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Print Literacy Opportunities for Young Children in a Multimodal Literacy Ensemble

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A thesis submitted in partial fulfillment of the requirements for the degree in Master of Education

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PRINT LITERACY OPPORTUNITIES FOR YOUNG CHILDREN IN A
MULTIMODAL LITERACY ENSEMBLE

(Thesis format: Monograph)

by

Lori McKee

Faculty of Education

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Education

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Abstract

This study explored the opportunities for print literacy learning within multimodal ensembles that featured art, singing, and digital media. Study questions concerned how reading and writing were practiced and what learning opportunities were afforded for them during an intergenerational program that united 13 kindergarten children with 7 elders to work through a chain of multimodal projects. Data were collected through ethnographic tools in the Rest Home where the projects were completed and in the children's classroom where project content and tools were introduced and extended by the classroom teacher. Themes were identified through the juxtaposition of field texts in a multimodal analysis. Results indicated that the ensembles afforded children opportunities to improvise and refine their print literacy practices through a process of rehearsal. The study is designed to contribute to the nascent, yet growing body of knowledge concerning print literacy practices and learning opportunities as conceptualized within multimodal literacy.

Keywords

Literacy, early childhood, multimodal, narrative, ethnography

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Dedication

To my Grandmother,
Dolores Dirlam Daudt,
who has taught me so much about life, love, and learning.

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Chapter One

Introduction

The lights dim, and the curtain parts. The conductor raises the baton and pauses for just a moment. With a sudden flick of the baton, the music begins. Each instrument plays its own unique part, sometimes in unison, sometimes in perfect harmony, and sometimes in dissonance with the rest of the ensemble. The harmonic voices are interdependent on each other as they dance along in counterpoint. The tempo changes, and with it the mood is altered. The music swells as one instrument plays a featured melody. All of the instruments rise and fall in support of the harmonic and rhythmic contours. The rhythms drive the music along to its finale. Collectively, the instruments combine together to produce beautiful music by relating to, and supporting one another.

The analogy of music has been widely used to explain the interconnectedness and complexity of literacy teaching and learning (Brandsford, Darling- Hammond & LePage, 2005; Jewitt, 2009a; Sanders & Albers, 2010; Walsh, 2007; Wissman, Costello, Hamilton, 2012). Many authors also apply musical terms to describe the different ways children construct meaning through different media¹ and modes² (Sanders & Albers, 2010; Walsh, 2007; Tierney, Bond & Bresler, 2006; Winters, 2010). Such a metaphor is helpful to me as I consider the literacy learning of my students. As a teacher of early primary students, I have often wondered at the complexity and interconnectedness of the

¹ Media refers to “the means of communicating a message, e.g. paper, computer screen, phone screen, IWB [Interactive White Board], film, camera, musical instrument (Walsh, 2011, p. 105).

² Modes are “the way the message is communicated, e.g. through spoken or written language, image, sound, gesture, movement, time and space” (Walsh, 2011, p. 105).

literacy learning experiences of the children in my class. Each of my students demonstrates an affinity for particular literacy practices and expresses their preferences through unique combinations of various modes. I have watched children sing while they draw or write, act out favourite stories as they play, and talk as they work together to design using a computer program. The children seem to spontaneously “orchestrate” (Jewitt, 2009a, p. 15) traditional modes associated with literacy (e.g. reading, writing, and speaking) with alternate modes of representation (e.g. singing, movement, and digital technologies) as they are acquired and practiced.

The objectives of this study are to explore opportunities for children’s print literacy learning within literacy events³ in multimodal ensembles⁴. This topic is important to study because the terrain of teaching and learning of literacies has changed in the 21st century (Walsh, 2011). The advent of digital and multimodal texts has impacted the ways children produce and construct meaning from texts (Lankshear & Knobel, 2003). The change in technologies calls for a change in pedagogical practices, but traditional literacy practices continue to prevail in many classrooms (Wissman et al, 2012). Before change can be embraced, the “relationship between traditional, print-based

³ A literacy event is “an observed event in which literacy has a role, such as the making of a text, with writing and drawing included in it” (Pahl, 2007, p. 86). In this study, literacy events include multimodal events and practices “to account for the way texts are multimodal” (Lancaster, cited in Pahl, 2007, p. 86). Multimodal texts include those created with digital technologies as well as those created through the other modes of expression including the arts (Sanders & Albers, 2010).

⁴ The term multimodal ensemble “refers to the interrelationships between co-present modes. As the resources of the different modes are combined, meanings are corresponding, complementary and dissonant as they harmonize in an integrated whole” (Jewitt, 2009b, p. 301). “Deriving from music, the metaphor ‘ensemble’ is suggestive of discrete parts brought together as a synthesized whole, where modes, like melodies played on different instruments, are interrelated in complex ways” (MODE, 2012). Further explanation follows in the literature review.

literacy skills and the ‘new basics’ of multimodal, multimedia text analysis and production” (Walsh, 2011, p.v) must be explored.

This study answers a call in the literature to further examine the influence of multimodal experiences on young children’s print literacy acquisition (Binder & Kotsopoulos, 2011). “Studies that document what happens when multiliteracies meet school literacy are needed” (Siegel, 2006, p. 74). This study builds upon Pahl’s (2007) assertion that multimodal practices such as speaking and drawing can be a “way in” to early writing (p.91). The study also follows Walsh’s (2007) findings that multimodal resources can be significant tools for facilitating the acquisition of traditional school literacies.

This inquiry is a case study using ethnographic and narrative methods, focused through a multimodal lens. It is designed to respond to the questions: What opportunities for print literacy⁵ learning are created for young children in a multimodal literacy curriculum? What do children do with print within multimodal literacy events and practices⁶? What are the implications of these learning opportunities and practices for programming for young children? In this exploration, kindergarten children were observed taking part in multimodal literacy events within an intergenerational art, singing, and digital literacies program. This study focuses on the use of print literacies by

⁵ The term print literacies refers to “the reading and writing of some form of print for communicative purposes in peoples’ lives” (Purcell-Gates, Jacobson, & Degener, 2004, p. 26).

⁶ Literacy practices are “the broader cultural conception of particular ways of thinking about doing reading and writing in cultural contexts. The knowledge, experience, feelings, values and capabilities that play a role in reading and writing of texts including the models of conceptions of literacy help by those practising it” (Jewitt, 2009b, p. 299).

children within multimodal literacy events. This investigation hopes to provoke greater understanding of the intersection between print and multimodal literacies (Walsh, 2011) and provide a resource for educators as they combine traditional and new literacy practices within their classrooms.

Chapter Two

Literature Review

The acquisition of literacies is complex and changing in the 21st century. The rate of technological change affecting modes of communication is unprecedented (Walsh, 2011). Technological advancements hold great potential to positively contribute to literacy learning (Tierney, et al, 2006, p. 360). “In early childhood classrooms, however, new literacies and technologies have received a mixed reception” (Wohlwend, 2009, p. 118). The lag in acceptance of new literacies and technologies in some classrooms has reinforced the division in home and school literacies (Walsh, 2007).

This literature review will set the stage for the research study by examining how literacies are constructed through the interrelationships of various modes. In this review, I provide a definition of literacy and literacies. I also discuss how literacies are constructed and enacted through different modes within a multimodal ensemble, and how meaning is changed as it passes between different modes in a semiotic chain. I examine the role of the child in acquiring her/his literacies. Finally, I position the lens for the study, taking into account the back-drop of the current culture. Throughout the literature review, I include the use of the musical metaphor discussed in the introduction. I continue the use of the metaphor to capitalize on the prevalence of musical language in the literature. I also extend the metaphor in hopes that the symbolism within the analogy will serve as a multimodal resource to the reader.

What is literacy?

Within the metaphor of the musical ensemble, literacy is the music. Music involves the interconnectedness of melody, harmony, dissonance, rhythm, dynamics, and tone. Similarly, literacy also involves a complex interrelationship between context and modes of expression. What is appreciated as music depends on the culture of the listeners and the creators of the music. The same can be said of literacy. What counts as literacy is dependent on the cultural context. As a result, many definitions of literacy abound in the literature. With such a diversity of definitions, it is difficult to believe that the term literacy is relatively new in the discourse of education (Lankshear & Knobel, 2003). What is literacy? What are multiliteracies? What counts as valid literacy practices? What does it mean to be a literate person in the 21st century? A discussion of different definitions of literacy follows.

Traditionally, the term literacy has been associated with the development of reading and writing skills (Literacy Alberta, 2012). Reading and writing were taught as separate subjects in school up until the mid 1980s (Stooke, 2010). “Literacy pedagogy has traditionally meant teaching and learning to read and write in page-bound, official, standard forms of the national language” (NLG, 1996). With the changes in society and technological advancements, this definition of literacy has been considered inadequate by some researchers (NLG, 1996).

This traditional definition of literacy fails to reflect the diversity of people or communication needs in current society. The New London Group created the term multiliteracies to account for the changing communication needs and channels within a diverse cultural and linguistic society and to account for the multiplicity of ways or

modes used by people to communicate in a technological age (NLG, 1996). The definitions of literacy and what it means to be literate have developed in response to societal change.

A literate person in the 21st century must be competent in a wide range of literacies in order to construct meaning from traditional print texts and evolving digital technologies (NCTE, 2008). This expanded view of literacies calls for "literacy pedagogy...[to] account for the rapidly increasing fusion of text forms embedded in children's lives by creating new opportunities for learners to communicate using multiple modes of representation in a variety of social contexts" (Kendrick & McKay, 2004, p. 110). These modes include traditional print-based practices as well as newer communicative practices associated with information and communication technologies (Stooke, 2010).

Within a multiliteracies framework, print literacies remain important modes that people use to construct and communicate meaning. The term print literacies refers to "the reading and writing of some form of print for communicative purposes in peoples' lives" (Purcell-Gates, et al, 2004, p. 26). Within this definition of print literacies, reading and writing are grouped together to acknowledge the reciprocity and interdependence of reading and writing acquisition (Clay, 1993). A multiliteracies approach recognizes that print literacies are part of composing and consuming multimodal texts (Wissman, et al., 2012). In this approach, print literacies are not privileged as in past definitions of literacy. Instead, they are viewed as modes of communication within a larger communication repertoire (Sanders & Albers, 2010).

Multiliteracies encompass more than just print literacies and include other literacy practices that are expressed through various modes (Tierney, et al, 2006). Multimodal literacy is “the simultaneous reading, processing and/or writing, designing, producing and interacting with various modes of print, image, movement, graphics, animation, sound, music and gesture” (Walsh, 2011, p. 106). These modes of expression “are interconnected in very complex, multifaceted ways using a plethora of image, sound, and print” (Tierney et al, 2006, p. 361). As people construct meaning, they “orchestrate multiple modalities in composing and consuming a range of texts” (Wissman, et al, 2012, p. 325). This orchestration offers rich potential for literacy acquisition as the different modalities interact within a multimodal ensemble.

The multimodal ensemble

The term *multimodal ensemble* is a metaphor derived from music and “is suggestive of discrete parts brought together as a synthesized whole, where modes, like melodies played on different instruments, are interrelated in complex ways” (MODE, 2012). The term multimodal ensemble has been used to explain how the resources from different modes combine together to represent meaning. The term multimodal ensemble “refers to interrelationships between co-present modes. As the resources of different modes are combined, meanings are corresponding, complementary and dissonant as they harmonize in an integrated whole” (Jewitt, 2009b, p. 301). Within a multimodal ensemble, meaning is constructed through the interrelationships and interconnectedness of various modes.

In order to realize the collective meaning making potential in the multimodal ensemble, different modes must be viewed as “relevant options for creating and

expressing meaning” (Kendrick & McKay, 2004, p. 111). Literacy in the multimodal ensemble:

is not, nor can it be enacted by simply adding another communicative mode to traditional print literacy and calling it “multimodal”. Literacy is entangled, unwilling to be separated from other modes, media and language systems that constitute the very messages that are sent, read, and/or interpreted (Sanders & Albers, 2010, p. 4).

Therefore, “multimodal understandings of literacy require the investigation of the full multimodal ensemble used in any communicative event” (Jewitt, 2008, p. 247). The orchestration and integration of modes within the multimodal ensemble allows for richness within meaning making opportunities.

Reading digital texts on a computer may highlight how modes are inter-connected in the meaning making process. The reader interacts with the text through “the synchronous functioning of the modes of image, movement, colour, gesture, 3D objects, music and sound” (Walsh, 2008, p. 102). The use of iPads adds another mode of expression as the reader interacts with the text through touch-screen technology (O’Mara & Laidlaw, 2011). Meaning is constructed as the reader experiences the interaction of the different modes. Meaning is further shaped through the choice of modes a reader makes, as each mode holds different potential for meaning making, and as meaning moves between modes in a semiotic chain.

Modal affordance.

Within a musical ensemble, each instrument communicates different music or meanings. A melody played by a trumpet sounds different than a clarinet, even when the notes played are the same. The timbre of each instrument provides a different “colour” to the music played. Therefore, the qualities of a particular instrument may make it better suited for playing particular melodies. This is similar to the use of different modes in the multimodal ensemble. The different instruments or modes have particular modal affordances and are used in different ways in particular contexts (Jewitt, 2009a). “Children emphasize certain modes or choose materials for their sensory qualities to make their signs more effectively represent their intended meanings to carry out their social purposes” (Wohlwend, 2009, p. 124). Different modes of expression hold particular potentials and limitations for meaning making (Kress, 2007). Each mode, on its own represents only partial meaning (Jewitt, 2008). In the viewing or reading of multimodal texts, the interconnectedness of modes and the movement of meaning across modes allows for synergistic effects in the meaning making process.

The semiotic chain.

In composing or constructing meaning, children “use and orchestrate a multiplicity of modes (e.g. reading, drawing, discussing) that are made up of semiotic resources in order to interpret and actualize their understandings” (Winters, 2010, p. 2). As meaning is represented and communicated through a series of different modes, a “semiotic chain” is created (Stein, 2008). The movement from mode to mode allows children to transform their understanding. This transformation has also been called transmediation (Siegel, 1995).

Moving from link to link in the semiotic chain is a cumulative (Stein, 2008) and generative process (Siegel, 2006). The representation of meaning changes with the mode of expression. Meaning is extended and enhanced as children draw on different modalities (Kress, 1997). Since there is not a “ready- made link” between modes of expression, the way meaning is made between modes is generative (Siegel, 2006, p.70). The child creates the link when moving meaning across modes. Young children are particularly able to express themselves in various modes:

Unlike older students, schooled to adhere to conventional boundaries between sign systems, young children turn reading and writing into multimodal events involving drawing, talking, singing, writing, and so on. Weaving together symbols of all kinds to represent and convey their meanings makes it possible for them to successfully orchestrate literacy events long before language alone can serve them (Siegel, 1995, p. 457).

Young children seem to naturally move between modes of representation (Kendrick & McKay, 2004), but the ways they move between modes is an individual process (Siegel, 2006). As the child moves between multiple modes, s/he invents a connection between signs, and the generative power of transmediation is realized (Siegel, 1995). When meaning moves through the links of a semiotic chain, the meaning expands and changes as it is rearticulated and recombined through different modes (NLG, 1996). The use of various modes allows children “to transform what they know” (Kendrick & McKay, 2004, p. 125) and “create new meaning” (Walsh, 2007, p. 79). This movement positions children as active designers of meaning.

The role of the child

A multimodal approach positions children as active designers of meaning (Albers & Harste, 2007). The process of design is creative and dynamic. Like the conductor of the musical ensemble who calls for certain instruments to crescendo at a particular moment, children act as multimodal designers who creatively and selectively exploit particular modes for different purposes in diverse contexts (Walsh, 2007). Although children are active in the meaning making process, they are not always aware of their design choices. “Children’s meaning-making is a creative practice in which children make conscious and unconscious decisions concerning the signs of their texts” (Stein, 2008, p. 145). The design choices they make derive in part from their personal experiences.

As children design, frame, and produce texts, they reveal parts of their personal histories and identities (Sanders & Albers, 2010, p. 10). Rowsell and Pahl (2007) suggest that multimodal texts are artifacts, closely “linked to the identity of the sign maker” (p. 392). These texts “can be thought of as an identity text which carries the traces of its author within” (Stein, 2008, p. 83). The view of the child as designer of identity texts poses implications for literacy programming.

Intergenerational programs where children participate with elders in language and literacy activities offer expanded opportunities for communication and expressions of identities (Heydon, 2012; Heydon, 2013). Within these settings, children and elders collaborate to make identity texts and visual artifacts (Heydon, 2013). Similar to Pahl and Kelly’s (2005) experiences with making multimodal texts in a family literacy program, intergenerational programs act as a “third space” as they link school literacy and out-of-

school literacy practices (p.91). Within the third space, the literacy discourses of school (such as print literacy practices) can be linked with out-of-school literacy discourses (such as multimodal literacy practices). The linking of different literacies facilitates the development of literacies and identities.

A type of third space can also be created within the classroom setting. In order to embrace the identities of children and the identity texts created in classrooms, teachers must recognize and build upon their students' "out-of-school literacy practices" (Jewitt, 2008, p. 242). When home literacies are valued, students are able to build upon their "funds of knowledge" (Moll, Amanti, Neff, & Gonzalez, 1992, p. 132) such as the knowledge they gain from their family and cultural backgrounds. The walls of the school become porous when students' experiences and interests inside and outside of the school walls are viewed as assets and the starting point for instruction (Jewitt, 2008).

Unfortunately, students are not always viewed as designers who bring rich resources with them to school. The text-driven standardized curriculum prevalent in North American schools leaves "little or no opportunity for children to bring their own experiences to the school environment, and thus perpetuates a deficit approach to early learning" (Binder & Kotsopoulos, 2011, p. 340). Literacy learning and instruction is impacted by the context of the high-stakes accountability culture.

The backdrop of high-stakes accountability

Literacy and literacy practices are closely equated with politics and power. Definitions of literacy and understandings of literacy practices must be understood against the backdrop of the high-stakes accountability culture in which we live. Like the

backdrop on a stage behind a performing musical group, the back-drop of high-stakes accountability is ever-present in classrooms and schools, as surveillance and standards drive literacy practices (Carrington, 2005). The back-drop of high-stakes accountability influences how music is received by the audience. Similarly, the high-stakes accountability culture impacts what counts as literacy in classrooms and what modes are allowed by children to achieve this literacy.

“The current approach to literacy in North America is through a curriculum that is predominantly text-driven and standardized” (Binder & Kotsopoulos, 2011, p. 340). Provincial assessment measures privilege print literacy over other literacies (Stooke, 2010). To help their students achieve on standardized assessment measures, teachers may revert to “teaching what is testable” (Tierney, et al, 2006, p. 360). As a result, print-centric practices are privileged and prevail over other modes of representation in many classrooms (Wissman et al, 2012). New technologies are sometimes viewed as “an accessory for entertainment or supplemental activities while the ‘real’ curriculum is delivered through traditional paper and pencil activities” (Wohlwend, 2009, p. 118). The classroom construction and uses of literacy legitimize and value particular literacies (Jewitt, 2008). In many cases, what counts as valid literacy practices centre on traditional text forms, and the value of multimodal literacies is not fully recognized.

However, there are some exceptions to this trend. In her book, *Multimodal Literacy- Researching Classroom Practice*, Maureen Walsh (2011) highlights several examples of classrooms that draw on the affordances of traditional text forms as well as newer technologies. The examples Walsh (2011) depicts detail the interconnectedness of different modes within multimodal ensembles. In these examples, the students are able to

use their “funds of knowledge” (Moll et al, 1992, p. 132) to build upon the literacies developed outside of school within the classroom. Although she describes many examples of authentic literacy learning using multiple modalities, Walsh (2011) acknowledges a “tension” between national testing and curriculum and multimodal pedagogy. These tensions are also recognized elsewhere:

As literacy and language arts teacher educators, we continually struggle with the tension between the restrictive culture of political mandates that value traditional approaches to literacy and how we must work to develop a culture of possibilities that engage and build upon the new literacies that children bring with them to class daily (Sanders & Albers, 2010, p. 2).

To create this “culture of possibilities” (Sanders & Albers, 2010) and reconcile the “back to basics” culture with multiliteracies practices and multimodal pedagogies, a redefining of “basic skills” to include reading and writing with multimedia texts may be necessary (Walsh, 2011, p. 95). This redefinition would embrace different subjectivities, languages, and discourses, and would draw on these differences as resources for learning (NLG, 2000). For this redefinition to be accepted by educators and the greater society, a re-culturation of what counts as literacy and valid literacy practices must take place in order to allow for a change in how literacy knowledge is represented and assessed.

The multimodal literacy lens

I position my lens for study within a multimodal literacy framework. Positioned within this framework, I “understand communication and representation to be more than about language” (Jewitt, 2009a, p. 14). I view language as an important mode of

representation, but as only one mode operating within a multimodal ensemble. As such, I believe that communication also involves modes such as image, gesture, posture, sound, and movement (Walsh, 2011). I believe that “representation and communication always draw on a multiplicity of modes, all of which contribute to meaning” (Jewitt & Kress, 2003, p. 277). These modes are interconnected within a multimodal ensemble (Jewitt, 2009b). The meaning expressed is different according to the mode of representation (Kress, 2007). As meaning passes through different modes as links in a semiotic chain, meaning is transformed (Kendrick & McKay, 2004).

I acknowledge that literacy extends beyond reading and writing skills (Purcell-Gates et al, 2004). I accept a broader definition of literacies that includes traditional print-based practices as well as newer communicative practices associated with information and communication technologies (Stooke, 2010). I view the child as an active participant in the learning of literacies (Tierney et al, 2006) and value the resources that the child has gained from sources outside the school (Jewitt, 2008). I view literacies as a social practice where “reading and writing are but elements of larger practices that are socially patterned” (Purcell-Gates et al, 2004, p.29). I believe that the context of the culture influences what counts as literacy in the classroom and how it is enacted (Binder & Kotsopoulos, 2011).

Summary of the Literature Review

Communication modes and media are rapidly changing in contemporary society. In today’s world, “messages are now created, inscribed, sent, and received in multimodal ways steeped in the use of new technologies” (Sanders & Albers, 2010, p. 2). Multimodal ways of communicating extend beyond the use of new technologies and include

expression of meaning through the arts and other modalities (Sanders & Albers, 2010). Current definitions of literacies account for the changing ways people communicate in society (NLG, 1996). While the value of multimodal communication is recognized by many, there is a lag in embracing multimodal forms of communication as integral to literacy learning and expression within schools (Wohlwend, 2009). Just as the meaning expressed through music cannot be fully appreciated without the full orchestration of instruments within the ensemble, so the expression of contemporary literacies cannot be fully realized or expressed through only traditional modes.

Chapter 3

Methods and Methodology

Methodology

This case study was part of a larger study, the *Intergenerational Digital Literacies Project*⁷, and was designed to explore print literacy⁸ opportunities for young children within multimodal ensembles⁹. A case study is a specific example that is used to illustrate a more general principle (Nisbet & Watt, 1984). The examination of the details of a particular case can illuminate a larger phenomenon when the specific meaning making context is taken into account (Dyson & Genishi, 2005). Case study methodology recognizes that lived experience is complex, individual, and dependent on context (Dyson & Genishi, 2005). In this study, case study methodology was useful as I sought to understand the literacy experiences of young children as they took part in creating multimodal texts in an intergenerational program.

In this study, I utilized narrative and ethnographic methods to construct a “case” of the ways print literacies were enacted within the multimodal literacy events in an

⁷ Funded in part by the Advancing Interdisciplinary Research in Singing (P.I. Annabel Cohen, UPEI) as part of the Intergenerational Understanding Theme led by Rachel Heydon, Western University.

⁸ The term print literacies refers to “the reading and writing of some form of print for communicative purposes in peoples’ lives” (Purcell-Gates, Jacobson, & Degener, 2004, p. 26).

⁹ The term multimodal ensemble “refers to the interrelationships between co-present modes. As the resources of the different modes are combined, meanings are corresponding, complementary and dissonant as they harmonize in an integrated whole” (Jewitt, 2009b, p. 301). “Deriving from music, the metaphor ‘ensemble’ is suggestive of discrete parts brought together as a synthesized whole, where modes, like melodies played on different instruments, are interrelated in complex ways” (MODE, 2012).

intergenerational program (Dyson & Genishi, 2005, p. 10). This case study took place within an intergenerational program in order to capitalize on the powerful opportunities that these programs hold for promoting communication and identity options for participants (e.g., Heydon 2012; Heydon, 2013). I utilized narrative methods to investigate the communication experiences of children moving between different modes of expression (Clandinin & Connelly, 2000). I employed narrative and ethnographic methods to locate the investigation within particular times, places, and situations (Clandinin & Connelly, 2000; Dyson & Genishi, 2005). Narrative and ethnographic methods were useful for this study because they recognize the complexity of lived experience (Clandinin & Connelly, 2000; Dyson & Genishi, 2005) and therefore offered helpful ways to account for the interconnectedness of modes of communication within a multimodal ensemble (Jewitt, 2009b).

Methods

In this section, I provide a description of each of the data sources, the participants and recruitment procedures, and the data analysis procedures. This study uses the same data sources and participants as the Intergenerational Digital Literacies project. In addition to the data sources used within the Intergenerational Digital Literacies project, I also used a reflexive journal. The data analysis procedures for this study closely mirror those used in the Intergenerational Digital Literacies study, but are guided by the particular research questions for this study. In this section, I also address issues of trustworthiness and the ethical considerations for study.

Data Sources

Due to the complexity of interactions in a multimodal environment, qualitative data were collected through multiple data sources (Jewitt & Kress, 2003). Data sources included photos taken of artifacts, field texts including transcriptions from audio and video taped interactions in the intergenerational classes, informal conversations with participants about artifacts constructed, interviews, field notes describing interactions in classes, and my own reflexive journals detailing my reflections throughout the research process. Since this study was part of the Intergenerational Digital Literacies Project, I worked with other members of the research team to collect data. I describe each of the data sources in turn.

Photos.

Together with other members of the research team, I took photos of artifacts created within the intergenerational program. The term artifacts refers to the multimodal texts that the children created during the intergenerational classes. A multimodal approach positions the child as an active designer of meaning (Albers & Harste, 2007) who creates texts that carry traces of her/his identity (Pahl, 2007). Therefore, the multimodal artifacts created within the intergenerational art, singing, and digital literacies program were “material instantiations of students’ interests, their perception of audience, and their use of modal resources mediated by overlapping social contexts” (Jewitt, 2008, p. 259). The photos of these artifacts provided important information about the maker of the text (Rowse & Pahl, 2007) that helped me contextualize the data gained from other sources (Clandinin & Connelly, 2000).

Audio and video taped transcriptions.

Following ethnographic case study methods (e.g., Dyson & Genishi, 2005), all aspects of the Intergenerational Digital Literacies Project were documented through videotaping and/or audiotaping of classes. Since meaning is always represented and communicated through a multiplicity of modes (Jewitt & Kress, 2003), the video and audiotaping allowed for a more accurate representation of the multimodal interactions within the program (Clandinin & Connelly, 2000). The audio and video were transcribed to “capture [the] fine-grained details” within the interactions (Dyson & Genishi, 2005, p. 67). The audio and video recordings and transcriptions aided me in my analysis by allowing me to “revisit what was said [and done] at the research site” (Dyson & Genishi, 2005, p. 70). Audio and videotaping also allowed me greater freedom to participate in the interactions during the program (Connelly & Clandinin, 2000).

Informal Conversations.

Together with the members of the research team, I engaged the participants in informal conversations about the creation of their multimodal artifacts before, during, and after each of the intergenerational sessions. Since young children frequently talk “aloud to themselves while composing texts” (Dyson & Genishi, 2005, p. 67), informal conversations allowed for a timely and natural way to clarify what children were thinking as they created multimodal texts. The informal conversations with children and elder participants allowed me to see the creation of artifacts through “the lens of the participants” (Dyson & Genishi, 2005, p. 75). The informal speaking and listening nature of the conversations allowed the children and elders to represent their experiences in

different ways than they might have within a more formal interview context (Clandinin & Connelly, 2000).

Interviews.

Following the cycle of lessons, semi-structured interviews of participants were conducted. Most interviews took place individually with the participant and member(s) of the research team. Some interviews took place with pairs of research participants and member(s) of the research team. Some of the child participants were interviewed in pairs because they were very shy and it appeared that they would be more comfortable with another child in the interview. Ron and Marilyn, a married couple, were the only elder participants interviewed together. They were interviewed together because it seemed more convenient for them as they arrived at the interview site together.

The interviews focused on multimodality and multimedia. As part of the interview, adult participants were asked to describe their perspective on the value of communicating through digital technologies as well as through art and singing activities (See protocol in Appendix A). The child interview protocol was designed to uncover what the child thought about her/his experiences using various modes and media, and about her/his feelings about participating in the intergenerational multimodal curriculum project. The original design suggested using a puppet to facilitate discussion (See protocol in Appendix B). After interviewing several children, it appeared that the use of the puppet was distracting to the children, so during the remainder of the interviews, I asked the same questions in the protocol (Appendix B), but without the puppet. The interviews provided a “supplement to field notes and transcriptions that [captured] the participants’ views in their own words” (Dyson & Genishi, 2005, p. 78).

Field notes.

I kept both descriptive and reflective field notes (Dyson & Genishi, 2005). In my descriptive field notes, I recorded details that described the context for each of the intergenerational art, singing, and digital literacies sessions (Clandinin & Connelly, 2000). I documented the time, type of activity, seating arrangement, child-elder partnerships, and the number of participants present in each session (Dyson & Genishi, 2005). In my reflective field notes (Dyson & Genishi, 2005), I documented my perceptions of the interactions between participants, as well as my perceptions of the level of student comfort and engagement with the activities.

Journal.

I kept a reflexive journal of my experiences as a beginning researcher throughout the study. In my journal, I “turn[ed] inward” (Clandinin & Connelly, 2000, p. 87) as I reflected on my research observations and experiences. I wrote freely as I contemplated, interpreted, and critically evaluated my emerging understandings. Since ethnographic data is filtered through the lens of the researcher, the use of the reflexive journal helped elucidate my values and biases as I acted in the role of researcher (Cohen et al, 2011).

Participants

As previously mentioned, this study was part the Intergenerational Digital Literacies Project. The participants for this study were participants in the Intergenerational Digital Literacies project. The principal of an elementary school approached the Principal Investigator in the Intergenerational Digital Literacies project to study and support the school staff in the design and implementation of an intergenerational multimodal literacy curriculum project. The participants included two

teachers and the principal from the school, one class of Junior and Senior kindergarten students, a small group of Grade 8 helpers, and a group of elder adults that lived in the community.

Two teachers volunteered to take part in the Intergenerational Digital Literacies project, a part-time kindergarten teacher, and the special education resource teacher for the classroom. The teachers and principal participants were also collaborators in the design and implementation of the intergenerational art, singing, and digital literacies curriculum. The teachers approached the parents of the children in one Junior and Senior kindergarten class (with 16 students) to obtain consent for their child's participation in the study. Thirteen out of 16 students in the class were participants in the research study. The kindergarten students ranged in age from approximately 3 to 6 years old. The teachers also approached the parents of a small group of Grade 8 students to assist the children and elders when working with the iPads during one intergenerational session. All six Grade 8 student helpers were also participants in the research study.

Participants for this project also included elder adults that lived in the community. The elder participants were connected to the Rest Home through their participation in recreational activities provided by Rest Home staff, but they did not live in the extended care facility. A retirement home staff member recruited adult participants for the Intergenerational Digital Literacies program, and a member of the research team invited the program participants to also be research participants. Seven out of 10 elders who participated in the intergenerational program were also participants in the research study. All teachers, students, and elder adults participated in the multimodal literacy program even if they did not wish to take part in the study.

Research took place in a community room at an elder care facility in rural Southern Ontario. The child participants traveled to the research site bi-weekly with their teachers. The length of each session was approximately 1.5 hours. Data were also collected in the kindergarten classroom between the intergenerational classes when project content and tools were introduced and extended by the classroom teacher. Observational data were collected 6 times over the course of 4 months (four intergenerational sessions and 2 classroom observations).

Data Analysis

Following common methods for qualitative research, data analysis was inductive and on-going, rather than deductive and sequential (Cohen et al, 2011). I archived and sorted the data by reading and re-reading the field texts searching for emerging “patterns, threads, tensions and themes” (Clandinin & Connelly, 2000, p. 133). I utilized information from my field texts (audio and videotape transcriptions, photos, field notes, conversation, interviews, and journals) and constructed interim texts and research texts (Clandinin & Connelly, 2000). The research texts were constructed as “portraits” (Clandinin & Connelly, 2000, p. 163) of print literacy opportunities within literacy events in multimodal ensembles. The portraits of print literacy opportunities were situated within a particular time, place, and milieu (Clandinin & Connelly, 2000; Dyson & Genishi, 2005).

The units of analysis in the study were the different literacy events within the intergenerational art, singing, and digital literacies program (Dyson & Genishi, 2005). I looked for ways that print literacies were included and used by the children as they constructed multimodal texts. My analysis of the data was guided by my research

questions: What opportunities for print literacy learning are created for young children in a multimodal literacy curriculum? What do children do with print within multimodal literacy events and practices¹⁰? What are the implications of this for programming for young children? As I analyzed and interpreted the data, I juxtaposed the photographs of texts next to the interview transcripts, field notes, and video (Iannacci, 2005). In interpretive research, data collection and analysis is mediated by the researcher's life experiences (Dyson & Genishi, 2005). Although I utilized reflexive journals to expose my own partialities, my interpretations and analysis remained "nested" within my experiences (Clandinin & Connelly, 2000, p. xvii).

I wrote interim texts to mediate the field texts and research texts. I conducted member checks with key participants to share emerging themes to further develop my understandings (Clandinin & Connelly, 2000). The key participants clarified aspects of the interactions that were unclear in the data and verified the themes identified. During the member checks, the key participants agreed with themes presented; no disagreement with themes was noted. From the interim research texts, I composed "narrative portraits" (Clandinin & Connelly, 2000, p. 163) of print literacy opportunities within literacy events in multimodal ensembles.

¹⁰ Literacy practices are "the broader cultural conception of particular ways of thinking about doing reading and writing in cultural contexts. The knowledge, experience, feelings, values and capabilities that play a role in reading and writing of texts including the models of conceptions of literacy help by those practising it" (Jewitt, 2009b, p. 299).

Trustworthiness

In qualitative research, the integrity of the research is determined through measures of trustworthiness (Moss, 2004). The language and criteria for trustworthiness in narrative research are under development in the research community (Connelly & Clandinin, 1990; Clandinin & Connelly, 2000). Riessman (1993) draws on persuasiveness, coherence, and the pragmatic usefulness of the text to evaluate the trustworthiness of narrative research. Ellis (2004) recommends verisimilitude to evaluate if the work is valid; a work is considered valid if it “evokes in readers a feeling that the experience described is lifelike, believable and possible” (p. 124). Some scholars argue that “just because a story or narrative is compelling, plausible, lifelike, seemingly authentic, and so on, it does not follow that it is necessarily true” (Schwandt, 2007, p. 313). In order to mediate these concerns, qualitative researchers are encouraged to act reflexively, conduct member checks to ensure that the participants are faithfully represented, collect data over a sustained period of time, and triangulate data from multiple sources (Woods, 2005).

To promote trustworthiness in this study, I endeavored to be “wakeful, and thoughtful, about all of [my] inquiry decisions” (Clandinin & Connelly, 2000, p. 184). I acted reflexively as I considered how my experiences, beliefs, values, and biases shaped my inquiry (Creswell & Miller, 2000). I conducted member checks with participants to help me understand the interactions from the perspective of the participants. I incorporated “thick descriptions” of the setting and participants in order to clearly explain the context for study (Creswell & Miller, 2000). I sustained my participant observation for one cycle of activity in the Intergenerational Sessions at the Rest Home. I employed

multiple methods so that data could be triangulated, and themes could be identified (Cohen et al, 2011, p. 462). I shared my reflections and discussed emerging themes with other members of the research team.

Ethics

The study was part of the Intergenerational Digital Literacies project. Since the methods involved human participants, the study was subject to ethical review by the University (Appendix C) and the participating School Board. The Rest Home did not require a specific ethics approval process. Adult participants and parents of child participants were informed of the nature and scope of the study and invited to participate. Elder participants were all competent and able to give their own consent for participation in the study. Participants were not anonymous as they often identified their first names on their multimodal artifacts. In order to protect the identity of the participants, identifying information that the participants included on the artifacts such as last names or the name of the school were masked in the data. Pseudonyms were used for the teacher participants to protect the location of the site. Data from all sources was kept confidential.

Summary

As communication technologies have developed in the 21st century, the definition of literacy and literacies has changed. An expanded definition of literacies includes traditional print-based practices as well as newer communicative practices associated with information and communication technologies (Stooke, 2010, p. 9). Drawing from a multimodal literacy framework, this study takes the view that children actively participate in the meaning making process (Albers & Harste, 2007) as they draw on language as well as other interconnected modes of representation to communicate (Walsh, 2011) within

multimodal ensembles (Jewitt, 2009b). The different modes of expression allow for meaning to be transformed as it passes through different modes as links in a semiotic chain (Kendrick & McKay, 2004). This study takes the view that literacies are a social practice (Tierney et al, 2006) and believes that the context of the culture influences what counts as literacy in the classroom and how it is enacted (Binder & Kotsopoulos, 2011). This study relies on narrative and ethnographic methods to construct a “case” of print literacy opportunities for young children within multimodal literacy ensembles (Dyson & Genishi, 2005).

Chapter 4

Data Analysis

This study was designed to explore the opportunities for print literacy learning and practices within multimodal ensembles that featured the use of singing, art, and digital media through the use of iPads. Study questions concerned how reading and writing were practiced and what learning opportunities were afforded for them during an intergenerational program that united kindergarten children with elder participants working through a chain of multimodal projects. The data suggests that there were many opportunities for print literacy acquisition. These opportunities arose in tangent with the singing, art-making, and digital technologies. Along with the opportunities for print literacy acquisition, there were occasions when opportunities might have been further extended. In this chapter, I display the data that highlights the opportunities for print literacy acquisition as well as the data that shows events where opportunities for print literacy acquisition could have been expanded. I present the print literacy opportunities as a rehearsal for young children acquiring and refining literacy practices within multimodal ensembles.

The Rehearsal

The data featured multimodal literacy events as a rehearsal for print literacy acquisition. This is similar to a musical rehearsal that allows musicians to interact with the music on the page and interpret the music for performance. Just as a rehearsal allows musicians to practise their instruments to become more proficient at playing the written music, the multimodal literacy events afforded children opportunities to practise and

refine their print literacy practices with the support of a more proficient language user. In addition to providing opportunities for practise, musical rehearsals also allow for melodies to be improvised and interpreted through choices of instrumentation and dynamics. Likewise, the multimodal literacy events afforded opportunities for children to extend their print literacy practices through a process of innovation and improvisation.

The following is a descriptive account of print literacy opportunities for children within the rehearsal. I first present the data that illustrate opportunities for children to practise and refine their print literacy practices. Next, I show the data that exemplify opportunities for children to improvise and extend their print literacy practices. Finally, I show examples from the data where opportunities for print literacy acquisition might have been extended. Within each part of the rehearsal, I include “portraits” of the of print literacy opportunities during the different literacy events.

Within the portraits, I have embedded data from a variety of sources including photos, audio transcriptions, video transcriptions, and excerpts from my Journal. I have used direct quotes including the original syntax wherever possible. In cases where the original syntax made it difficult to understand the interaction, I have inserted text within square brackets. I have also used square brackets to identify non-verbal communication such as gestures. I use italics to represent the words expressed through song. I have masked the areas on photos where the participants have included identifying information such as the school name or surnames in order to protect the identity of the participants. I have used pseudonyms for the names of the teachers to protect the location of the site. Throughout the portraits, I refer to the participants by their first name because this is how the child and elder participants addressed each other in the program. I also refer to the

teachers and principal by first name within the portraits. While the children did not refer to the school staff by first name, many of the elder participants referred to the teaching staff by first name due to personal connections through church and other community involvement. I use the first names of all participants to reflect the closeness of this tight-knit, rural community which was reflected in many interactions.

Opportunities for refinement through repetition and practise.

The data suggest many opportunities for children to refine early print literacy skills through repetition and practise during the multimodal literacy events. The multimodal projects provided opportunities for children to practise literacy skills that they knew or could approximate. These opportunities were evident within the activities related to art-making, creating digital storybooks, and singing.

Boys and girls, try to write your name on it, okay?- Julia (Nov. 12, 2012).

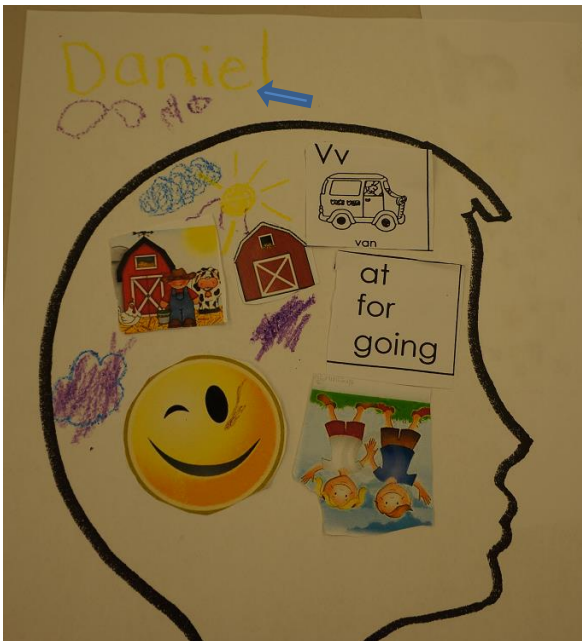
In the art-making activities, the teacher, Julia frequently reminded students to write their names on their work. The teacher's direction to write their names provided children with opportunities to practise and refine print literacy skills. Julia did not expect that all students would be able to write their names independently. She offered various supports for her students when writing their names. These supports were made available for all students who needed help, but they were particularly used with the students who were in Junior kindergarten.

Daniel was one of the students that Julia supported in writing his name. Daniel was a Junior kindergarten student who was reluctant to write letters or draw pictures. Julia supported Daniel's efforts to write his name by writing his name with a yellow

crayon on his artwork. In many cases, when given a model written in yellow crayon, the children in the class traced over the yellow model to practise their letter formation.

Daniel used the support of the yellow crayon model in a different way. He wrote his name underneath Julia's model using approximate shapes for letters. Figure 4.1 shows Julia's model written in yellow crayon and Daniel's attempts to write his name under the model.

Figure 4.1. Songs in My Head by Daniel



Julia's prompts for the students to write their names in art-making lessons provided students with opportunities to refine their print literacy practices with the help of their elder partner. For example, when Julia gave the instruction to write their names, Tyson, a kindergarten student, immediately started writing his name from right to left. Figure 4.2 shows Tyson's initial attempt at writing his name (SYT). Before he had finished writing his name, Tyson recognized that he had made an error. He appealed for help non-verbally to Marilyn, his elder partner. Marilyn responded by pointing to the

paper from left to right and saying, “Can we fix it and go in this direction...like so?” (Nov. 12, 2012). Figure 4.2 shows how Marilyn continued to support Tyson as he was refining his ability to correctly write his name by using the correctly formed T that Tyson had written in his first attempt, and writing the remainder of Tyson’s name (YSON) in pencil. Tyson traced over Marilyn’s pencil model with a black crayon.

Figure 4.2. Tyson’s Heartmap



“That’s in my name too!”- Talon (Oct. 29, 2012).

As children wrote their names to identify their artwork, they noticed similarities in spelling between their names and the names of other people working near them. For example, Talon recognized the similarities between his name and his elder partner’s name after they had both written their names on their artwork. Figure 4.3 shows Talon and Ron’s names in print on their collages. Talon’s elder partner, Ron, explained how Talon noticed the similarities between their names:

My little buddy looked at his name and my name and he pointed to my name... “o-n” just like in my name and he went to his work and his name is Talon. He said there’s the “o-n” the same in my name and in [his] name. (Oct. 29, 2012).

The writing of names on the artwork sparked an opportunity for Talon to practise identifying letters that he knew from his name in different words.

Figure 4.3. Talon and Ron’s Collages



The multimodal art activities also provided children with opportunities for children to practise writing words other than their names by using text in the environment as a model. Figure 4.4 shows how Zachary copied the words HOHOHO on his Christmas card following the model on the Christmas stationary provided, adding an extra “HO” at the end. In the intergenerational sessions, Julia did not specifically prompt students to use the words around them to assist them in their writing, and it appears that Zachary decided to use the text on the stationary as a model spontaneously. When I asked Zachary to read what he had written, he said that he did not know what the words said. Although Zachary could not read the message that his text conveyed, the letters on the stationary provided a

model for Zachary to rehearse his print literacy practices by forming letters and reinforcing his understandings of print concepts.

Figure 4.4. Zachary's Christmas Card



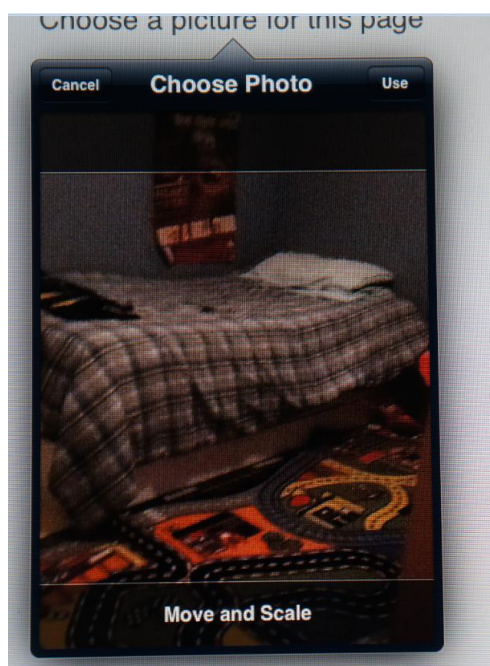
“Hi, I love jumping on my bed!”- Karl (Nov. 22, 2012).

The use of iPads also provided students opportunities for oral language rehearsal as the children practised what to say before recording their oral text. When teaching the children how to use the Pictello app¹¹ to create a digital storybook in the classroom, Julia prompted each student to orally practise their text before recording. The opportunities for oral language rehearsal allowed each student time to compose their oral text while

¹¹ The Pictello app is an app designed for use with iPads to create talking photo storybooks. The kindergarten children created photo banks of pictures with their families at home and with their teachers and peers at school. The children used the text-to-speech application of the app to read the title of their book (e.g. All About Koleson) and used the voice recording capability of the app to record a text for the photos that they selected from their photo bank. As the children were introduced to the app at school, they created a page for their digital storybook. The children continued adding pages to the same digital storybook during the session at the Rest Home.

looking at the photo they had chosen. The oral texts were often connected in meaning to the visual text. For example, in the classroom, Karl selected a picture of his room for his digital storybook. Figure 4.5 displays the picture of Karl's room that Karl had selected from the bank of photos he had taken with his family at home and stored on the Pictello app. When composing and practising his text in the classroom, Karl looked down at the picture and composed his text saying, "Hi, I love jumping on my bed!" (Nov., 22, 2012). After he had composed and rehearsed his text, he recorded his oral text and repeated the rehearsed text exactly. After recording, Karl listened to his text while looking at the photo he had chosen. This gave Karl opportunities to receive the text he had created through both audio and visual modes.

Figure 4.5. Photo of Karl's Room on Pictello App



The children also had opportunities to rehearse their oral texts before recording as they created pages for their digital storybook during the session in the Rest Home. The

opportunity to practise saying their oral text before recording allowed children to refine their ability to clearly express their story. For example, Talon had an opportunity to practise his articulation of his oral text so that it would be more easily understood when recorded. The following is an excerpt of the interchange between Talon and his elder partner Ron, as Talon rehearsed his oral text:

Talon: That's all of us. [very difficult to understand, almost unintelligible]

Ron: That's sofas?

Talon: That's all OF us. [points his finger to the ceiling, then points to the lower right corner of iPad] (Nov. 26, 2012).

When Ron did not immediately understand what Talon had said when rehearsing his oral text before recording, Talon rehearsed his text again. In order to clarify his message, Talon spoke more slowly, articulated his words with greater care, and modified his expression and intonation. Talon further used the opportunity to practise and refine his oral text by pointing to the image on the iPad to help him convey his meaning. Figure 4.6 shows how Talon pointed to the picture on the iPad to assist him in conveying his meaning to Ron as he composed and practised his oral text before recording.

Figure 4.6. Talon Composing and Rehearsing his Oral Text



Am I doing this right?- Ron (Nov. 12, 2012).

Several times throughout the sessions at the Rest Home, elder participants asked me if they were supporting the children in the “right” way. On more than one occasion, Ron called me over to where he was working with Talon and asked me about how the children learned (Nov. 12, 2012) and what was specifically expected of them academically (Oct. 29, 2012). As a retired school principal, Ron was aware of the burden of curricular expectations and wanted to do his best to support the children as they participated in the various activities. Ron’s desire to support the children in the “right” way served as the impetus for an opportunity for Talon to practise his print literacies. Ron was worried that Talon did not recognize his name when Ron wrote TALON in capital letters to label Talon’s art work (See Figure 4.7). Ron called me over and asked, “Am I doing this right?” (Nov. 12, 2012). I came over to help clarify the situation:

Lori: How do you spell Talon?

Talon: I don't have this. [points to A in his name that Ron wrote]

Lori: Ohhhh! [to Ron] You know what I think...I wonder if it's a capital, if he's used to seeing it like a capital T and lowercase. Do you want to write your name Talon?

Talon: It goes like this.

Lori: Okay. Show us how.

Ron: You show us.

Talon: T [looks up at Lori then looks at Ron]

Lori: T....yep. [Talon writes a T].Yes, and then what?

Talon: A circle. [draws circle]

Lori: Circle.

Talon: Then this. [draws a vertical line to make an a]

Lori: Yes.

Talon: That's how we write...

Lori: That's the a. That's a little a, right?

Talon: Um...O [draws an O]...O...[looks at it] The...[looks closer, looks back at where Ron had written his name in capitals and points to it]...O, then....

Lori: What's the last-

Ron: What's the next letter?

Talon: Ummm

Ron: The last letter in your name?

Talon: [writes something on page and looks at Ron]

Lori: Is it an N? (Nov. 12, 2012)

This interaction reflects an opportunity for Talon to practise his emerging understandings of print literacies as he writes his name. Talon's attempts to write his name during the interaction recorded above can be faintly seen in a blue pencil crayon in the lower right quadrant of Figure 4.7.

Figure 4.7. Talon's Name Written by Ron

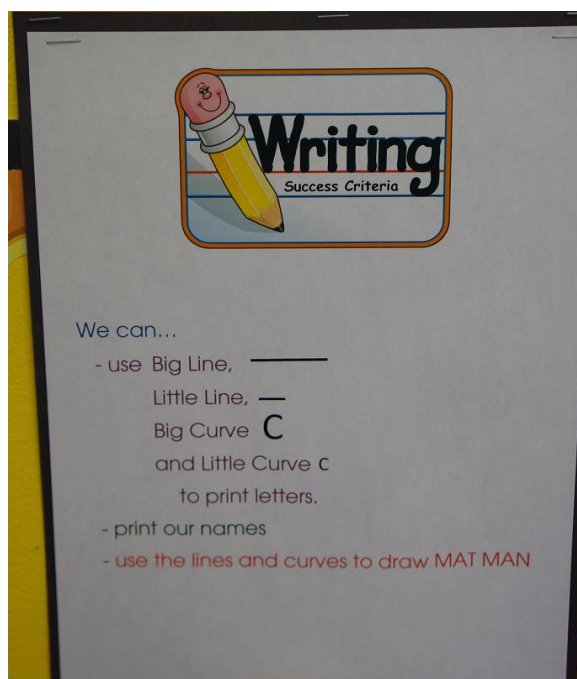


Figure 4.7 further shows opportunities for Talon to practise his early literacy skills. Meaning on Talon's heartmap is represented through a combination of text forms and visual images. Talon drew pictures to represent his meaning, and some lines (the orange strokes) may represent letter-like forms. Ron labelled the sections TALON and TRUCK, and Julia labelled MOM and DAD using the yellow crayon in the upper right quadrant. The visual images and text forms work together to convey meaning. In the creation of his heartmap, Talon practised his understanding of concepts of print, letter formation and identification as well as reading and writing his name.

“Mat Man is an easy way to help to do us do our writing.”- Julia (Nov. 6, 2012).

Within the multimodal projects, Julia selected pedagogical practices that allowed children to rehearse and refine their print literacies. Julia encouraged the children to use “Mat Man”¹² techniques in their drawing and in their writing. Figure 4.8 shows a poster that was hanging in the “Writing Centre” in the classroom and highlights how the instruction of drawing techniques was closely related to writing practices through the use of Mat Man. The different lines used in forming Mat Man correspond with the different strokes required for standard letter formation.

Figure 4.8. Writing Success Criteria



¹² Mat Man is a character used within the Handwriting Without Tears® program. Mat Man was created to teach readiness skills related to “body awareness, drawing & pre-writing, counting, building, socializing & sharing” (Handwriting Without Tears®, 2013).

There were many examples of Mat Man being used in the children's classroom in different locations using various media to support children when drawing people, representing the letters in their names, and when creating works of art. Figure 4.9 shows a Mat Man that Julia had drawn, coloured, and posted in the Writing Centre to support children's writing practices. The materials that Julia used to create the Mat Man (crayons and paper) were available for use by the children in the Writing Centre during playtime. Figure 4.10 shows an example of a Mat Man that Julia had painted and hung near the paint easels to support the children in their art practices. Again, the materials used in the creation of this Mat Man model for Art were available in the Painting Centre.

Figure 4.9. Mat Man Drawn by Julia

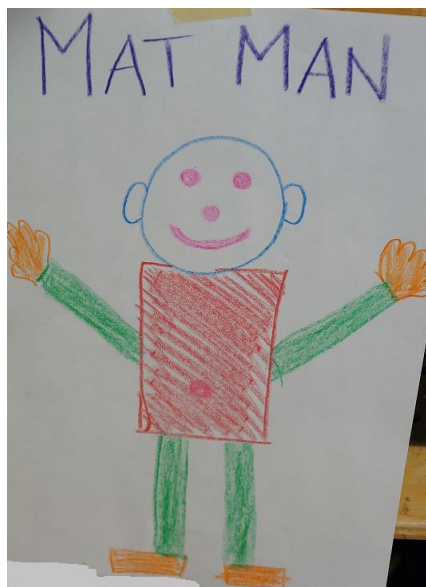


Figure 4.10. Mat Man painted by Julia



When I visited the school, there was a special display of Mat Man pictures in the hallway outside the classroom. Figure 4.11 shows how the children used various art media to create a Mat Man using pre-cut shapes. Each of the children's Mat Man pictures on display also featured the child's name formed with Mat Man blocks. Each of the blocks correspond with the different curves, straight lines, and dots required to create a Mat Man and also to create letters using standard form. Figure 4.11 shows how the instruction of art and letter formation was connected in the classroom literacy practices.

Figure 4.11. Mat Man Created With Art Media and Blocks Used to Spell Owen's Name



Julia referred to Mat Man to encourage the children to extend their details in drawing as well as to develop their writing skills. Julia modelled how to draw a Mat Man step by step in the classroom as she prepared the children for an art-making session at the Rest Home:

Julia: I **do** have a mom and she's very important to me. So Miss K's going to draw a Mat Man, so I'm going to do a circle for my face, and a rectangle for my body, sticks for my arms and my legs...

Child: And hands.

Julia: Yep, I gotta draw my hands....

Julia: ...my eyes, my nose, my mouth and I'm going to put some curly hair 'cause my mom has long curly hair.

Koleson: [unintelligible]...like that?

Julia: ...and there's a skirt on her too....that I could draw in. And I need a belly button too, you're right. You always need a belly button on your Mat Man. So there's my mom!

Figure 4.12 shows the heartmap that Julia created with the children during the classroom lesson. Several examples of Mat Man can be seen that are all visually very similar.

Figure 4.12. Julia's Heartmap



Julia created her heartmap (Figure 4.12) as a model for the children so that they would have experience with the activity before going to the Rest Home session. In addition to providing an example of using Mat Man, Julia also modelled other print literacy practices. In her heartmap, she modelled that pictures (e.g. picture of the church) and text (e.g. title of the book) represent meaning. She also modelled that there is a relationship between visual images and text, and that these modes can interact to represent meaning (e.g. picture of the school with the school name on it, labelled with the words "Our school"). Julia also modelled writing her name and giving a title to her work.

Julia encouraged the children to use classroom literacy practices such as Mat Man during the program at the Rest Home. Julia showed the image of her completed heartmap

(Figure 4.12) to the elders at the Rest Home when explaining the art lesson to them. She introduced Mat Man as a way that the kindergarten children were learning to make people, and encouraged the children to use Mat Man in their artwork. Sheri, a Resource Teacher¹³ who accompanied the children to each intergenerational session, also encouraged the children to use Mat Man during the session at the Rest Home. The following interaction details how Sheri provided an opportunity for Karl to develop his print literacies through singing during an art lesson as she encouraged Karl to draw a figure step by step by singing a Mat Man song from the Handwriting Without Tears[®] program:

Sheri sings:

Mat Man, it's time to build you from your head down to your feet [points to head]

Mat Man, it's time to build you,

We'll take it piece by piece.

One head [points to head]

To hold your brain

Do you have a head?

Karl: [Nods]

Sheri sings:

Two eyes so you can see [points to eyes]

¹³ In her position as Resource Teacher at the school, Sheri worked with students of all age groups who required additional assistance to work within the classroom. Within this class of kindergarten students, Sheri worked with several students that required additional support with expressive language.

[Karl draws, Martha leans over to see]

Sheri: eye?

Sheri sings: *One nose to smell and blow* [points to nose]

[Sheri pauses while Karl draws]

One mouth to talk and eat [points to mouth]

[Sheri pauses while Karl draws]

Two ears so you can hear [tugs on her ears]

[Sheri pauses while Karl draws, tugs on ears again]

One body for your insides [hands on ears still]

[Sheri pauses while Karl draws]

Two arms so you can reach [stretches out arms]

[Sheri pauses while Karl draws]

Karl: There's a long arm!

Sheri: That is a long arm.

Sheri sings: *Two hands to clap the beat*

[Sheri pauses while Karl draws]

Two legs so you can stand

[Sheri pauses while Karl draws]

Two feet so you can walk

[Sheri pauses while Karl draws]

Oh, no, we forgot, your...

Karl: Belly-button.

Sheri sings: *Belly-button spot.*

[Sheri pauses while Karl draws] (Nov. 12, 2012).

Sheri's use of the Mat Man song highlights how the modes of music and gesture were used to facilitate Karl's attempts to construct meaning through drawing. Sheri sang the song line by line with the accompanying hand gestures, pausing to allow Karl time to draw the body part mentioned in the song. Sheri's singing of the Mat Man song supported Karl in his writing practices by encouraging him to extend his writing by adding details to his visual text when drawing. Figure 4.13 shows the Mat Man that Karl created as Sheri sang the song in the upper left quadrant of heartmap. The other Mat Man figures that Karl created without direct support can also be viewed in this image.

Figure 4.13. Karl's Heartmap



Karl's opportunities to practice print literacies as he created his artwork were supported through Mat Man techniques and were also supported in other ways. Figure

4.13 displays several examples of how Karl's print literacy practices were supported by different adults as he represented the things that were important to him on his heartmap. Karl's attempts to represent meaning were supported by his elder partner Martha who labelled the images drawn by Karl. Karl's attempts at writing his name were also supported by an adult who dotted the letters of his name so that Karl could trace them. Adults supported children in various ways as the children rehearsed their print literacy practices.

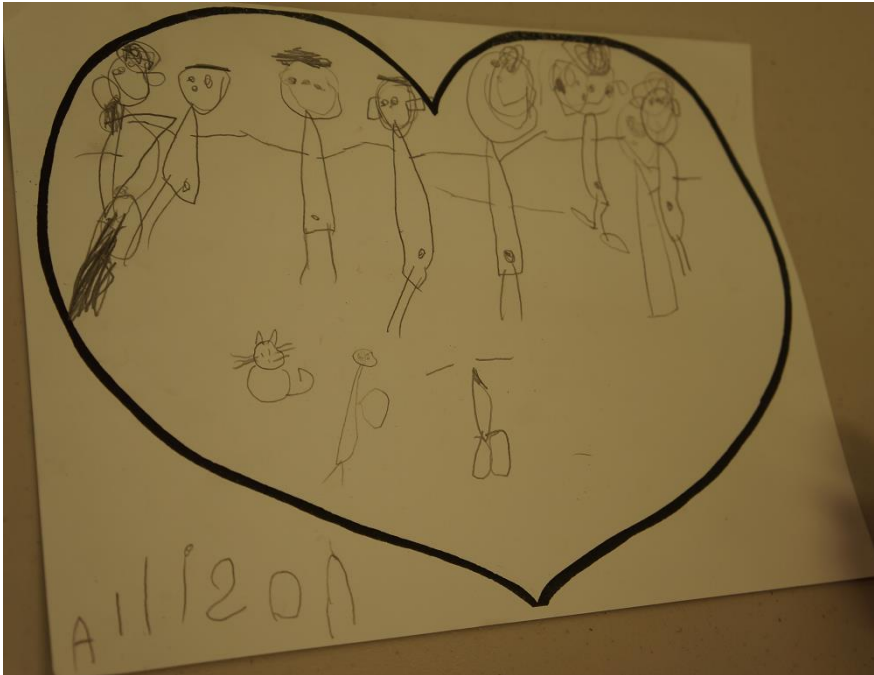
Amy was also supported in practising her print literacies as she attempted to include Mat Man in her heartmap to represent people who were important to her. Amy's drawing of Mat Man was assisted through text-based supports, rather than through song. Figure 4.14 shows that Amy's efforts to draw two Mat Men have been supported by an adult, who dotted the figures so that Amy could trace over them. The image also shows that Amy created two Mat Men independently to represent her Mom and Dad. The data does not give evidence of whether Amy was given the support of the dotted model first, or whether Amy created the Mat Men figures first. Figure 4.14 also shows that an adult has further supported Amy as she practiced her print literacies by writing the words MOM and DAD on the heartmap in yellow. Amy used this assistance to convey a message in print as she traced over the letters. This support provided opportunities for Amy to rehearse and refine classroom literacy practices.

Figure 4.14. Amy's Heartmap



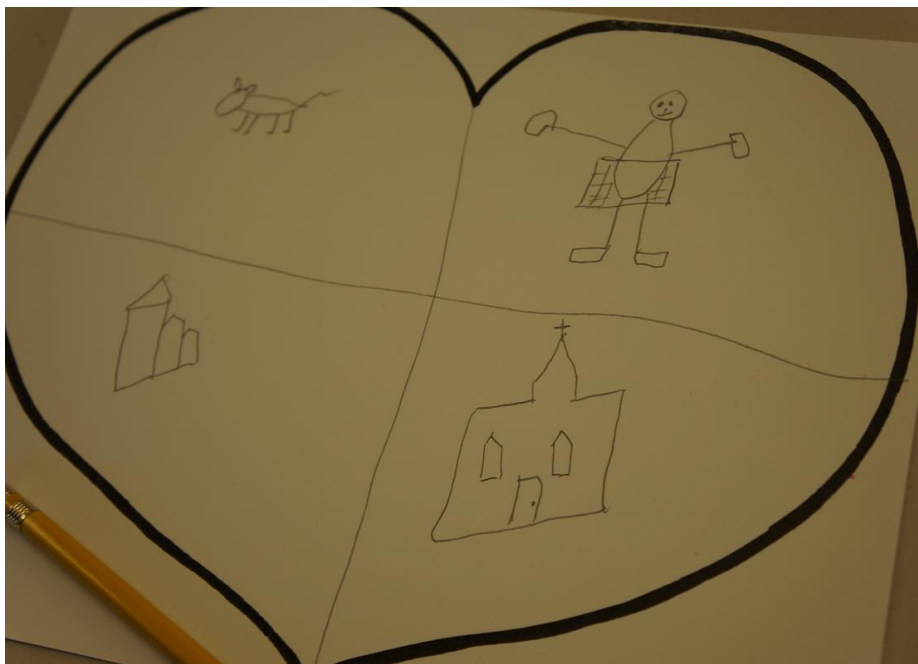
The classroom literacy practice of using Mat Man to support writing and drawing was widely used by the children in the sessions at the Rest Home. Figure 4.15 shows how Allison represented each member of her immediate family using a Mat Man form. Allison has also included a Mat Man of her Grandma in her picture. The continuity of literacy practices between the classroom and the program at the Rest Home allowed opportunities for Amy to refine her emerging understandings of print literacies through repetition and practise of familiar literacy practices in different locations.

Figure 4.15. Allison's Heartmap



The children's literacy practices are apparent within the drawings of the elder partners. In particular, some of the elders used Mat Man type figures to represent people. Figure 4.16 shows how Ron echoed the children's literacy practice of using Mat Man by creating a Mat Man figure to represent his wife. Many of the features of the Mat Man figure are evident in Ron's representation, with the exception of the belly button. Ron's child partner, Talon, noticed this omission while they were creating the art project and prompted Ron to add a belly button to his Mat Man. Ron's attempts to incorporate the children's literacy practices in his artwork were supported by his child partner.

Figure 4.16. Ron's Heartmap

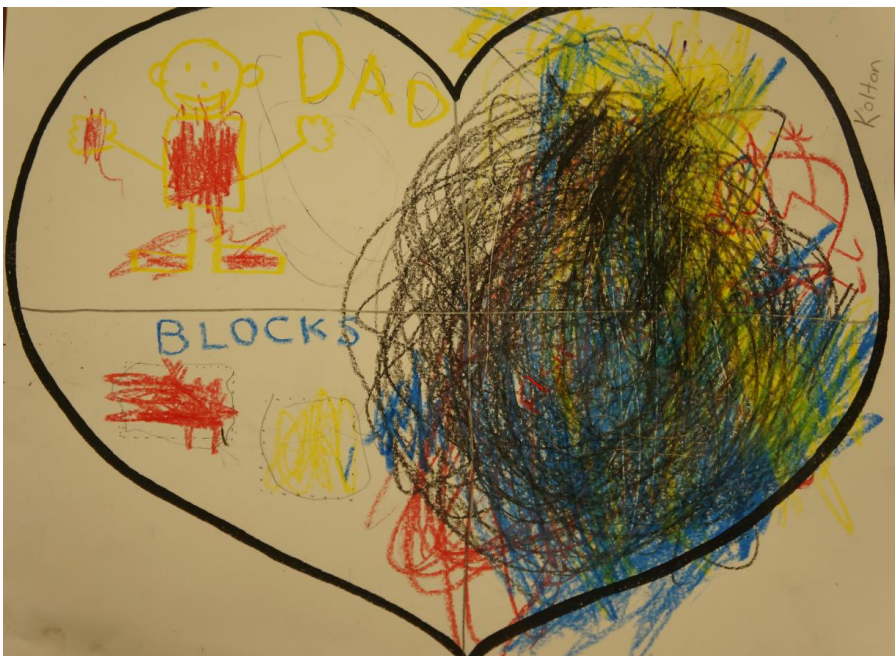


The images and texts on Betty's heartmap (Figure 4.17) also echo the children's print literacy practice of using Mat Man. Figure 4.17 shows how Betty included a figure that closely resembles Mat Man. In this case, there is no direct evidence in the data to identify what prompted Betty to include a Mat Man type figure in her artwork. Considering the references to Mat Man during the session, a possible catalyst for Betty's inclusion of the Mat Man figure may have been Julia's introductory lesson for the heartmap art-making session (discussed previously). Betty's inclusion of Mat Man may also have been influenced by her child partner's work. Koleson's heartmap (Figure 4.18) shows a Mat Man that was drawn by Julia for Koleson to trace in the upper left quadrant. It is possible that Betty's inclusion of Mat Man was impacted by this interaction, although the data is inconclusive.

Figure 4.17. Betty's Heartmap



Figure 4.18. Koleson's Heartmap



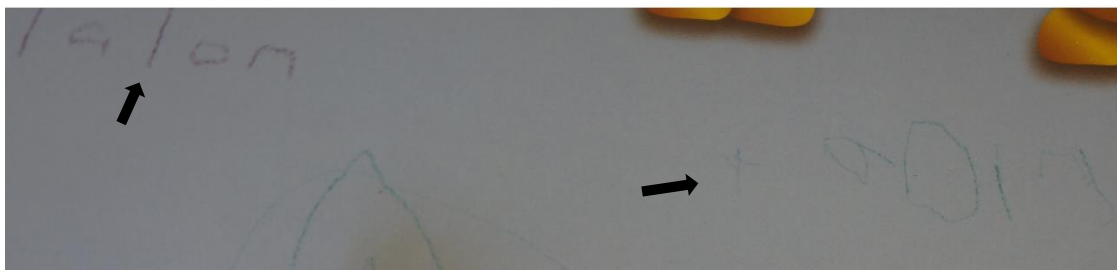
Betty's heartmap (Figure 4.17) echoes the classroom literacy practice of using Mat Man, but it also reflects other print literacy practices that were previously modelled

for the children. For example, Betty included many of the literacy practices in her heartmap (Figure 4.17) that Julia displayed in her heartmap example (Figure 4.12). Like Julia, Betty included labels with her drawings that show the relationship between texts and images. She labelled her drawings next to the images as well as on the image of the building. This is similar to the way that Julia labelled the school building in her heartmap example (Figure 4.12). The echoes of previously modelled literacy practices within Betty's artwork may have provided opportunities for children to reinforce what was previously learned as they rehearsed their print literacy practices.

I did it first and he did it second!- Talon (Dec. 3, 2012).

The opportunities to rehearse print literacies changed as the children became more comfortable and confident with their skills. For example, as Talon's ability to write his name independently developed, the rehearsal became a way to confirm what was known. Talon's partner Ron adjusted the ways he supported Talon's literacy practices accordingly. As previously discussed, in the early sessions at the Rest Home, Ron wrote Talon's name as a model for Talon to copy (Figure 4.7). In the final session, Talon took the lead in writing his name and Ron, following Talon's example, wrote Talon's name. Figure 4.19 displays Talon's name written by Talon (right side of image) and by Ron (left side of image). The way that Ron wrote Talon's name is also visually different in Figure 4.19 than it is in the earlier example (Figure 4.7). In the final session, Ron wrote Talon's name with a capital and lowercase letters. This is in contrast to Ron's earlier writing of Talon's name where he wrote Talon's name in all capitals (Figure 4.7). Over time, as the children became more proficient with their literacy practices, the multimodal events allowed children opportunities to reinforce and display their understandings.

Figure 4.19. Talon's Name Written by Talon and Ron



Opportunities for Innovation and Improvisation.

Within the rehearsal, the multimodal activities also afforded children opportunities to extend their understanding through a process of improvisation and innovation. The children used the multimodal events as opportunities to renew their understanding of what was known and what they had practised to produce “new” knowledge. These opportunities were evident in activities related to art-making, the creation of digital storybooks with iPads, and through Music.

Were you practising your letters?- Julia (Nov. 12, 2012).

Working on the art activities in the intergenerational sessions afforded children with opportunities to improvise and extend their writing practices. Figure 4.20 shows Mackenna's attempts at writing. She uses standard spelling to write “MOM” to correspond with the image she had drawn. Mackenna extends her writing practices by attempting words that she could not write independently using standard spelling. In the classroom and in the intergenerational program, Julia referred to the use of non-standard spelling as “practising letters” (Nov. 6, 2012; Nov. 12, 2012). In the top left corner of her heartmap, Mackenna writes a text using non-standard spelling to represent the names Katelyn, Chloe, and Dave. The rehearsal process allowed Mackenna to use her

understanding of letters and words to extend her understandings by attempting words that she did not know by sight.

Figure 4.20. Mackenna's Heartmap



Mackenna was afforded further opportunities to improvise and extend her print literacy practices by observing her elder partner, Marg's literacy practices during art-making sessions. Marg immensely enjoyed looking at the images from "My Map Book" by Sara Fanelli (1995) that Julia shared in the lesson that introduced the art project. When Marg had completed her artwork, she asked Julia if she could see the book. She looked through the various pages of the book and then wrote the title of the book on her page (see Figure 4.21). Mackenna watched Marg use the text to write the title of the book on her heartmap. Following Marg's lead, Mackenna also used the text "My Map Book" to write the title of the book on her own heartmap (see Figure 4.20). Marg's literacy practice

of using the book as a model for writing words served as a catalyst for Mackenna to extend her print literacy practices.

Figure 4.21. Marg's Heartmap



Makayla also found opportunities to improvise and extend her print literacy practices while creating works of art. Figure 4.22 shows how Makayla communicated meaning through various combinations of visual images, standard spelling, text scribed by an adult, and invented spelling. Makayla wrote several words that she knew by sight (e.g. COHEN, MAKAYLA), and extended her writing by using non-standard spelling of words.

Figure 4.22. Makayla's Heartmap (front view)



Makayla “practised her letters” and extended her print literacy practices through a distinctive rehearsal process. As she worked next to Marg, Makayla independently practised her words by writing what she thought the word should look like on the reverse of her paper. When Makayla was satisfied with her attempt, she re-wrote the word again on the front of her page. Marg explained Makayla’s rehearsal process to me following the art-making session:

Marg: She just sat there and you know, before she put it on here, [front of the page], she put it on the back.

Lori: Ohhh!

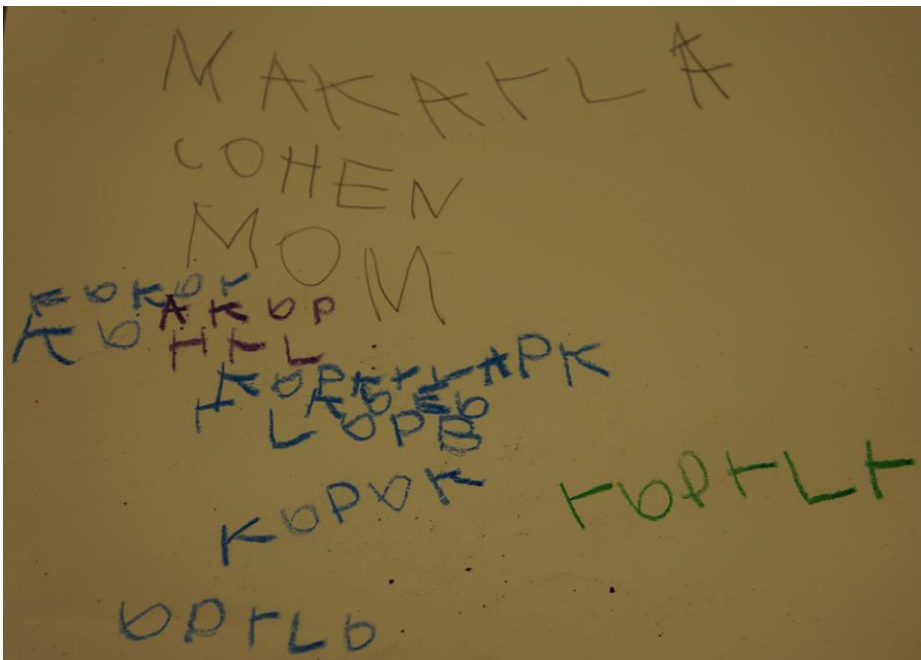
Marg: She wrote it, but she never asked me for anything, and I said to her, I asked her about her dog and she wrote Cohen here [back of the page]. I thought, Cohen for a dog’s name? And then she wrote it over here [front of page]. [I asked,] What is your doggy’s name? Cohen. She knew exactly what she had written.

Lori: That's interesting that she practised on the back and then she...

Marg: She did! Every word she wrote, she did on the back first and then she'd flip it over.... She's going to be a novelist!" (Nov. 12, 2012).

Figure 4.23 shows evidence of Makayla's rehearsal process on the reverse side of her heartmap. Some of Makayla's attempts to spell words using non-standard spelling on the back of her heartmap (Figure 4.23) are visually similar to Makayla's text on the front of her heartmap (Figure 4.22). Makayla has written more text on the reverse of her heartmap (Figure 4.23) than on the front (Figure 4.22). This suggests that Makayla may have been selective in the texts she included on the front of her page for display.

Figure 4.23. Makayla's heartmap (reverse view)



During the art-making session, I noticed that Makayla was writing a lot and I observed how she flipped her page frequently while writing. I asked Makayla to tell me about her heartmap and she was hesitant to respond. Marg, Makayla's elder partner, also

encouraged her to talk about her artwork by asking some questions, but Makayla just smiled and did not answer. I was not particularly surprised by Makayla's hesitation to talk because she had been quite shy and reluctant to speak with her elder partner or anyone in the Research team during the intergenerational sessions. I had noticed in my classroom observations that Makayla readily volunteered answers in the classroom, so I asked Julia to come and talk with Makayla about her heartmap. Julia asked Makayla to read what she had written on the back of her heartmap. Makayla was able to read (MAKAYLA, COHEN, and MOM) but did not respond when Julia pointed to the words spelled through non-standard spelling. When Makayla did not read what the letters represented, Julia said, "Were you practising your letters here?" (Nov. 12, 2012).

I noted that Makayla rehearsed her writing practices in a similar manner in the classroom lessons observed, and in the intergenerational sessions. During a classroom observation, Makayla chose to work at "practising her letters" for the entire duration of playtime. She worked independently and was engrossed in her work. Figure 4.24 shows Makayla working at the Writing Centre during playtime and highlights how Makayla used her understanding of letters to extend her print literacies. The strings of letters practised in the classroom (Figure 4.24) are not identical to those practised on the reverse of her heartmap (Figure 4.23), but they represent a consistency in Makayla's literacy practices.

Figure 4.24. Makayla Writing in Classroom



Tell us a story about that one!- Martha (Nov. 26, 2012).

The use of iPads to create digital storybooks also created opportunities for children to improvise and extend their print literacy practices. The conversations between children and their elder partners provided opportunities for children to extend their oral language skills as they generated an oral text. In order to prepare for the session at the Rest Home, the children had taken pictures in their homes and classroom and stored them in the photo bank of the app. These visual images served as the impetus for conversation as the children composed their text. For example, Martha invited Karl to talk about one of his pictures by saying, “Tell us a story about that one!” (Nov. 26, 2012). Martha further engaged Karl in conversation to encourage him to provide additional information, after Karl had given a brief response:

Martha: There's a picture of you and mommy.

Karl: [nods]

Martha: Is that you?

Helper: Press that button [points to arrow on ipad]

Martha: And your brother?

Karl: [nods] Yeah!

Martha: Oh, that's your brother.

Karl (squeals and turns to Martha): And my dog!

Martha: And your dog!

Helper: [taps ipad] Now what do you press?

Karl: Next?

Helper: Yep, press it.

Karl: [taps ipad, and image changes to the picture in a larger size]

Helper: Now, press it one more time.

Karl: [taps the ipad and a menu pops up, Karl chooses from the menu and taps the ipad, record screen can be seen]

Helper: Yep.

Karl: [presses the record button] My... mom, and my brother, aaannnd my dog.
[holds finger over stop button]

Martha: What's the name of your dog?

Karl: [unintelligible] [Karl presses stop button, then the play button. Karl listens to the recording]

Recording of Karl's voice: My... mom, and my brother, aaannnd my dog....

Martha: Good! Good! (Nov. 26, 2012)

The conversation prompted Karl to use a more sophisticated oral language structure by including a linking word in his oral text.

What are you going to say?...Or can you sing?- Lori (Nov. 26, 2012).

There were also opportunities for the children to develop their print literacies through song when working with iPads to create the digital storybooks. Similar to Martha, I engaged the children in conversation to help them compose their oral texts about their visual images they had selected from their photo bank. I invited the children that I worked with to either say or sing a text to go with the picture. Daniel was eager to sing a song about the image of his cat:

Daniel: I know. I can sing it!

Lori: How does it go? Teach me and I'll sing it with you.

Daniel (sings): *I love my cat*

Lori (sings, repeating Daniel's melody): *I love my cat*

Daniel (sings quietly): *[unintelligible] ...love my cat*

Lori: So it goes... [sings, repeating Daniel's melody] *I love my cat, and I really love my cat!*

Daniel: Yeah!

Lori: *I love my cat, I really love my cat!* Like that? (Nov. 26, 2012).

The invitation to sing prompted Daniel to compose a song about his picture. Daniel's song independently composed and then rehearsed with me yielded a text that emphasized how much he loved his cat. Daniel improvised his print literacies as he composed a text through song while working with the iPad.

The conversations between child and elder about the visual images did not always encourage the children to extend and improvise their oral texts when working with the iPads. In some cases, the conversations seemed to have little impact on the oral text that the child decided to record to go with the visual image selected. For example, Ron attempted to engage Zachary in conversation, and Zachary answered his questions. It appeared that Zachary had already composed his oral text as the conversation did not seem to influence the oral text that Zachary composed:

Zachary: [looks back at ipad and scrolls through pictures, taps the ipad to select, presses use]

Ron: And where was that taken? [points to ipad]

Zachary: [taps the picture] Um...school. [presses bottom right of ipad screen]

Ron: School?

Zachary: [selects record option]

Ron: Is that in your kindergarten room?

Zachary: [presses record and leans forward]. My favourite centre is the house centre. [presses stop and play]

Ron: And why is that?

Recording of Zachary's voice: My favourite centre is the house centre.

Zachary: [looks up at Ron] Clothes.¹⁴

Ron: Okay. (Nov. 26, 2012).

Similarly, Marg attempted to engage Makayla in a conversation to generate an oral text to go with a picture of a Christmas tree. Marg asked Makayla questions such as “How big is it?... What can you record about your tree? Is it beautiful?... What can you tell us about your tree?” (Nov. 26, 2012). Makayla responded to Marg by pointing to the image on the iPad and speaking, but did not follow Marg’s suggestion for recording the oral text. Marg responded by allowing Makayla more time to think. While there were many opportunities for children to develop print literacy practices, it was not always evident whether they were fully realized.

Opportunities for Expanded Print Literacy Acquisition.

There were many opportunities for children to develop print literacies within the multimodal ensemble. As evident in the interactions described above, many of these opportunities were beautifully orchestrated and supported by the teachers, elders, and the children themselves. One of the benefits of retrospectively looking through multiple data sources is the opportunity of viewing the interactions through various lenses. As I analyzed the data, I noticed some examples where opportunities for children to rehearse their print literacy practices within the multimodal literacy events might have been extended. The rehearsal may have been extended through the particular choice of supports provided for the individual students as they practised their print literacies, and

¹⁴ Zachary’s answer “clothes” refers to the dress-up clothes that were available for use by the children in the house centre during play time.

through greater facility with using the digital technology. While no interaction or lesson can ever be perfect, and people act and react according to the confines of the time, space, and situation, to forward educator's understanding of instructional practices, it may be helpful to consider the data displaying the print literacy opportunities that could have been expanded.

Who is doing the writing?-Lori (Journal, Nov. 14, 2012)

I posed this question in my Journal after observing how frequently the adults were writing on the artwork of the children. Some of these examples are presented in Chapter 4, but these examples are only samples from a much larger data source. I wondered if there were times that children might have missed opportunities to practise print literacies because words were scribed for them. In some cases, as discussed in previous sections, the scribing of words by adults supported children as they used the correctly written model to write their names (See Daniel's writing of his name in Figure 4.2). At other times, I wondered if the scribing may have limited opportunities for children to practise what they knew and extend their literacy skills. For example, Figure 4.19 shows the word Gramma written by Marg on Mackenna's heartmap. When working on creating her heartmap, Mackenna asked Marg how to spell the word Grandma. Marg responded by offering to write the word for Mackenna on the heartmap:

Mackenna: How do you spell Grandma?

Marg: Ok. Do you want me to put it on there for you? Okay.... (Nov. 12, 2012).

Mackenna's heartmap (Figure 4.20) shows that Mackenna had facility in writing known words, as well as generating text to represent words using non-standard spelling.

Mackenna may have had further opportunities to refine and extend her print literacy practices through verbal prompts or questioning. I wonder how Mackenna might have responded to the questions, “What do you think? How could we start it?”

Makayla’s heartmap (Figure 4.22) also displays an example of a literacy event where opportunities for practise might have been extended. On Makayla’s heartmap, Julia had written the word MOMMY as a model for Makayla to copy. However on the back of Makayla’s heartmap (Figure 4.23), where Makayla had practised her words, she had written the word MOM independently by sight. In this case, it appears that Makayla did not require the word to be modelled for her because she already could write a word with similar meaning independently.

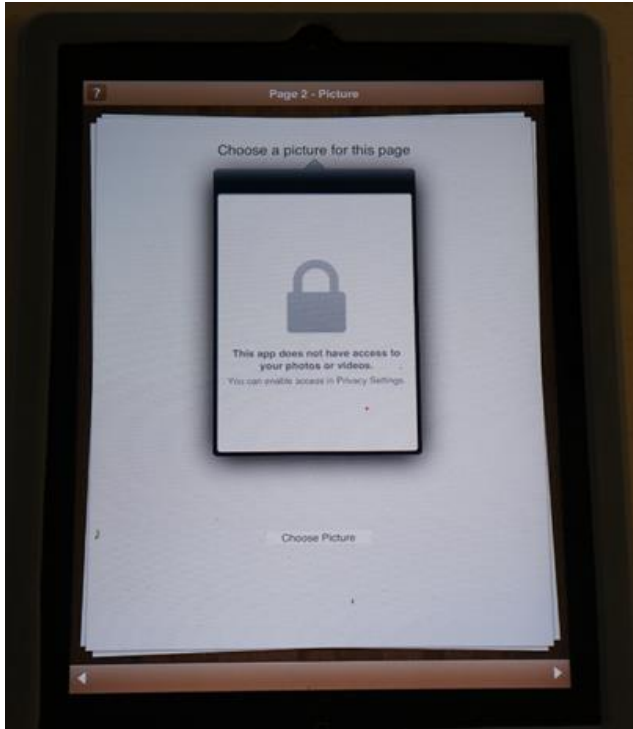
Mine’s locked!- Koleson (Nov. 22, 2012).

The iPad technology provided opportunities for print literacy learning, but there were also times that difficulty using the technology resulted in a shortened rehearsal period. During the classroom observation, the children were introduced to the recording function on the Pictello app for the first time¹⁵. As they started to create their digital storybooks, several children were “locked out” of their picture libraries when they pushed the wrong button. Figure 4.25 shows the image that the children viewed after they made this error. When locked out of the app, the children could not view any part of their

¹⁵ The use of the Pictello app during the classroom observation and in the program at the Rest Home represent the first times that the children used this app to create digital storybooks. While the app had not been used previously in the classroom, Julia felt that using the app was a useful activity for her students, and was open to using the Pictello app as well as other apps to create digital storybooks in the future (Jan. 15, 2013).

digital story book and their opportunities to rehearse their literacies using the app were restricted.

Figure 4.25. Locked Out of App



Since Julia and I were both new users of the Pictello app, we did not know how to unlock the app and restore access to the photo library, so students were asked to watch a partner's iPad for the remainder of the lesson. The inability to practise using the app when locked out appeared to frustrate the children. After Koleson was locked out, he would call out "Mine's locked" each time Julia gave an example on her iPad:

Koleson: Mine, mine is locked.

Julia: Yes, yours is locked, Koleson. ...

Tyson: Can you stop saying that please?

Koleson: It's locked. ...

Tyson: Stop saying that, pleeeeeease.

Koleson: Mine's locked. (Nov. 22, 2012).

While other students who were locked out were less vocal, they also appeared frustrated when unable to practise. Figure 4.26 shows Amy after she was locked out of the app and unable to access her pictures. When students were “locked out”, they watched Julia demonstrate how to select pictures and record messages. They were able to learn about the app by watching their peers select their photos, rehearse their texts, and record their messages, but they were unable to view their own pictures, touch the various icons, and navigate through the app. Students who were “locked out” were understandably less engaged with the lesson, as their opportunities to rehearse their print literacies were cut short.

Figure 4.26. Amy Locked Out and Unable to Practise



The data suggests that there were many opportunities for children to rehearse their print literacy practices within the multimodal literacy events. The opportunities to rehearse print literacies were evident in activities related to art-making, using digital technologies, and singing. In this rehearsal, the children had opportunities to practise and refine, as well as improvise and extend their literacy practices. Along with opportunities for practise, there were opportunities for print literacy acquisition that could have been extended.

Chapter Five

Discussion

This study was designed to explore the print literacy opportunities for young children within a multimodal literacy ensemble. The data suggests that there were many opportunities for young children acquiring print literacies during the various literacy events. In this chapter, I present the discussion of the data as a reprise, following the musical metaphor utilized throughout this study. A reprise in music is a repetition of a song or popular melody that is re-orchestrated and often presented to the audience as a finale to the piece (Cole & Schwartz, 2012). In this reprise, I discuss the print literacy opportunities that were present for the kindergarten children within the multimodal literacy ensemble and interpret them in light of the literature reviewed in order to address the research questions. I also reflect on events in the data where opportunities for print literacy acquisition could have been expanded. Finally, I consider the implications of the findings for programming for young children and identify possible directions for further study.

What Opportunities for Print Literacy Learning are Created for Young Children in a Multimodal Literacy Curriculum?

The data suggested many opportunities for the children to rehearse their print literacies through art, song, and the creation of digital storybooks with iPads. There were opportunities for the children to refine their print literacies through repetition and practise. There were also opportunities for the children to extend their print literacies through a process of innovation and improvisation. These opportunities accentuated the

interconnectedness and complexity of literacy learning as children constructed meaning through different modes and media within the various literacy events in the multimodal literacy ensembles (Kress, 2007).

The entanglement of literacies was evident in the multimodal ensembles as children rehearsed their print literacies (Sanders & Albers, 2010). The children used multiple modes concurrently during the different multimodal literacy events. For example, the children used various combinations of text, picture, and colour to convey a message when creating multimodal projects such as the heartmaps (See Figures 4.2, 4.7, 4.13, 4.14, 4.15, 4.18, 4.20, 4.22). The children also used song and gesture to help them select images for their collages. Additionally, when creating messages for their digital storybooks, the children used images, touch, gesture, singing, and speech. The children's multimodal texts displayed how they used multiple modes simultaneously to communicate meaning.

The interconnectedness of literacies was further evident as the children expressed meaning through different modes. The boundaries between modes were blurred as the children used singing and speaking interchangeably as they created texts for their digital storybooks (Jewitt, 2008). This was also evident as the children used modes of drawing, images, and written text interchangeably in their art to communicate their messages (Kendrick & McKay, 2004). The children selected and used different modes to express meaning in a flexible, individual manner.

As the children rehearsed their print literacies and expressed meaning through different modes within the various literacy events, there were expanded opportunities for

communication and meaning making (NLG, 1996). As the children expressed meaning through multiple modes, a semiotic chain was created that allowed the children to re-shape their understandings (Stein, 2008) and produce new meanings (Siegel, 2006, p. 70). The multimodal literacy events afforded opportunities for children to transform their understandings as they rehearsed their print literacies through various combinations of modes.

What Do Children Do With Print Within Multimodal Literacy Events and Practices?

The children used print in a variety of different ways within the multimodal literacy events. For example, the children used print to convey a message when creating artwork, and to help them navigate the app when creating the digital storybooks. The ways the children used print were influenced by classroom and individual literacy practices, community context and relationships formed during the program, and curricular expectations within a high-stakes accountability culture. I discuss each of these factors that influenced the children's uses of print during the multimodal literacy events in turn.

Classroom and individual literacy practices.

The ways that children used print in the multimodal literacy events often reflected their classroom literacy practices. The incorporation of classroom literacy practices within the multimodal literacy events at the Rest Home was evident as many children used Mat Man to represent people that were important to them on their heartmaps (Figures 4.13, 4.14, 4.15, 4.20). The use of Mat Man was an important literacy practice in

the children's classroom at school. This was evident through the many visual references to Mat Man in the classroom environment (Figures 4.9, 4.10, 4.11) and through Julia's inclusion of Mat Man in her heartmap during the classroom lesson (Figure 4.12). The children transported the classroom literacy practice of Mat Man from school to the intergenerational program as they created multimodal art projects. The multimodal art projects became a "threshold space" (Pahl & Kelly, 2005, p. 92) for the children to share their school literacy practices such as Mat Man with their elder partners. The literacy practice of Mat Man was adopted by some of the elders as Ron, Betty, and Marg included Mat Man characteristics in their heartmaps (Figure 4.16, 4.17, 4.21). The classroom literacy practices influenced the ways children and their elder partners used print during the multimodal literacy events.

Although the children's literacy practices in the multimodal literacy events reflected practices that came from their classroom, the children also combined print with other modes to support their messages in individual ways. The ways children used print appeared to be connected with their level of proficiency and comfort with print literacies. For example, when working on his heartmap, Koleson made no observed attempts to write his name (Figure 4.18), but conveyed meaning through a detailed picture. Mackenna appeared more proficient when using printed text as she wrote her name and other words independently on her heartmap and also expressed meaning through non-standard spelling and pictures (Figure 4.20). Although there were commonalities in the literacy practices used by children to construct meaning, the children engaged in particular meaning making practices related to their proficiency with print literacies

(Siegel, 2006, p. 69). The children's individual literacy practices were supported by their teachers and elder partners.

The opportunities for children to use and refine their print literacies were supported in various ways by the teachers and elders in the program. In many cases, children who were less proficient with print literacies received greater and more varied support from the adults. For example, Karl was supported in using and refining his print literacies as Julia provided dotted letters for him to trace over to write his name (Figure 4.13). Karl was further supported by Sheri as she sang the Mat Man song to facilitate his drawing of a person. Amy was given a yellow model to trace over to write the words MOM and DAD, and a dotted Mat Man figure to trace over on her heartmap. Amy also worked independently to convey meaning as she wrote her name and formed other Mat Man figures independently (Figure 4.14). Other children such as Makayla did not receive text-based supports, and worked independently to write words known by sight, and to represent words using non-standard spelling (Figure 4.22, Figure 4.23). The ways that the teachers and elders supported the children allowed the children to exploit meaning through print-based modes (Walsh, 2007).

Children used the supports provided by their teachers and elder partners in particular ways. The children used similar supports to rehearse and enact their print literacies in different ways. Within the intergenerational program, Julia frequently wrote text in a yellow crayon as a model for the children to trace over. The children used the yellow crayon model in different ways. Amy traced over the yellow crayon model in order to write words (Figure 4.14), while Daniel wrote approximated shapes for letters under the yellow model of his name (Figure 4.1). Other children, like Makayla appeared

to ignore the yellow crayon model (Figure 4.22). As active designers in the meaning making process (Albers & Harste, 2007), the children interpreted and used the supports in particular ways. The data is unclear about whether the children were conscious or unconscious of their design choices as they used the supports provided by the adults in particular ways to support their acquisition of print literacies (Stein, 2008).

Community context and relationships.

The setting of the community and the relationships formed between participants impacted the ways the children used print within the multimodal literacy events. This study took place in small, rural community in Southern Ontario. Several of the elder participants described their community as “tight-knit” and “faith-filled”. Most of the elders did not know the children personally before the program at the Rest Home, but showed interest in getting to know the younger members of their community. The relationships between the children and elders developed over time as they interacted with one another during the multimodal literacy events within the intergenerational program.

The context of the intergenerational program provided opportunities for the children and elders to build upon their prior experiences as they collaborated to make identity texts and visual artifacts (Heydon, 2013). As the children worked with their elder partners to create the multimodal texts, they shared their personal histories and identities (Sanders & Albers, 2010). The children produced multimodal texts that carried traces of their identities (Rowse & Pahl, 2007) as “they revealed themselves as individuals, as members of families, and as members of their school through art and writing” (Sanders & Albers, 2010, p. 9). For example, Mackenna drew a picture of her church, her friends, and her family members including her Grandma who “is in heaven now” on her heartmap

(Figure 4.20). As children composed identity texts, they shared experiences from outside of the school within a schooled environment.

The construction of multimodal texts allowed for the creation of a “third space” that linked home and school literacy practices (Pahl & Kelly, 2005). This was evident in each of the multimodal projects as children drew and coloured pictures of their family members when creating heartmaps, and shared songs from daycare and church when creating collages. The creation of the third space was particularly evident during the creation of the digital storybooks as the children shared photos taken with the iPads of their family members and home environments. These photos served as catalysts for conversation and formed the basis for the oral texts the children recorded. For example, as Karl shared his picture of his family members with Martha, he talked about his mom, brother, and dog. Karl’s experiences with his family were the starting point for his oral text for the page of his digital storybook. The multimodal literacy events afforded children opportunities to feature their out-of-school experiences in the creation of digital storybooks and signified a fusion of home and school literacy experiences (Jewitt, 2008).

Emphasis on refinement in a high-stakes accountability culture.

The intergenerational program focused on improving communication and identity options for children and elders, and provided multimodal literacy events that foregrounded the modes of art, singing, and digital technologies (Heydon, 2013). The children had many opportunities to use print in a number of different ways during the multimodal activities, but achievement in these traditional modes of literacy was not the emphasis of the program. This is in contrast to the examples in the literature review that highlighted instances of print literacies being privileged over other literacies in the

classroom (Tierney, et al, 2006; Wohlwend, 2009; Wissman et al, 2012). Although the primary focus of the multimodal literacy program was not print literacies, there was evidence of achievement standards influencing literacy practices. The use of pedagogical programs aimed toward improved readiness skills and comments made by elders about achievement exposed the backdrop of high-stakes accountability that is ever-present in schools (Carrington, 2005). The pressures of curricular expectations and the emphasis on achievement in our culture influenced how the children used print literacies in the multimodal literacy events.

The use of Mat Man was an important literacy practice in the children's classroom (Figures 4.8, 4.8, 4.10, 4.11) and was widely used by children in the program at the Rest Home as they created heartmaps (Figures 4.13, 4.14, 4.15, 4.18, and 4.20). As discussed previously, Mat Man is part of the "Handwriting Without Tears[®]" program and links art, writing, building, and singing. The teachers used the Mat Man figure to help the children extend their drawing and writing skills. Although helpful to the children as they used multiple modes to construct meaning through forms of print (Kendrick & McKay, 2004), the use of Mat Man also reflected the presence of curricular standards and achievement measures (Carrington, 2005).

The character of Mat Man was created as part of the "Handwriting Without Tears[®]" program to teach readiness skills related to "body awareness, drawing & pre-writing, counting, building, socializing & sharing" (Handwriting Without Tears[®], 2013). While a commercial program is not necessary to teach these skills, the program provides an "easy- to- teach" curriculum for skill mastery that is considered "easy-to-learn" for

students (Handwriting Without Tears[®], 2013). This program is linked to the Common Core State Standards and is marketed to teachers and parents as a way of helping children master skills in order to improve performance on standardized measures of achievement (Handwriting Without Tears[®], 2013). Although the use of Mat Man was helpful for children as they used print literacies within the multimodal literacy events, the use of the program also reflected the emphasis on standards and achievement in school culture.

The back-drop of high- stakes accountability was also evident as Ron, a former principal, expressed his awareness of the pressures of curricular expectations. During the program at the Rest Home, Ron asked me to explain the academic expectations for achievement in kindergarten (Oct. 29, 2012), and asked if he was helping the children in the “right” way (Nov. 12, 2012). Ron’s concern provided an opportunity for Talon to rehearse his print literacies as he showed us how to write his name on his heartmap (Figure 4.7). Ron’s concern also highlights the emphasis toward skill refinement in our culture as he considered the learning trajectories allowed for young children as they acquire print literacies (Carrington, 2005).

The examples of Mat Man and Ron’s concern about supporting his child partners in the correct manner reflected tensions between political mandates about student achievement and a more individualized approach of building upon literacies (Sanders & Albers, 2010). In both examples described above, there were opportunities for the children to practise and refine their print literacies, but I wonder what opportunities to improvise and extend print literacies could have been created if there were not the pressures of skill achievement and mastery in our culture. The examples described above

highlighted the tensions and complexities of selecting programs to support young children as they acquire literacies within an accountability culture.

Like Sanders and Albers (2010), in my teaching practice, I struggle with the tensions that exist between political mandates and student centred practices. The analysis of the data prompted me to reconsider questions that I have wrestled with throughout my teaching career: How quickly should young children be expected to use standard writing practices? What guides the educator's decisions about this, the curriculum or the needs of individual children? How can educators balance opportunities to refine literacy skills and practices with opportunities for improvisation? What opportunities for print literacy acquisition could be extended through pedagogical choices? These are difficult questions to consider when programming for children within the current accountability culture. With these questions in mind, I turn to a discussion of how opportunities for print literacy acquisition might have been expanded within the multimodal literacy ensembles.

Opportunities for Expanded Print Literacy Acquisition

Within the multimodal literacy events, there were instances where opportunities for the children to practise their print literacies might have been expanded. The rehearsal may have been extended through the particular choice of supports provided for the individual students as they practised their print literacies, and through greater facility with using the digital technology. What can be learned about literacies and the acquisition of literacies from these opportunities where print literacies may have been expanded? I believe that these observed opportunities emphasize the individuality and complexity of literacy learning within the multimodal literacy events and highlight the role of the child in acquiring her/his literacies. Since beliefs about the nature of literacies and the role of

the child in acquiring literacies are at the centre of programming for children, I present this consideration of the opportunities where print literacy acquisition could have been expanded as a foreword to the discussion of the implications for instructional practices.

The learning of literacies is complex and relative to the person within a particular context. This was evident as the elder partners supported the children in writing words on their heartmaps. As described in Chapter 4, in some cases, children like Daniel required these supports to create a message in print. In other cases, children like Mackenna may have benefitted from alternative supports. Children exploit modes of expression in different ways and move between modes in an individual manner (Siegel, 2006). This challenges teachers to consider paths of literacy learning as case-like and suggested rather than pre-determined (Tierney et al, 2006, p. 362). This view re-positions the role of the child in the teaching and learning of literacies.

This individualized approach to acquiring literacies positions the child as an active participant in the meaning making process (Kress, 2008). As a designer of meaning in a multimodal ensemble (Albers & Harste 2007), the child is able to exploit particular modes in different contexts (Walsh, 2007). When the children were “locked out” of the app, their design choices were limited as they could not access or view their own pictures, or compose their oral texts. When “locked out”, the children appeared frustrated, less engaged, and were unable to rehearse their print literacies. Viewing the child as an active participant in an individualized process of literacy acquisition poses implications for teachers.

What are the implications of this for programming for young children?

The opportunities for print literacy acquisition and the ways children used print within the multimodal literacy events in the intergenerational program pose implications for programming for young children in classroom environments. Although the setting of the intergenerational program is much different than the classroom environment, the opportunities for print literacy learning and the ways children used print in the multimodal literacy events at the Rest Home can inform classroom literacy practices. As I consider the implications for programming, I position myself as a teacher who has had the opportunity to research the print literacy opportunities of young children during multimodal literacy events. While conducting research for this study, I also continued to teach a class of Grade One students in a different school district. As I moved between the role of researcher and teacher during this study, I was challenged to consider my own practices. I present the implications for programming in the form of questions that I posed in my Journal as I reflected on my research experiences and planned literacy lessons for my own class.

What kinds of literacy events am I providing for my students?

This study illustrates how the multimodal literacy events in the intergenerational program provided rich opportunities for children to express their literacies through multiple modes. Children combined different modes in individual ways within the different activities (Siegel, 2006). Children embraced different modes of expression as they created art, sang songs, and used digital technologies. As a result, there were many opportunities for print literacy learning within the different multimodal events.

This finding challenges teachers to consider the kinds of modes that are allowed for the expression of literacies in their classrooms (Jewitt, 2008). Certainly there are obstacles to promoting multimodal expressions of literacy in the classroom. Some of these obstacles relate to material resources including hardware and software resources and teacher skill in using technology (Wohlwend, 2009). Still other obstacles relate to the pressure teachers may feel to prepare students for standardized print-based assessments (Tierney et al, 2006). However, the creation of multimodal texts allows for expanded communication options as the children move between modes of expression (Walsh, 2007). In spite of the obstacles that are in place, the potential for learning opportunities within multimodal literacy events calls teachers to combine new and traditional literacy practices in meaningful ways within their classrooms in order to enhance students' literacy learning (Walsh, 2011).

What is in a text?

This study documents how children shared traces of their identities in the texts that they created within the different multimodal literacy events in the intergenerational program (Rowse & Pahl, 2007). As the children created pictures of what was important to them in their heartmaps and shared photos taken at home with their elder partners, rich opportunities for conversation and developing literacies were created. Within the multimodal events, it was clear that the children benefitted from these opportunities to share home literacy experiences and practices within a schooled environment.

This finding challenges teachers to consider what meaning is held in the texts created by children in their classrooms. "If educators read such multimodal texts to uncover children's sedimented identities, they may find connections that bridge home and

school literacy practices” (Sanders & Albers, 2010, p. 9). The texts the children created during the multimodal literacy events were not simply a combination of pictures, letters, and/or words, the texts carried information about the child’s identity and past experiences (Pahl & Rowsell, 2007). Reading children’s texts created in the classroom as multimodal artifacts may allow teachers to use children’s experiences and interests inside and outside of the school as the starting point for instruction (Jewitt, 2008).

How can I support my students in developing their literacies?

In this study, the intergenerational program afforded children with opportunities to practise their literacies within the different multimodal literacy events with their elder partners. The children often worked in triads, with one other child and their elder partner. It was clear that the children greatly benefitted from practising their literacies in the presence of a more capable language user. The elder partner provided guidance and encouragement to their child partners as they worked together within the different multimodal activities.

This finding is challenging to teachers who are working with a much higher classroom ratio of students to teachers. How can I, as one teacher in a classroom full of young children, provide the level of differentiated support that was available for the students within the intergenerational program? I cannot replicate the setting of the intergenerational program in my classroom, but the lessons learned within the multimodal literacy events have impacted my day-to-day teaching. In my own practice, this finding has challenged me to consider the modes I sanction and privilege for the expression of literacies and the construction of artifacts in my classroom (Jewitt, 2008). This finding has also inspired me to read the multimodal texts created by my students as expressions

of their identities (Sanders & Albers, 2010). I believe that examining my programming choices and viewing each of my student's texts in a different light offer a measure of individualized support that echoes the differentiation of supports provided within the intergenerational program.

Suggestions for further study.

This study explores the intersection of print and multimodal literacies and answers a call in the literature to further examine the influence of multimodal experiences on young children's literacy acquisition (Binder & Kotsopoulos, 2011). It builds upon the literature finding that children combine modes of expression in individual and complex ways (Siegel, 2006) and use these modes as resources as they acquire traditional school literacies (Walsh, 2007). While the data illustrate many opportunities for young children acquiring print literacies in a multimodal ensemble, this study is only a glimpse into understanding "what happens when multiliteracies meet school literacy" (Siegel, 2006, p. 74). In future research, I suggest a replication of a similar study over a greater amount of time. This would afford opportunities to study the intersection of print and multimodal literacies over time, across settings, and between modes.

1. A comparison over time: In this study, data was collected over a brief period of time. A study over a greater length of time would allow for a deeper consideration of print literacy opportunities during multimodal literacy events as the participants' relationships with each other develop and their comfort and proficiency when working with particular modes expands.
2. A comparison across settings: This study took place in a small, tight-knit, rural community. Further study in a different community (e.g., urban) may allow for a

consideration of print literacy opportunities within similar literacy events in different locations. This may elucidate localized literacy practices.

3. A comparison between modes: This study explored the print literacy opportunities within a multimodal literacy ensemble. Future studies might compare the different opportunities for print literacy learning between the different literacy events that featured particular modes (e.g., opportunities created when using digital technologies compared with the opportunities created when working with art).

Finale

The music crescendos to the finale and the instruments fall silent. The reverberations of sound linger in the hall as the audience applauds. While the music is over for now, this piece has become part of the repertoire for this musical ensemble. This performance will provide the basis for future rehearsals as the playing of this music will affect the orchestration and interpretation of melodies in future compositions and performances. Similarly, children orchestrate their literacies through a continual process of rehearsal, refinement, and improvisation. As children construct meaning through different combinations of various modes or melodies, they expand their communication repertoires and play beautiful music. This is literacy in the multimodal ensemble, rich in its complexity and vibrant in its diversity of melodies.

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Appendix A

Intergenerational Singing: An Exploratory Study of Singing Engagement, Generativity, and Well-being

Interview Protocol for Seniors

Information for Interviewer:

This interview is inductive and involves asking mainly general, open-ended questions designed to elicit stories and descriptions by the respondent. Focus on personal narratives that gain a deeper understanding of the respondent's experiences with various modes and media and the influence these experiences have on their sense of self, well-being, and generativity - an adult's concern for an commitment to promoting the well-being of future generations.

Using a number of general probes might be helpful. The purpose of probes in interviews is to enable the person being interviewed to provide as much detailed information as possible in their responses. Neutral probes encourage additional information, but do not suggest specific answers. Some examples of probes are "How is that?" or "In what ways?" and so on. You will also be asked at times to provide prompts that move the question around different contexts/situations.

Interview Introduction:

- Introduce yourself
- Describe the project and goals (as per the information letter)
- Explain consent form and have respondent sign the consent form
- Explain that interviews will be audio recorded
- Explain that the respondent may stop at any time or choose not to answer any question
- Ask if the respondent has any questions before you begin, e.g., "Feel free to ask me to clarify any question you don't understand."

PART A – MULTIMODAL AND MULTIMEDIA ENGAGEMENT

1. What do you like most about singing/art-making/using the i-pads?

Follow up questions: Do you think your reasons for liking singing/art-making/using the i-pads have something to do with:

Who you are as a person (prompts: your own beliefs and values, attitudes, abilities?)

Who is around you at the time of singing/making art/using the i-pads (prompts: family, friends, teacher, program director?)

The situation or context at the time of singing/making art/using the i-pads (prompts: available opportunities around you, community, structure/organization, accessibility?)

Past experiences of singing/making art/using digital technology? (If so, what experiences in particular?)

2. Talk to me about the importance of singing/making art/using digital technology such as the i-pads to you at this time in your life?

Follow up questions: Why do you think it is important/not important? What benefits (if any) do you think singing/art-making/using digital technology like the i-pads has had on your health or sense of well-being?

3. Do you find singing/making art/using digital technology like the i-pads easier or harder to do than it used to be?

Follow up questions: Have you experienced any internal or external resistance and/or barriers/challenges to singing/art-making/using the i-pads now and or in the past? If so, what are these and where do you think they come from? (prompts: any stress, a conflict, a problem, a special challenge, physical barriers/difficulties, songs that are sung/style of art/specific hardware or software?) What do you think is the easiest or most difficult part of singing art-making/using digital technology like the i-pads?

PART B – LIFE STORY NARRATIVE ABOUT SINGING/ART-MAKING/USING DIGITAL TECHNOLOGY LIKE THE I-PADS

4. Tell me about the singing/making art/using digital technology activities that you did earlier in your life?

(List all activities - prompts: At school? Church or community choir? At home? Singing with the radio/records? Singing alone? Singing with others? (Breadth of singing involvement) (what activities), intensity of singing involvement (how much singing), Duration of involvement (how long singing)? (Ask similar questions for art making and use of digital technologies)

5. Tell me about the importance was singing/art-making/digital technology to you in your earlier life?

Follow up question: Why do you think it was important/not important?

6. Tell me a childhood memory that you have of singing/art making?

Think about a key event relating to singing from your childhood that stands out to you for some reason. Can you think of a memorable moment involving singing/art making?

(Prompts: What happened? What were you doing? When did it happen? Where did it happen? Who was involved? What were you thinking and feeling? Did this event change you in any way? If so, in what way?) [Note: Try to get respondent to focus on a specific event/episode.]

7. Describe any people in your life where influenced your singing/art making?

(Prompts: for example, a parent, a teacher, a family member, a friend?) Describe the most important person who had had an impact on your singing/art-making. Specify the relationship you had or have with this person and the specific way in which he or she had (or continues to have) an impact on your singing/art making experience.

8. Talk to me about people whose singing/art you loved? A singer/artist that you adored?

Follow up question: What did you love about his/her singing/art? Do you think he or she influenced your singing/art making in some way? If so, in what way?

PART C – IG MULTIMODAL CURRICULUM

9. Describe what do you like the most about singing/making art/communicating through digital technologies with the children?

Follow up questions: Do you think your reasons for liking doing these things with the children have something to do with:

Who you are as a person (prompts: your own beliefs and values, attitudes, abilities?)

Who is around you at the time of the activities (prompts: family, friends, a recreational/music therapist, program director?)

The situation or context is at the time of activities (prompts: available opportunities around you, community, structure/organization, accessibility?)

Past experiences of singing/art making/using digital technologies? (If so, what experiences in particular?)

10. Tell me about what do you think is the most important reason for singing/making art/communicating through digital technology with the children?

11. Tell me about what do you think is the most difficult part of singing/art making/communicating through digital technology with the children?

12. Describe how do you feel after class? (Do you feel any different from before the class?)

13. Describe how do you feel after communicating at a distance with the children? (Do you feel any different from before you do this?)

14. What do you think is the objective/goal of the classes with the children?

16. Tell me about one of your favorite/most special moments in the project? A favorite song or activity?

17. What do you think the children learn from the project?

18. Do you think the children learn something from you? Yes-->what? No-->why not?

19. In your opinion, why do the other adults participate in the project?

20. Would you continue to come to sing/make art/communicate virtually with the children in the future? Why or why not?

Follow up questions: What do you think would help you make a contribution to others?
What do you think would stand in your way or make it difficult for you to do it?

Appendix B

Young Children's Engagement in Intergenerational Multimodal Curriculum

Interview Protocol- Children

Information for Interviewer

This interview is to find out what the child respondent thinks about being using various modes and media and participating in the intergenerational multimodal curriculum project. A puppet is used to keep the children engaged in the interview. The pictures are used to provide additional information that compare how the child thinks other children would respond to their own responses.

Interviewer Introduction (say script with puppet)

Hi, my name is _____. What is your name? How old are you? I am new to this class and I don't know about what you do with the grandmas and the grandpas here at Bluewater. Can you tell me about what you do together? (Prompts: in the class at Bluewater, what do you do from the time you come here until it's time to go back to school)?

1. Draw a picture that tells me a story about a time you sang/made art/used digital technologies in school/home/outside of school? It can be a picture of singing that you do here, at home or at school.
 - 1.
2. How did you feel in that story when you sang/made art/used digital technologies in school/home/outside of school?
3. Draw a picture that tells me a story of yourself when you're older singing/making art/using digital technologies.
 - 2.
4. How did you feel in that story when you sang/made art/used digital technologies when you were older?
 - 3.

Photos and Engagement in Singing

A. Photo 1 (picture of young boy or girl singing/making art/using digital technology)

1. Here is a picture of Jessie (girl)/Simon (boy). S/he is singing/making art/using digital technology just like you were doing with the grandmas and grandpas at Bluewater.
2. Why do you think Jessie/Simon is singing/making art/using digital technology?
3. Do you think Jessie likes to sing/make art/use digital technology? Why or why not? (Is there anything you think Jessie doesn't like about singing/making art/using digital

technology? Why?)

4a. Do you think Jessie is a good singer/artist/user of digital technology? Why or why not?

4b. Are you a good singer/artist/user of digital technology? Why or why not?

5a. What sorts of things do you think Jessie is learning from singing/making art/using digital technology? *Follow up:* Do you think Jessie is learning easy or difficult things from singing/making art/using digital technology? (Is this a good thing or a bad thing? Why?)

5b. What sorts of things are you learning from singing/making art/using digital technology? Are you learning easy or difficult things? (Is this a good thing or a bad thing? Why?)

6a. How do you think Jessie is feeling when she is singing/making art/using digital technology? Why?

6b. How are you feeling when you are singing/making art/using digital technology? Why?

B. Photo 2 (picture of young boy or girl singing/making art/using digital technology with an older man or woman)

7a. Here is a picture of Grandma Connie (older woman)/Grandpa George (older man) with a little girl/boy (Jessie/Simon?). They are singing/making art/using digital technology together. What do you think Grandma Connie (older woman)/Grandpa George (older man) likes best about singing/making art/using digital technology with Jessie/Simon? (Is there anything Grandma Connie/Grandpa George doesn't like about singing/making art/using digital technology with Jessie/Simon?)

7b. When you are here at Bluewater, what do you like best about singing/making art/using digital technology with the grandmas and grandpas? (Is there anything you don't like about singing/ making art/using digital technology with the grandmas and grandpas at Bluewater?)

8a. Do you think Jessie/Simon is learning something about singing/making art/using digital technology from Grandma Connie/Grandpa George? (If yes, what is s/he learning? If not, why isn't s/he learning something?)

8b. Are you learning something about singing/making art/using digital technology from the grandmas and grandpas at the classes at Bluewater?

9a. How do you think Grandma Connie/Grandpa George is feeling when s/he is singing/making art/using digital technology with Jesse/Simon? Why?

9b. How do you think the grandmas and grandpas at Bluewater are feeling when they are singing with you? Why?

10a. What do you think Grandma Connie/Grandpa George likes best about singing/making art/using digital technology with Jessie/Simon? Why? (Is there anything you think Grandma Connie/Grandpa George doesn't like about singing with Jessie/Simon? Why?)

10b. What do you think the grandmas and grandpas at Bluewater like best about singing/making art/using digital technology with you? Why? (Is there anything you think the grandmas and grandpas in your class don't like about singing with you? Why?)

General Observations

I liked watching you work with the grandmas and grandpas here at Bluewater.

1. Why do you think you are doing a project with the grandmas and grandpas at Bluewater?
4.
2. What kinds of things do you learn in this project?
5.
3. Who helps you learn to sing/make art/use the ipads?

Specific Observations:

1. When the teacher was singing with you about (name lesson observed), what did you learn by singing and talking about that?
6.
2. When you were (name activity) with your (name friend and activity), what did you learn by doing that? Did you know (what to do) or did you just guess?
7.
3. When you were singing/**making art/using digital technology** alone (name activity), what did you learn by doing that?
8.
4. What do you like best about singing/making art/using the ipads in the project with the grandma and the grandpas? Why?

Appendix C

Ethics Approval Form

Western Education
WESTERN UNIVERSITY
FACULTY OF EDUCATION
USE OF HUMAN SUBJECTS - ETHICS APPROVAL NOTICE

Review Number: 1209-4
Principal Investigator: Rachel Heydon
Student Name:
Title: *Intergenerational Digital Literacies Project*
Expiry Date: October 31, 2013
Type: Faculty
Ethics Approval Date: October 12, 2012.
Revision #:
Documents Reviewed &
Approved: Western Protocol, Letters of Information & Consent



This is to notify you that the Faculty of Education Sub-Research Ethics Board (REB), which operates under the authority of the Western University Research Ethics Board for Non-Medical Research Involving Human Subjects, according to the Tri-Council Policy Statement and the applicable laws and regulations of Ontario has granted approval to the above named research study on the date noted above. The approval shall remain valid until the expiry date noted above assuming timely and acceptable responses to the REB's periodic requests for surveillance and monitoring information.

During the course of the research, no deviations from, or changes to, the study or information/consent documents may be initiated without prior written approval from the REB, except for minor administrative aspects. Participants must receive a copy of the signed information/consent documentation. Investigators must promptly report to the Chair of the Faculty Sub-REB any adverse or unexpected experiences or events that are both serious and unexpected, and any new information which may adversely affect the safety of the subjects or the conduct of the study. In the event that any changes require a change in the information/consent documentation and/or recruitment advertisement, newly revised documents must be submitted to the Sub-REB for approval.


for Dr. Alan Edmunds (Chair)

2012-2013 Faculty of Education Sub-Research Ethics Board

Dr. Alan Edmunds	Faculty of Education (Chair)
Dr. John Barnett	Faculty of Education
Dr. Farahnaz Faez	Faculty of Education
Dr. Wayne Martino	Faculty of Education
Dr. George Gadanidis	Faculty of Education
Dr. Elizabeth Nowicki	Faculty of Education
Dr. Julie Byrd Clark	Faculty of Education
Dr. Kari Veblen	Faculty of Music
Dr. Jason Brown	Faculty of Education
Dr. Susan Rodger	Faculty of Education
	Faculty of Education, Associate Dean, Research (<i>ex officio</i>)
Dr. Shelley Taylor	Faculty of Education, Western Non-Medical Research Ethics Board (<i>ex officio</i>)
Dr. Ruth Wright	Faculty of Music, Western Non-Medical Research Ethics Board (<i>ex officio</i>)
Dr. Kevin Watson	Faculty of Music, Western Non-Medical Research Ethics Board (<i>ex officio</i>)


Research Officer
Faculty of Education Building


Curriculum Vitae

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Post-secondary Education and Degrees: University of Guelph
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1992-1996 B.A.Sc.

Queen's University
Kingston, Ontario, Canada
1996-1997 B.Ed.

The University of Western Ontario
London, Ontario, Canada
2010-2013 M.Ed.

Honours and Awards: Dean's List, University of Guelph, 1992, 1995, 1996

Adelaide Hoodless Proficiency Scholarship, 1995
University of Guelph

Macdonald Award, 1993
University of Guelph

MAC-FACS Alumni Scholarship, 1992
University of Guelph

Related Work Experience Research Assistant to Dr. Rachel Heydon
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2012- present

Classroom Teacher
Thames Valley District School Board
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Reading Recovery Teacher
Thames Valley District School Board
2005-2007

Classroom Teacher
Faith Community Christian School
1997-1998

Conferences

- McKee, L., Heydon, R., O'Neill, S. & Rowsell, J. (2013, June). Elders, children, songs and iPads: Improvising and rehearsing print literacy practices within multimodal ensembles. In S. O'Neill (Chair), *Multimodal and Digital Media Multiliteracies In and Through the Arts*. Symposium to be conducted at the meeting of the Canadian Society for the Study of Education, Victoria, B.C. (accepted)