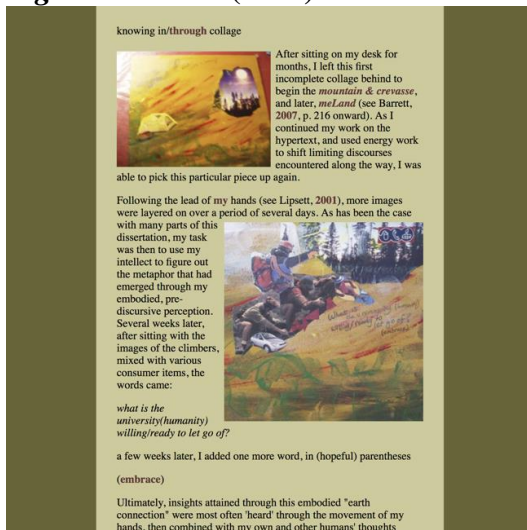


Figure 67. Barrett (2009).

Grammar of Multimodal Meaning

Reference:

- Represents silence (Watt) and represents identity (Barrett).

Dialogue:

- Connects the author to ideas and concepts.
- Leaves interpretation for the reader.

Structure:

- Various parts are not clear without a caption or further explanation of what they mean.

Situation:

- The collage means a lot after it is explained. However, it can represent many different meanings. For example, I thought Watt's collage was about beauty.

Intention

- To communicate personal and meaningful ideas to convey emotion and abstract concepts.

Affordances of multimodality

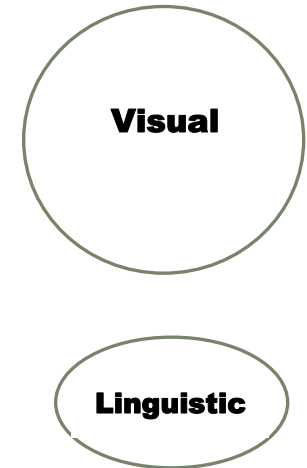
- To portray more important aspects of the research.
- To make concepts like 'silence' more powerful and meaningful than the linguistic text.

Constraints

- Very open to interpretation, which is fine for artistic purposes but needs to have a linguistic aspect.

Modal Configuration

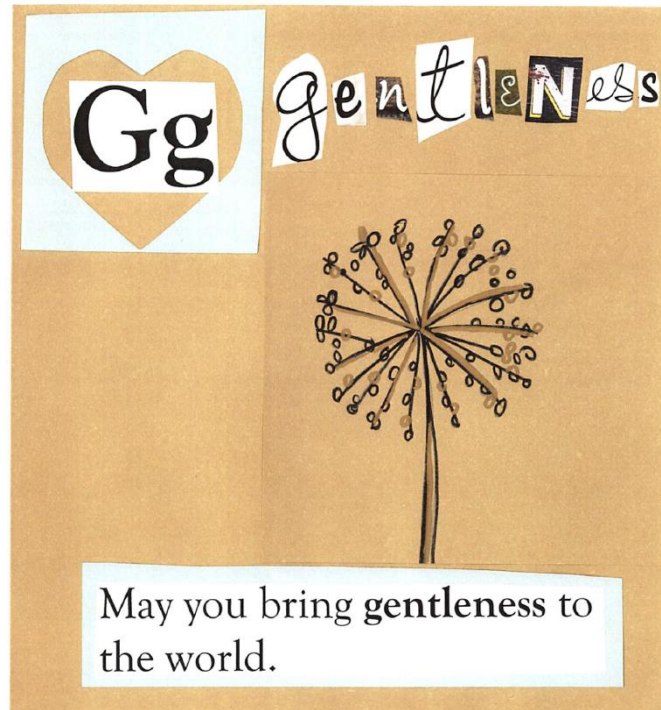
Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

Visual, Linguistic, Spatial Modes

ALPHABET BOOK



Grammar of Multimodal Meaning

Reference:

- Alphabet book connotes vulnerability, compassion, mindfulness, and discomfort.

Dialogue:

- Connects her children to her research.

Structure:

- The letter, word, sentence, and visual make it easily digestible to anyone consuming the text.

Situation:

- A way to move forward from her cancer experience.

Intention

- It comes from a place of healing.

Affordances of multimodality

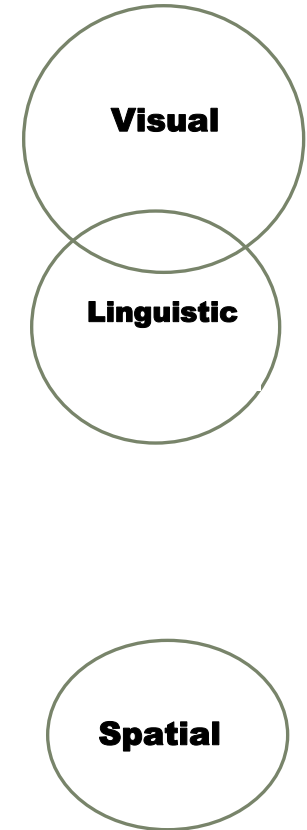
- The simplicity makes it easily digestible for various audiences and it is meaningful and motivational.

Constraints

- Not as scholarly because of the language used and the simplicity.

Modal Configuration

Most important to how the mode affects the overall meaning



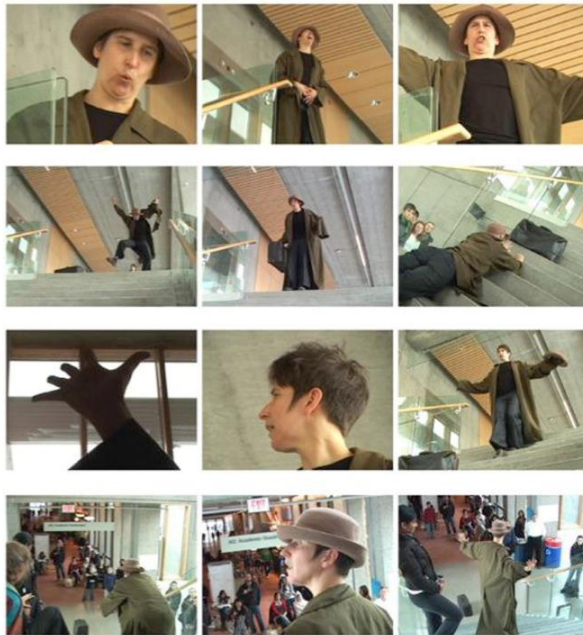
Least important to how the mode affects the overall meaning

Figure 68. Watt (2017).

Visual, Gestural, Spatial Modes

PHOTOGRAPHY

Figure 49. Embodied Theories at Play: Montage 2



Note. Hof, 2010, unpublished, used with permission.

Figure 69. Ricketts (2011).

Grammar of Multimodal Meaning

Reference:

- Represents her performance from a third-person point of view

Dialogue:

- To allow those who could not see the actual performance to see.
- To allow the audience to take their own photographs and experience it for themselves.
- She does not record her performances.

Structure:

- A series of photographs taken from different angles.

Situation:

- Needs further linguistic explanation.

Intention

- Honour her performance.
- Explore.
- Respect her Lug character.

Affordances of multimodality:

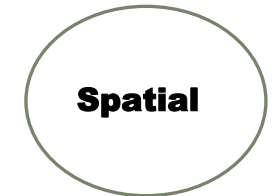
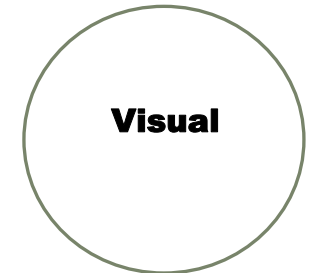
- To view her dances/performance in a way that was not a video.

Constraints

- How important is each photograph in explaining the story? What about the quantity?

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

Visual Mode

PAINTING

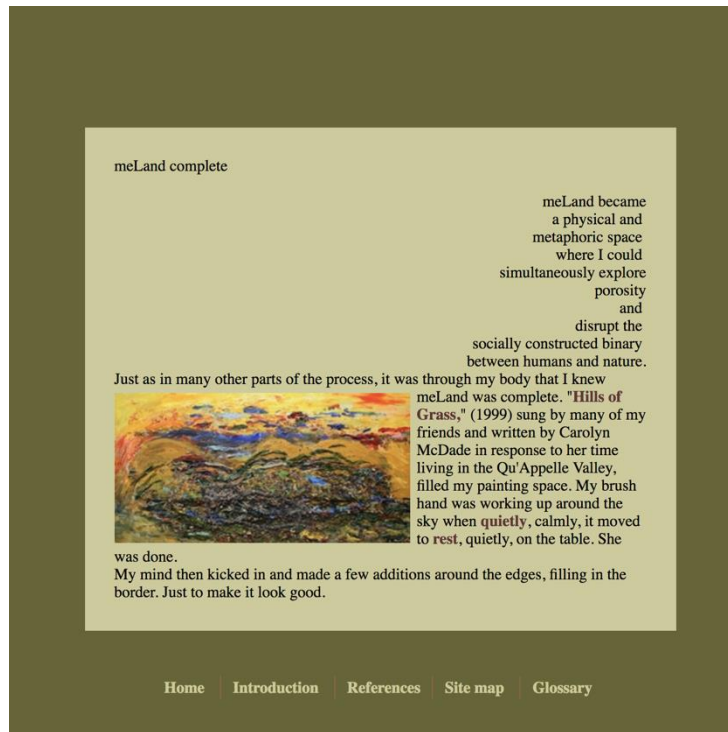


Figure 70. Barrett (2009).

Grammar of Multimodal Meaning

Reference:

- Represents 'MeLand' – intersection of the author and the land.

Dialogue:

- Connects the researcher to her research.
- It has a personal meaning for her.

Structure:

- Different materials were used.
- Did not take much space in her window.

Situation:

- This was part of a hyperlink that is not part of the main page.

Intention

- To provide insight into the deeper parts of her dissertation work.

Affordances of multimodality

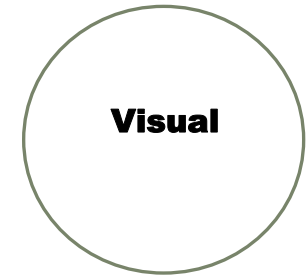
- Allows the author to engage in epistemological understandings.

Constraints

- Does not connect well to the overall meaning of the research.

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

Visual, Gestural, Spatial, Linguistic Modes

GAME-MAKING

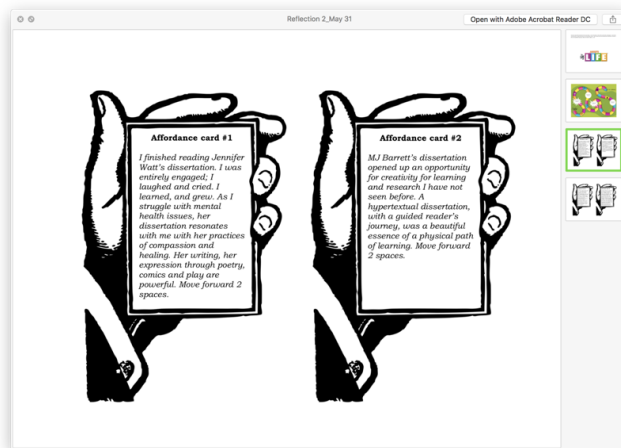
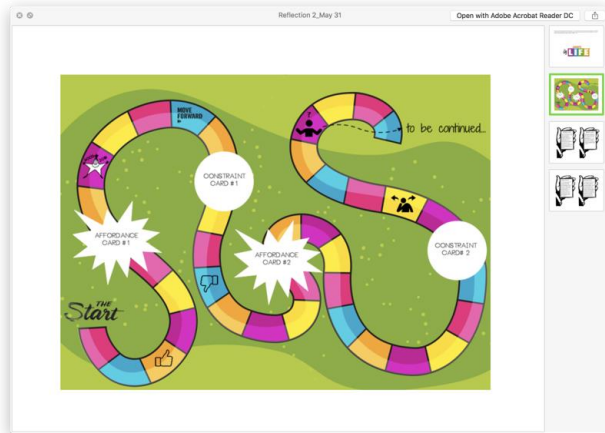


Figure 71. Annie Tran's Journal.

Grammar of Multimodal Meaning

Reference:

- Represents my journey through the Ph.D.

Dialogue:

- For my own personal journal.

Structure:

- Layout of a board game with game cards.

Situation:

- This was part of a journal that was not included in the final dissertation.

Intention

- To make sense of my experiences.

Affordances of multimodality

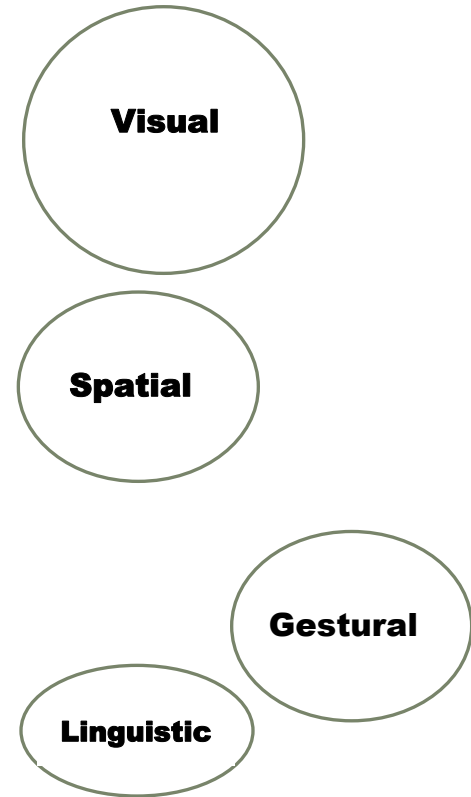
- Helped to make my thoughts clear.
- Allowed me to experiment with different formats and to be creative.

Constraints

- Did not include in dissertation because I personally felt it did not meet academic standards.

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

Linguistic, Spatial Modes

POETRY

140

What Hurts

What hurts:
 having fears exposed in front of those who make you afraid.
 hoping so much for someone, and watching them lack faith in themselves.
 working to exhaustion and not having it recognized by the ones you are doing it for.
 missing everything that feels like support, because it feels like home.
 feeling like you are always a bit on the outside.
 caring more than what is recommended.
 being isolated in the midst of others.
 hearing more criticism than praise.
 speaking and not being listened to.
 trying to be strong when you feel broken
 knowing you wouldn't change who and how you are,
 even though you know it will cause you more pain.
 facing those who expose you again and again.
 attempting to be everything to some who have nothing.
 reaching out to those who can help you.

2001, Oxford Community School

Figure 72. Watt (2017).

Epiphany ⁹⁹ (Rajabali, Rajabali, and Cruz, 2004)

Day embraces the dark of night
 As my soul wakes to the light
 Loves itself, fills the room
 And I am lost in you

Your beauty consumes all of me
 Every breath flows rhythmically
 Time stands still eternally
 And I am feeling you

Life, sweet life
 Joy through the pain
 Sun in every rain
 Life, oh sweet life
 Love is the key
 To all its mystery

⁹⁹ Please see supplementary audio track for song "Epiphany."

Black is white
 Death is life
 When I'm with you
 The wrongs are right
 You illuminate, rejuvenate, reciprocate
 You are my fate

When I fell you gave me wings
 To fly above this pain within
 I am the kite you are my wind
 And I am loving you

A shooting star captured in my heart
 This flicker is now a flame
 As every time I connect with you
 I get to a higher plane...

Figure 73. Rajabali (2017).

Grammar of Multimodal Meaning

Reference:

- Represents life experiences.

Dialogue:

- Any audience.

Structure:

- Different types of styles of poems.

Situation:

- Found in various parts of the dissertations.

Intention

- To communicate large ideas within a prescribed format.

Affordances of multimodality

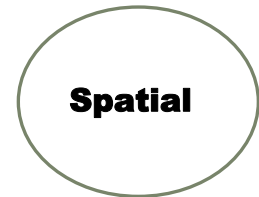
- Easily accessible and relatable.
- Depicts big ideas using fewer words.

Constraints

- Some parts may not be easy to understand.

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning



Linguistic, Visual, Spatial Modes

PLAY

What is so complicated? It's not rocket science! I am the theory? And you (looking at Compass) are the teaching. (Both Compass and Map look the other way.)

Ahem...I think you are forgetting something.

What?!!!

I am the most important one of all three of us!

Oh cripes, here we go!!

Well I am! We already discussed this!

How!

Well, I am like the tour guide....

You are the suitcase!!!

Yes I know but I am leading them through this expedition, as she calls it.

Maybe we should let Kathryn introduce us....

The Voices
This thesis is presented through three major voices. These voices are the suitcase, the map, and the compass.

Figure 74. Ricketts (2011).

Closet Play

CAST OF CHARACTERS
TEACHER.....dressed as WONDERING WOMAN
STUDENTS.....dressed in "The Village People" costumes
adaptable for any gender performance.

COWBOY COWGIRL
BIKER
POLICE OFFICER
CONSTRUCTION WORKER
"DEAD INDIAN"²
SAILOR.

ACT 1, Scene 1
The stage is set to evoke a classroom space. A teacher's desk is covered with pens, papers, a computer, projector, and a plastic puffin fish toy. A backpack hangs on a chair behind the teacher's desk. Six chairs are arranged facing the teacher's desk. A large whiteboard faces the audience and student chairs. Downstage left a chair sits besides a full-length mirror on a stand. When the lights come up, the students sit facing the teacher's desk. The teacher is dressed as WONDERING WOMAN, her costume shares the red and blue glamour of another well known superhero, but features a question mark symbol. She perches on the edge of her desk facing her students.

POLICE OFFICER. (With edge of tension or even accusation to his/her voice)
Are we going to debrief the film from last class at all today?
The other students begin to give each other meaningful glances, shift uncomfortably in their chairs, or stare at the teacher.

² This name comes from King's (2012) description of the "Dead Indian" as "the stereotypes and clichés that North America has conjured up out of experience and out of its collective imaginations and fears" (p. 52). For further discussion of the naming of this character, see "from the Closet".

Figure 75. Watt (2017).

Grammar of Multimodal Meaning

Reference:

- Explaining elements of the dissertation.

Dialogue:

- Anyone can read this.

Structure:

- In the form of a script.

Situation:

- Found in various parts of the dissertation.
- Important to the story or narrative of the dissertation.

Intention

- There is a performative playfulness.

Affordances of multimodality:

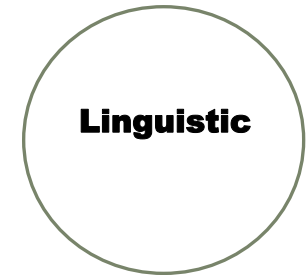
- Easy to read, not confusing, entertaining, and simple.

Constraints

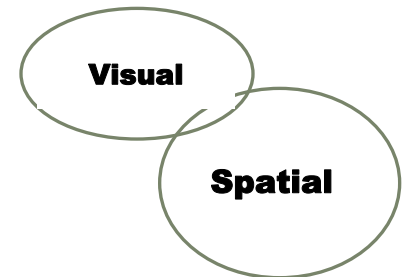
- There is a primary emphasis on one mode.

Modal Configuration

Most important to how the mode affects the overall meaning

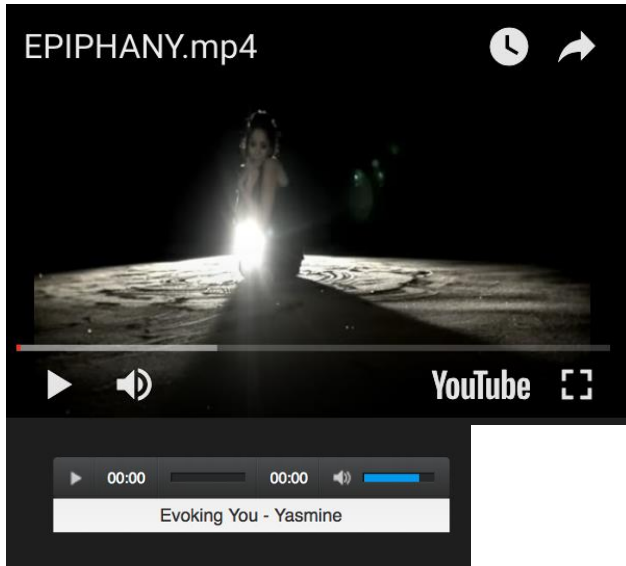


Least important to how the mode affects the overall meaning



Oral, Audio, Linguistic Modes

MUSIC



(Re)turning to the poetic I/eye : towards a literacy of light : [supplementary material]

Rajabali, Anar
2017

Show Media	<ul style="list-style-type: none"> ubc_2017_may_rajabali_anar_all.mp3 ubc_2017_may_rajabali_anar_epiphany.mp3 ubc_2017_may_rajabali_anar_evokingyou.mp3 ubc_2017_may_rajabali_anar_karim.mp3 ubc_2017_may_rajabali_anar_mothertongue.mp3 ubc_2017_may_rajabali_anar_hizomeinthesky.mp3 ubc_2017_may_rajabali_anar_sama.mp3 ubc_2017_may_rajabali_anar_sandalsinthesnow.mp3 ubc_2017_may_rajabali_anar_waiting.mp3
Item Metadata	
Title	(Re)turning to the poetic I/eye : towards a literacy of light : [supplementary material]
Creator	Rajabali, Anar
Date Issued	2017
Description	The attached files are supplements to the author's doctoral dissertation at http://hdl.handle.net/2429/61048
Type	Sound
Language	eng
Date Available	2017-04-06
Provider	Vancouver : University of British Columbia Library
Rights	Attribution-NonCommercial-NoDerivatives 4.0 International
DOI	10.14288/1.0343488
URI	http://hdl.handle.net/2429/61130
Degree	Doctor of Philosophy - PhD

Figure 76. Rajabali (2017).

Grammar of Multimodal Meaning

Reference:

- Lyrics about life experiences.

Dialogue:

- For any audience.

Structure:

- Through supplemental files in the online dissertation repository and YouTube.

Situation:

- Adds to the linguistic poetry.

Intention

- Lifts the words off the page.

Affordances of multimodality:

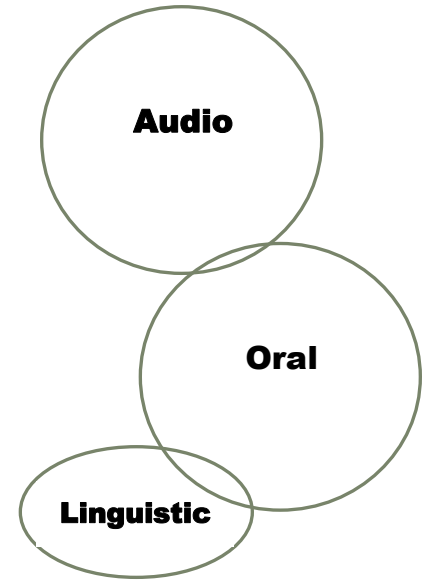
- Brings another layer of meaning to what she writes.

Constraints

- Sometimes vague and unclear.

Modal Configuration

Most important to how the mode affects the overall meaning



Least important to how the mode affects the overall meaning

SUMMARY

Comic – visual, linguistic and spatial modes

Affordances of multimodality

- The purposes of the meanings are motivated by the meaning-maker themselves. The interests serve the meaning-maker and audience.
- A variety of readers will understand this, which connects the people who are interacting with this multimodal piece.
- Due to structure and organization, they are easy to read.

Constraints

- Some popular references might not be understood (e.g., The Scream by Van Gogh), which means the meanings refer to a select audience.

Collage – visual, linguistic modes

Affordances of multimodality

- To portray more important aspects of the research, which means that the situation and the context of their collage are important.
- To make concepts like ‘silence’ more powerful and meaningful than the linguistic text, which connects the people who are interacting with this text.

Constraints

- Very open to interpretation, which is fine for artistic purposes but needs to have a linguistic aspect; this makes the referent point confusing.

Alphabet Book – Visual, linguistic, spatial modes

Affordances of multimodality

- The meaning-maker is motivated by their family and the materials around them, which serves the interests of the meaning-maker.

Constraints

- The meanings connect to a larger audience, and not specifically to an academic audience.

Photography – visual, gestural, spatial

Affordances of multimodality:

- The meaning from the photograph was connected to surroundings that could not be easily experienced through text.

Constraints

- The choices in composition of the photos were unclear.

Painting – visual mode

Affordances of multimodality

- The meanings serve the interests of the meaning-maker.

Constraints

- The meaning does not play a large role in the overall composition.

Game Making – visual, gestural, spatial, linguistic modes

Affordances of multimodality

- The meaning serves the interests of the meaning-maker.
- Connects the audience to the meanings.

Constraints

- Meaning did not refer to academic or scholarly standards.

Poetry – linguistic, spatial modes

Affordances of multimodality

- Meanings connect the people who are interacting.
- The composition is easy to read.

Constraints

- Some of the meanings may be hard to understand.

Play – linguistic, visual, spatial modes

Affordances of multimodality:

- The meanings relate to the overall structure of the dissertation.
- The meanings connect the people who are interacting.
- The composition was easy to read.

Constraints

- Some meanings may only be for a scholarly audience.

Music – oral, audio, linguistic modes

Affordances of multimodality:

- The meanings serve the interests of the meaning-maker.
- The meanings connect the people who are interacting.

Constraints

- The meanings refer to unclear concepts at times.

DISCUSSION

When using various modes (visual, audio, oral, linguistic, gestural, spatial) through forms such as comics, collages, alphabet books, photographs, paintings, games, poetry, plays, and music, there are various affordances and constraints. One affordance that was similar throughout the study was that the meanings helped to serve the interest of the meaning-making. It was clear that the meanings from engaging in various forms were deeply personal for my participants. Another affordance was that the meanings helped to connect the people interacting with the text. Whether the audience was scholarly or non-scholarly, the audience could still understand the meanings of the text.

The affordance of multimodality to connect all types of people interacting with the text is important because there is greater knowledge mobilization, interdisciplinarity, and greater transformation of meaning when more people are involved with research. One overall constraint that was common was to solely analyze the meanings based on an academic audience because the text created is a dissertation. There are times when it seemed like the meanings would be confusing, unclear, or unscholarly if the modes were on their own. However, the participants always used the linguistic mode to strengthen their scholarly ideas and arguments, making their text multimodal. In the next section, I discuss my lived curriculum and the affordances and constraints of using multimodality in my own dissertation. I also offer advice and provide my conclusion.

6.6 My Lived Curriculum, Affordances, and Constraints as Someone Conducting a Multimodal Ph.D. Dissertation in Education

My academic career really began when I started my master's degree back in 2013. I have been inside this world of graduate education for five years. When I first began, I found that I was experimenting with what I could do visually and digitally in my scholarship. Alongside this experience, I was also gaining momentum as a photographer, with four weddings and multiple engagements and maternity photoshoots thus far. Meanwhile, on top of this, I was a substitute teacher. Early on in my Ph.D. process, I experimented with making comics and a board game, but never once was I able to envision using my own photography in this dissertation. I could not conceptualize, reason, or see where my photography could be included. Not being able to incorporate my photography in a meaningful way into my research was an obstacle. Further, I wanted to engage in data visualization, but learned that data visualization (data that is presented and represented in an aesthetically visual mode) is most commonly used with quantitative data; my study involved qualitative data. I wrestled with how I could use colours, shapes, and icons. I continually found that my dissertation was developing, largely, into a monomodal dissertation. The irony did not escape me.

Designing this dissertation was heartbreaking for a long time. I was not sure what the final product would look like. But as I reached the end of the dissertation, and my Ph.D. process, I saw a light. I was able to see where my strengths were and to run with it. Here, I present a *21st century document, where you can find pages built as if it should be in a KeyNote presentation with plenty of iconography*. I have worked hard to understand certain principles of KeyNote presentations in terms of the number of words, the way graphics need to be meaningful, the psychology of colour, and how animations can be used in meaningful ways. Iconography is the use of icons to represent key ideas. I have noticed that communicating with icons was becoming a familiar discourse and often does not bring unfamiliar meanings. I came to understand icons are not as open to interpretation, and I did not want to use a visual representation that would be confusing to the reader.

Since September 2017, my dissertation has undergone some drastic changes. In terms of challenges, I was able to sympathize with my participants, as I faced similar ones. In terms of technical difficulties, I had issues when I was sending out recruitment emails. Next, there currently are no ways to search for students who created multimodal dissertations. I had to recruit through e-mails only. I also had to continuously upload large files onto an online learning platform (an online learning management system used to upload files in a secure way with extensive storage available for students and faculty) to share my documents. I was worried that formatting and fonts would not translate when it was sent and uploaded and downloaded onto different computers, in particular, different versions of Microsoft Word would change my formatting, as well as I had downloaded specific fonts onto my laptop that would not open on another laptop. I was

6.7 What Are the Implications of Promoting Multimodal Dissertations in the Social Sciences?

worried about the templates, formatting, and editing this entire dissertation. I was continuously reminded of what my institution required and what rules and regulations were involved in submitting a dissertation, such as margins and layouts, which I found to be constraining.

I had many ideas that would have required further funding or support that I did not have available. I found that I could not take too many risks with my work, as taking extra classes in coding, programming, and data visualization was going to be a financial limitation. Also, I could not afford to download new programs, such as Adobe, Photoshop, or Illustrator. I could not take time to learn new programs from scratch in order to create what I had envisioned or drafted up. I definitely felt constrained by technical difficulties, institutional requirements, and financial limitations.

An achievement of my study was that it was continuously generative, as there were no major problems I was able to maintain momentum throughout the process. I was able to maintain momentum and finish within four years, which is similar to Kathryn and Anar's experiences. I was enabled by my supervisor's quick turn around with feedback and her continuous support. Other examples of support were from my committee member and colleagues who electronically forwarded examples of multimodal dissertations every single time students were featured in the media for their multimodal work. Lastly, though I could not find participants through an online repository, as multimodal dissertations were not indexed as multimodal dissertations, I was able to recruit participants rather quickly, which meant there are Ph.D. graduate students who are doing this type of work. There was also much interest in my work.

Promoting multimodal dissertations in the social sciences means that theories of education, in particular multiliteracies and multimodality, are being put into practice by the academic community in the field of Education. Multimodal dissertations allow for meaningful communication, representation, and expression in ways that make research accessible and equitable. These dissertations invite situated practices, available designs, and experiences into the dissertation creation process. Students who are creating multimodal dissertations are interrogating their process to make sure that it is grounded and strong. They make informed decisions about everything they include and create in their dissertation. Most importantly, these multimodal dissertations take time; however, with passion and dedication students can find this approach highly engaging, transformative, and generative.

The results of this study suggest that future generations of graduate students focus on finding a supportive supervisor and examining committee. Jennifer, Kathryn, Anar, and M.J. all spoke very highly of their supervisors and committees. Most often, their supervisors pushed them to understand their reasoning but believed in their process. Next, it was found that future students engaging in multimodal dissertations ought to incorporate their passions, interests, and life experiences into their work to make it meaningful and purposeful to them. Lastly, future students should always question their

work and the importance of adding different modes into various sections of their dissertation. There should always be a “so what” factor when working with various modes; everything should be scrutinized and understood, not only for the creator of the dissertation, but also all for its readers.

Two of my participants, Jennifer and Anar, received awards for their multimodal dissertations. These awards are important, as it shows that institutions and organizations are starting to recognize and celebrate the academic scholarship evident in multimodal dissertations. My study contributes to knowledge about the importance of lived curriculum in graduate education and how it is represented in student research and dissertations. Lived curriculum is important to multimodal dissertations because students are able to include their passions, interests, and motivations into their work and have it validated as academic scholarship through a successful doctoral defense.

There is still much research to be done. For example, research on the supervisors and examining committees of students who created multimodal dissertations will provide

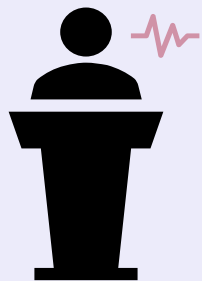
valuable insight into how faculty members can support students. There also needs to be further research into creating a database of multimodal dissertations, as online repositories are unable to upload most formats other than PDFs. Importantly, there needs to be further consensus on the definition of multimodal dissertations. For example, other terms used to describe multimodal dissertations are *non-traditional* or *complex electronic*, but these terms fail to encompass all that multimodal dissertations are. Last, there needs to be additional research into students who are currently completing their dissertations with action research methodology.

Recommendations and advice shared by Jennifer, Kathryn, Anar, and M.J. are represented in section 6.6. This section includes advice on how to engage in the process of composing a multimodal dissertation and the various points to take into consideration. In general, these Ph.D. graduates suggest that students who want to create a multimodal dissertation need to enjoy the process and be imaginative.

6.8 ADVICE

From Jennifer Watt

People who are working with multimodal dissertations: enjoy the process. Document the process. Notice your change and your growth. Take risks. Be willing to be that beginner and to admit that you're a beginner. Frame it in whatever way makes you comfortable. When I realized that I was not doing art to be an artist, but I was doing art to be a teacher, and a learner, that freed me. I think if you frame it as you're learning and growing, then that takes away some of the pressure of what that final product is. Because the product isn't as important as the process. And get your committee. Get a wonderful committee that supports you. And be willing to wait. There's a lot of waiting.



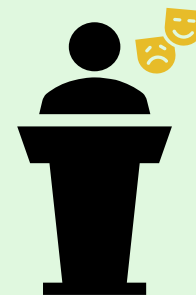
From Anar Rajabali

It's really important to take a look at the breadth and scope that is already there. So that there's permission and then I think it's really important to start to map out your thesis in a way that is embodied, imaginative. Lay down what is important and why, and what were those forms? So that you can start to surprise yourself in terms of how you parse out your time, your thinking, your activities, into something that actually feels like it's coming from inside out. Opposed to 'oh it's the five-chapter thesis...I've got my lit review...' because it doesn't have to be that way anymore. But for some people they would say 'I just wouldn't even know where to start.' And really the starting points can be big pieces of paper and felt pens or dry erase board markers. Anything that gets you off your laptop and a notebook and pencil into another way of formulating and planning.



From Kathryn Ricketts

Be imaginative. I think there's so much possibility and so much opportunity to represent in different ways and to be able to further understandings and the power of the image, the word, the spoken word, audio, or film. It's just so powerful. Such a powerful medium in which to really communicate our knowledge and research. I think more and more, it would be really good to go in and take these possibilities or these modes and use them to the full advantage. I just considered that I dabbled in it but now I wonder how else now to do that? There's so much—so many ways to communicate that can be far more effective than just on the page. Be imaginative and find the ways in which you can really represent your work to the very full capacity, whether it is film, in song or whatever. But I definitely think that to add another layer can be very powerful and evocative.

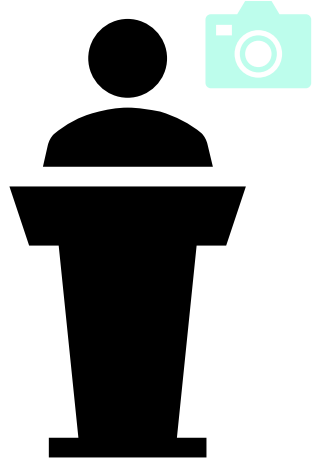


From M.J. Barrett

Consider where you're going and if you're going into academia. Seriously think about the papers of what you can get out of that because papers in peer-reviewed journals are still the currency in most places. I think that's something to pay attention to any kind of move into an academic position—if that's where you're going. I think having a community of practice is also really important. Think about where funding is coming from as it may have implications for the forms of representation you consider. Know where it is to support you. Pay attention to discursive constraints because often what we think are material constraints are actually discursive constraints. So being able to identify which is which is really important I think. (M.J. Barrett Interview)



Annie's Advice



Keep a book to design your ideas in. Make sure you have conversations with experts in what you want to try. Have many conversations with your supervisor. Make sure you look at examples. Remember every time someone sends you an email to help you with your research. Find what you like in your everyday life. Try everything even if you think you do not know how to do it yet. If there is something new you want to try, learn a lot about it. Use everything you know. Make sure you take what you already have and design it into something new. Do not let money limit you; there is a way that is free somehow. Do not be scared to stand up for your research. Let 1600 revisions make you stronger. Make realistic timelines. Make sure your work is meaningful. Look at the before and after drafts of your dissertation. Talk about your research. Go to conferences. Be fearless. Be brave.

Multimodal dissertations can be a publication that has scholarly merit. These publications are engaging, promising, creative, critical, original, and thorough. Dare I say it, multimodal dissertations are fun; fun to read as a reader, and fun to create as a creator. In five out of five cases, creating a multimodal dissertation led to the successful completion of the Ph.D. programme, as well as provided opportunities within and outside of academia based on what you want. Complex subject matter can be communicated through various different modes. Multimodal dissertations allow you to use past work in a way that can be incorporated into your final dissertation. The relationship between the supervisor and student while working through a multimodal dissertation is consistently a very thoughtful and supportive relationship. Programs can be persuaded to change their requirements based on the work of students, supervisors, and faculty members. Scholarly creativity should be encouraged in doctoral education.

6.9 Conclusion

Students in Education are creating multimodal dissertations with combinations of visual, linguistic, gestural, spatial, and audio modes that incorporate visuals in the form of collages, comics, poetry, spoken word, music, hypertext, images, and photographs. Their experiences have led to dissertation awards; other opportunities within the academic world, such as co-authoring and co-presenting; and the ability to use their dissertation work in the classroom. It is evident that the participants' lived curriculum sustained their research and their multimodal dissertation. The institutional requirement challenges the participants faced suggest that there needs be discussion on how to further support these students. One implication for the future of multimodal dissertations is to have designated centers to consult, direct, and aid students who want to do similar work. From these four case studies stems the hope that the number of graduates and multimodal dissertations will only increase in the future.

It is promising that all of the graduate students who created multimodal dissertations have successfully completed their program and have had various employment opportunities afterwards. It is encouraging that these particular graduate students were not necessarily professionally trained artists but still could engage with different modes in creative ways. It is exciting that their multimodal dissertations have a wide audience to engage with. An area of future research would be students who were doing a multimodal dissertation who actually left their program prior to completion and

why. In the future, it would be interesting to see whether there are higher or lower drop-out rates compared to traditional dissertations.

Despite the advantages of multimodal dissertations, a majority of the literature involves a component of written work. I am not suggesting the radical notion of eliminating the traditional dissertation, but I do think encouraging multimodal alternative options to the traditional dissertation can be very rewarding. I think that a majority of my dissertation involves traditional scholarly elements and format, but also it includes multimodality where necessary. In fact, there were times when I did prefer writing instead of designing something with many modes. I was a very fussy creator; the sizes of boxes, layout, and colours had to be consistent, which was very time consuming. In fact, seeing my dissertation grow from 120 pages to 232 pages shows me that I have trained my scholarly mind to share as much as I could about what I know.

The implications of this study are that current and future supervisors can be encouraged to work with students who want to create similar multimodal work and students can feel more confident to explore non-traditional aspects in their dissertation without being entirely lost about how to make it work. Supporting the work done on supervisory pedagogy, the results of this study suggest that frequent communication with their supervisor is key to a graduate student's success. In Education, where it is encouraged to set precedence or to create a seminal piece of work within a field of research, it helps to know that students have crossed boundaries to create original and creative academic works.

This study helps inform the literature and theory of Ph.D. completion, issues in doctoral education, supervisory pedagogy, academic literacies, changes with the dissertation, and scholarly creativity. This study helps to define this type of academic work, providing a language that is quite varied from what is found in the literature.

Future areas of research could involve looking thoroughly through dissertations and producing a content analysis, or interviews with supervisors themselves about their experiences working with graduate students who created non-traditional dissertations. Lastly, an area of future research could be in action research of students who are currently creating multimodal dissertations and whether they complete or do not complete their dissertation. A comparative study of how multimodal dissertations contribute to higher or lower completion rates than traditional dissertations would be interesting.

I know traditional dissertations have value, but I want to allow choice for creating multimodal dissertations in doctoral education programs and have them academically recognized as having scholarly merit. Currently, there are variations to doctoral programs—Doctor of Philosophy (Ph.D.), professional/practice/work-based doctorates, Doctor of Education (Ed.D.)—that are hard to keep track of. At the end of the day I am more concerned with producing a product that helps me learn in substantial ways. It is time to provide choice, guidelines, advice, and multimodal clarity to doctoral students. It is time for doctoral education to become student-centered instead of institution-centered.

I have created a dissertation that is about multimodality and communicated as much as possible through multimodality. This will be the first multimodal dissertation about multimodal dissertations.

Thank you for reading.

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7 Appendices

Appendix A: Semi-structured Interview Questions

1. What is your academic/professional background?
2. Why did you create a multimodal dissertation?
3. Please describe what you did (Please comment on modes and media)
4. What were the affordances and constraints of the modes that you used (e.g. how did they help/constrain the forwarding of your argument)?
5. What resources did you draw on for this dissertation (e.g. background knowledge)?
6. What enabled and/or limited the construction of this dissertation?
7. What were the stages in the process of bringing the dissertation to successful defense?
8. How has your experience been with disseminating your research?
9. What is the reaction from others with your multimodal dissertation?
10. What else could you share for those creating multimodal dissertations?

Appendix B: Letter of Information



Letter of Information and Consent

Project Title

Complex Electronic and Multimodal Dissertations—An Exploratory Case Study of the Opportunities for Multimodality in Graduate Education

Dissertation research by Annie Tran

MA, Education
Western University

Document Title

Letter of Information and Consent

Supervised by Principal Investigator + Contact

Dr. Rachel Heydon, Ph.D., Education

Dissertation Research + Contact

Annie Tran, MA, Education
Western University,

1. Invitation to Participate

You are being invited to participate in this research study about complex electronic and multimodal dissertations because you have successfully defended and completed this in your program.

2. Why is this study being done?

In an era when communication and higher education are rapidly changing, there is much to learn about multimodality and the dissertation; for example, how can multimodality be used to forward

argument, how does multimodality change research in a dissertation, how is technology changing the format of the dissertation? This purpose of this study will address the problem of how to understand how research can be argued, represented and presented in multimodal ways, and how the lived curriculum affects graduate education and the dissertation. This study will contribute to knowledge required to create new opportunities for alternative dissertation formats for future graduate students and will contribute to the literatures concerning multiliteracies and multimodality in higher education and the ways technology and communication are changing.

3. How long will you be in this study?

It is expected that you will be in the study for only 1 day, which will take 1-2 hours.

4. What are the study procedures?

If you agree to participate, you will be interviewed for 1-2 hours, with semi-structured questions. There will be an audio-recording being used, and you can still participate if you do not agree to be recorded. This interview can take place over Skype or telephone. No potentially sensitive or personal questions will be asked. I will also be looking at your dissertations and doing a multimodal analysis.

5. What are the risks and harms of participating in this study?

There are no known or anticipated risks or discomforts associated with participating in this study.

6. What are the benefits?

You may not directly benefit from participating in this study, but information gathered may provide benefits to society as a whole which include creating new opportunities for alternative dissertation formats for future graduate students and will contribute to the literatures concerning multiliteracies and multimodality in higher education and the ways technology and communication are changing.

6. Can participants choose to leave the study?

If you decide to withdraw from the study, you have the right to request your withdrawal of information collected about you. If you wish to have your information removed please let the researcher know.

7. How will participants' information be kept confidential?

Representatives of The University of Western Ontario Non-Medical Research Ethics Board may require access to your study-related records to monitor the conduct of the research. While we do our best to protect your information there is no guarantee that we will be able to do so. The inclusion of your full name, dissertation title and institution will allow someone to link the data and identify you. While we do our best to protect your information there is no guarantee that we will be able to do so. If data is collected during the project which may be required to report by law, we have a duty to report. The researcher will keep any personal information about you in a secure and confidential location for a minimum of 5 years. If the results of the study are published, your name, dissertation title and institution will be used within the publication.

8. Are participants compensated to be in this study?

You will not be compensated for your participation in this research.

10. What are the Rights of Participants?

Your participation in this study is voluntary. You may decide not to be in this study. Even if you consent to participate you have the right to not answer individual questions or to withdraw from the study at any time. If you choose not to participate or to leave the study at any time it will have no effect on your employment status/academic standing. We will give you new information that is learned during the study that might affect your decision to stay in the study. You do not waive any legal right by signing this consent form.

9. Whom do participants contact for questions?

If you have questions about this research study please contact Annie Tran or her Dissertation supervisor (Principal Investigator): Dr. Rachel Heydon.

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

This letter is yours to keep for future reference.

10. Verbal Consent

Do you confirm that you have read the Letter of Information and have had all questions answered to your satisfaction?

YES NO

Do you agree to participate in this research?

YES NO

Do you agree to be audio-recorded?

YES NO

Do you consent to the use of personal, identifiable quotes obtained during the study in the dissemination of this research?

YES NO

Do you consent to the use of unidentified quotes obtained during the study in the dissemination of this research?

YES NO

Do you agree to have your name, dissertation title and institution used in the dissemination of this research?

YES NO

Appendix C: Recruitment E-mail (Other)**Subject Line: Invitation to participate in research**

Hello,

We are looking for authors of multimodal dissertations. A multimodal dissertation employs multiple modes (visual, gestural, tactile, spatial and auditory) in meaningful ways to communicate research. You are being invited to share participants who have completed a multimodal dissertation in a study that we, Annie Tran and Dr. Rachel Heydon are conducting. Briefly, the study is interested about your experiences creating a multimodal dissertation and involves a 1-2 hour semi-structured voluntary interview through Skype or telephone.

If you would like more information on this study or would like to receive a letter of information about this study, please contact the researcher at the contact information given below.

Thank you,

Annie Tran
University of Western Ontario

Dr. Rachel Heydon
University of Western Ontario

Appendix D: Recruitment E-mail (Student)**Subject Line: Invitation to participate in research**

Hello,

We have identified you as an author of a multimodal dissertation. You are being invited to participate in a study that we, Annie Tran and Dr. Rachel Heydon are conducting. Briefly, the study is interested about your experiences creating a multimodal dissertation and involves a 1-2 hour semi-structured voluntary interview through Skype or telephone.

I will be sending one more reminder email in two weeks about whether you would like to participate in research.


If you would like more information on this study or would like to receive a letter of information about this study, please contact the researcher at the contact information given below.

Thank you,

Annie Tran
University of Western Ontario

Dr. Rachel Heydon
University of Western Ontario

Appendix E: Ethics approval


Research Ethics

**Western University Non-Medical Research Ethics Board
NMREB Delegated Initial Approval Notice**

Principal Investigator: Dr. Rachel Heydon
Department & Institution: Education/Faculty of Education, Western University

NMREB File Number: 109044
Study Title: Complex Electronic and Multimodal Dissertations An Exploratory Case Study of the Opportunities for Multimodality in Graduate Education

NMREB Initial Approval Date: March 21, 2017
NMREB Expiry Date: March 21, 2018

Documents Approved and/or Received for Information:

Document Name	Comments	Version Date
Western University Protocol	Received March 15, 2017	
Recruitment Items	Recruitment Email to Student	2017/03/15
Recruitment Items	Recruitment Email to Other	2017/03/15
Letter of Information & Consent		2017/03/15
Instruments	Interview Questions - Received February 15, 2017	

The Western University Non-Medical Research Ethics Board (NMREB) has reviewed and approved the above named study, as of the NMREB Initial Approval Date noted above.

NMREB approval for this study remains valid until the NMREB Expiry Date noted above, conditional to timely submission and acceptance of NMREB Continuing Ethics Review.

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

Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB.

The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Appendix F Links of Multimodal Dissertations

(*in the order of the database)

- A.D. Carson (2017) <http://phd.aydeethegreat.com/>
 Shaw Obasi (2017) <https://soundcloud.com/obasishaw/sets/liminal-minds>
 Amanda Visconti (2015) <http://dr.amandavisconti.com/>
 Nick Sousanis (2014) <http://spinweaveandcut.com/>
 Larisa Segida (2014) <https://mspace.lib.umanitoba.ca/handle/1993/23224>
 Steve Wilcox (2017) <https://praxisgames.itch.io/allergory>
 Alex Galarza (2017) <http://alexgalarza.com/research/>
 Patrick Stewart (2015) <https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0167274>
 Rebecca Zak (2014) <https://www.youtube.com/watch?v=GxYUBM0efso>
 Marta Madrid (2014) <http://0-hera.ugr.es.adrastea.ugr.es/tesisugr/24363108.pdf>
 Spencer Harrison (2010) <http://www.spencerjharrison.com/>
 Daria Loi (2005) <http://dariasuitcase.blogspot.com/>
 Genevieve Cloutier (in progress) <https://genevievecloutier.net/>
 Katrina Foxton (in progress) <https://www.bl.uk/case-studies/katrina-foxton>
 Kari-Lynn Winters (2009) <https://open.library.ubc.ca/cIRcle/collections/ubctheses/24/items/1.0069326>
 Sarah Truman (in progress) <https://walkinglab.org/>
 Zane Zalis (in progress) <http://www.zanezalis.com/>
 Rachel Sanders (in progress) <http://www.rachelksanders.com/texture-exhibition/>

Curriculum Vitae

Name: Annie Tran

Post-secondary Education and Degrees:

Western University
London, Ontario, Canada
2015-2019 Ph.D.

Western University
London, Ontario, Canada
2013-2015 M.A.

Lakehead University
Thunder Bay, Ontario, Canada
2012-2012 B.Ed.

University of Toronto
Toronto, Ontario, Canada
2007-2011 H.B.Sc.

Honours and Awards: Grad Pact '91 Bursary
2015

Related Work Experience Teaching and Research Assistant
Western University
2015-2018

Publications:

Tran, A., & Heydon, R. (in press). Digital technologies and online learning. In R. Heydon (Regional Ed.); W. J. Jacob (Ed.-in-Chief). Set: *Higher education* (Volume: Canada). Bloomsbury Education and Childhood Studies. London: Bloomsbury.

Heydon, R., Cooper, E., Tran, A. (2016, November). Core Concepts from Multiliteracies for Language Teachers and Contemporary Times. *English Language Learning Magazine CONTACT*. 42(4). pp. 82-84. Retrieved from <http://www.teslontario.net/uploads/publications/contact/ContactFall2016>