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Synergy Between Digital and Traditional Literacy Practices: A Framework for Building a Reading Culture in a Secondary School

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SYNERGY BETWEEN DIGITAL AND TRADITIONAL LITERACY PRACTICES:

A FRAMEWORK FOR BUILDING A READING CULTURE

IN A SECONDARY SCHOOL

A Dissertation Presented

by

NINA KOSITSKY

Submitted to the Graduate School of the

University of Massachusetts Amherst in partial fulfillment

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Education

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DEDICATION

To Michael, Eugene, and Roman

And in memory of Mark Kositsky

ACKNOWLEDGEMENTS

ABSTRACT

SYNERGY BETWEEN DIGITAL AND TRADITIONAL LITERACY PRACTICES:
A FRAMEWORK FOR BUILDING A READING CULTURE
IN A SECONDARY SCHOOL

SEPTEMBER 2016

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Integration of digital technologies into the English classroom requires that we rethink pedagogical frameworks within which education occurs. This study examines traditional and digital literacy practices in a high school that committed itself to building a strong reading culture among its students as it digitized its library collection. Through a series of in-depth, phenomenologically based interviews and classroom observations, the researcher focused on identifying factors that foster an interest in literary reading as a personally meaningful literacy experience among 21st century adolescents and explored the following questions: What kind of teaching practices promote this interest? What kind of social environments encourage it? Can digital technologies be a bridge to reading engagement among Millennials?

The findings revealed a complex array of interwoven issues – digital technological and sociocultural – that appear to shape young adults' reading practices in a cultural context that offers an unprecedented variety of options in terms of access to and engagement with literature. Among the topics discussed throughout the dissertation are as follows: an educational paradigm for promoting adolescents' interest in literary reading; student and teacher agency; technology as the extension of teacher and student; choice-driven English curriculum; reader-response theory in the Digital Age; peer influence; school library services and on-demand eBook acquisitions. While the dissertation offers a detailed account of how digital technologies can play a prominent role in boosting Millennials' reading engagement, it foregrounds social factors as building blocks of a strong reading culture. These research findings have direct implications for conceptualizing secondary English education in the Digital Age in terms of its content as well as its pedagogical approaches.

PREFACE

I learned to read in preschool, out of a fervent desire to be part of a mysterious community of people who knew the code – the community of literate people. The mere ability to decipher and make meaning of written symbols excited me and made me feel worldly. I am still filled with joyful anticipation of the forthcoming pleasure of reading every time I come across a new title that captures my interest, for one reason or another. As Alberto Manguel (1996) put it, "I could perhaps live without writing. I don't think I could live without reading" (p. 7).

When you are a reader, you never really question, or "unpack," the term itself: for you, reading is just one of the most efficient and gratifying ways to satisfy all sorts of frivolous and serious curiosities you happen to have: about the world, other people, the self. After all, language is one of the key tools that help us mediate reality (Vygotsky, 1986). It is when my personal interest in reading as an intellectually and emotionally rewarding pursuit evolved into a professional interest that the issue presented itself in all its reality: for years, the field of education has been grappling with the problem of aliteracy – "having the ability to read but no interest in doing so" (Thimmesch, 1984).

For instance, in the proceedings of a conference held in 1984 and *solely devoted to the aliteracy phenomenon* (Thimmesch, 1984), conference participants express their concerns about "the decline of language skills in successive generations of high school students, the simplification of college textbooks, a diminished newspaper readership, the omnipresence of television" and ponder effects of these trends on our culture and society.

These concerns sound remarkably familiar; except in our Digital Age, "the omnipresence of television" has been replaced by the ubiquity of personal digital technologies.

Thus, technologies come and go, but the challenge of raising a reader remains. There is no doubt that some of the obstacles to achieving this goal continue to be socially and pedagogically induced. And this is what concerns me on both personal and professional levels. And this is what has been the driving force behind the research presented in this dissertation. Thus, it is with "impassioned goals" in mind (Charmaz, 2006) that I entered the research on reading practices in the Digital Age. To echo Charmaz (2006), I entered the studied phenomena with enthusiasm, opened myself to the research experience, and followed where it took me.

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CHAPTER 1

INTRODUCTION

A person who won't read has no advantage over one who can't read.
                                        - attributed to Mark Twain

English Language Arts has historically been "a lightning rod of a subject": "to the proponents of cultural literacy it is all about "monuments of unageing intellect"; to the advocates of critical literacy it is a "pedagogy of the oppressed"; to genre theorists it offers a key to narrative form" (Slattery, 2008). Due to its "somewhat amorphous nature" (Cook, 2004) the English curriculum has been reconceptualized multiple times throughout the last 100 years (Applebee, 1974). However, it is for the first time within the last 100 years when the impact of technological advancements on our literacy landscape has been akin to the revolutionizing effects of the printing press on the production of reading materials and on the subsequent spread of literacy (Eisenstein, 1979). Leu (2000) goes even further, asserting, "Never before have the technologies of literacy changed so rapidly in such fundamental ways" (p. 424). As a result, today's young people are culturally positioned by the pervasiveness of computer-based and media technologies (Smith & Curtin, 1998, p. 211), which mediate everyday experiences, including the literacy practices they engage in. This raises questions about sociocultural, epistemological, conceptual, cognitive, and affective consequences of the digital technological revolution.

The spread of digital technologies has triggered major conceptual shifts in the field of literacy education. Thus, the National Council of Teachers of English (NCTE)

and the International Literacy Association (ILA)[1] have updated national standards for

English language arts learners to reflect an understanding that "as society and technology

change, so does literacy."[2] The amended standards emphasize that a literate person in the

21st century should possess "many literacies" to be able to adequately participate in

increasingly more intense and complex literate environments: the ability to build and

express an understanding of a wide range of print and non-print texts; "to use a variety of

technological and information resources (e.g., libraries, databases, computer networks,

video) to gather and synthesize information and to create and communicate knowledge";

to engage with broader, more diverse audiences to gain and share knowledge, etc. The

NCTE/ILA standards pertaining to the 21st century literacies also make it clear that "the

continued evolution of curriculum, assessment, and teaching practice itself is necessary."

Similarly, Kress (1999) points out:

> If English is to remain relevant as the subject which provides access to
> participation in public forms of communication, as well as remaining capable of
> providing understandings of and the abilities to produce culturally valued texts,
> then an emphasis on language alone simply will no longer do. English will need
> to change. (p. 67)

The conceptual shift in literacy education has involved an evolution of its key

concepts. As implied above, "literacy" has come to describe very many different kinds of

practices, not all of which keep the etymology of the word – the ability to read and write

– intact. Alvermann (1999) observes that literacy can now refer not only to reading and

writing, but also to "other modes of symbolic communication that are often valued

differently by people living in different social and economic structures and holding

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[1] Formally known as International Reading Association (IRA).
[2] http://www.ncte.org/positions/statements/21stcentframework

different political views" (Alvermann, 1999, p. 4). This understanding of literacy is intrinsically inclusive and therefore calls for more comprehensive pedagogical practices when it comes to literacy education.

A group of researchers known as the New London Group (1996) use the word "literacy" in the plural to emphasize "the inherent multimodality of contemporary forms of [meaning] representation" (Cope & Kalantzis, 2013, p. 107), thus introducing the term "multiliteracies" to the field of education.[3] They suggest that meaning making should be conceived "as a form of design or active and dynamic transformation of the social world and its contemporary forms increasingly multimodal with linguistic, video, audio, gestural and spatial modes of meaning becoming increasingly integrated in everyday media and cultural practices" (Cope & Kalantzis, 2013, p. 107). The new London Group researchers theorized a new approach to literacy pedagogy – pedagogy of multiliteracies – that focuses on modes of representation much broader than language alone and takes language education beyond mere transmission of language rules from "literary models." A multiliteracies framework emphasizes "the enormous role of agency in the meaning-making process" and regards all forms of representation, including language, as active processes of transformation and not as processes of reproduction (Cope & Kalantzis, 2013).

Since its introduction to the field of literacy education, the pedagogy of multiliteracies has been widely discussed in the professional literature and, in various degrees, implemented in the classrooms. In addition, new, related terms – such as "new

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[3] The second part of the "multi" in the term "multiliteracies" is referred to multilingualism as an increasingly significant phenomenon that has important implications for contemporary literacy education. For more details, see New London Group (1996) and Cope & Kalantzis (2013).

literacies" and "digital literacies" – have been added to the professional lexicon. These terms refer to "those literacies that have emerged in the post-typographic era" (Semali, 2001) and involve literacy practices that are mediated by digital technologies. Eisner (1998) offered an all-encompassing definition of literacy – coding and decoding in any number of modes of meaning making – which seems to capture most of the new interpretations of this term.

Consequently, the term "text" has also undergone a considerable transformation. It is no longer only "a particular set and sequence of [written] signs scanned by the reader's eye" (Ryan, 2001, p. 5) and restricted to the print format. In the Digital Age, it often takes the form of a hypertext – "a textual reserve and instrument of composition with which the navigator can project a multitude of other texts" (Levy, 1998, p. 54), "a matrix of potential texts, only some of which will be realized through interaction with a user" (Levy, 1998, p. 52). Mahiri (2004) goes way beyond a text as a language-based artifact and claims that any type of meaning representation is a "text":

> Stories, poems, essays, books, and newspaper and magazine articles. However, they also can be spoken representations of meaning, such as oral stories, discussions, or speeches. They can be dramatizations, such as live enactments, films, and television; visual representations of meaning such as paintings, cartoons, sculpture, graphics, and holography; tactile representations such as Braille; and even lived experiences, such as a day in the park, a conversation with a loved one, or an observation about a social situation. (p. 224)

This interpretation of text echoes the 21st century NCTE/ILA standards, which expect English language arts students to gather, evaluate, and synthesize data from various sources, such as "print and non-print texts, artifacts, and people."

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Statement of the Problem and Purpose of the Study

The acceptance of broader definitions of literacy and text has brought "a paradigm shift in literacy instruction" at all levels of education (Smolin & Lawless, 2003). The literature and media reports abound in accounts of students engaged with multiple literacies through the use of digital technologies. Rutledge (2007), for instance, gives a comprehensive overview of new literacies being used at all levels of education: elementary students responding to texts by drawing abstract sketches; adolescents creating a PowerPoint multimedia presentations on homelessness; students making comic books in a non-art middle-school classroom; fifth-graders recreating video news-reports from the Civil War; high-school students directing their own Shakespeare videos; college students using paintings, art, videos, and aroma to compose research projects; art education students using applications such as iMovie, Movie Maker 2.1, and PowerPoint to create multimedia stories, and so forth (p. 11).

These and other similar studies mostly describe the processes and practices involved in making meaning from/with multimodal, hyperlinked texts. There is no sufficient research, however, that examines the role of digital technologies in the development of *print* literacy skills – making meaning from/with written text through reading and writing. In the literature, literacy practices that involve reading and writing in print formats, or in the print environment, are referred to as "traditional" literacy skills and practices (e.g., see Kymes, 2005; Calwell, 2013; Afflerbach et al., 2014; Nauman, J. & Salmeron, L., 2016), while engaging in literacy practices in electronic formats, or in the electronic/digital environment, falls under the digital literacies category. Although the

research presented in this dissertation explores various literacy practices, it primarily focuses on *print literacy* – making meaning with written language.

In addition, an understanding that different modes of meaning representation cannot be viewed as interchangeable has gained much less attention among literacy researchers and teaching practitioners alike. For instance, it took more than a decade for the New London Group (1996), which introduced the pedagogy of multiliteracies, to "have come to recognize more clearly" that "some of the differences in meaning potential afforded by the different modes are fundamental" (Cope & Kalantzis, 2013, p. 120). To give an example, "reading and viewing require different kinds of imagination and transformational effort in the re-representation of their meanings to oneself. They are fundamentally different ways of knowing and learning the world" (Cope & Kalantzis, 2013, p. 121). It is difficult to underestimate the significance of these insights for literacy education, and the scarcity of studies that consider both "parallelism and incommensurability between modalities" (Cope & Kalantzis, 2013) makes it an important area of literacy research.

Furthermore, although all researchers agree that encountering textual information in the digital environment feels different from the print environment, there is no consensus on educational and epistemological implications of this. The arguments run in different directions. Some argue (Reinking, 2001; Lanham, 1993) that multimodal electronic texts may in fact promote literacy, as they offer literally interactive (e.g., through hyperlinks), scaffolded (e.g., through visual imagery), and intrinsically more inviting (due to a wide choice of modes or resources) reading opportunities.

Others point to the declining reading scores in the period of growing ubiquity of electronic devices. Thus, the 2008 Scholastic *Kids and Family Report*, which specifically focused on reading and technology, released the following findings: "After age eight, more kids go online daily than read books for fun daily. Among 15-17-year-olds, daily book reading decreases to 17% and daily Internet use increases to 58%."[4] Similarly, the Kaiser Family Foundation report *Generation M^2: Media in the Lives of 8- to 18-Year-Olds* (January 2010) stated that "[r]eading for pleasure continues to be the only media activity that decreases as children grow older….This difference is entirely accounted for by the fact that younger children spend more time reading books than their older counterparts do." The National Endowment for the Arts' 2004 and 2007 reports – *Reading at Risk: A Survey of Literary Reading in America* and *To Read or Not to Read: A Question of National Consequence* – documented a decline in both reading and reading ability in "the first generation of teenagers and young adults raised in a society full of videogames, cell phones, iPods, laptops, and other electronic devices."

Interestingly, the agency's more recent report – *Reading on the Rise: A New Chapter in American Literacy* (The National Endowment for the Arts, 2008) documented "a decisive and unambiguous increase" in book-reading in general (defined as the reading of any book, not solely "literary," for pleasure) and literary reading in particular among adult Americans. The most significant growth had been among young adults (ages 18-24, the youngest group surveyed) – the cohort that had shown the largest declines in earlier surveys. Young adults also reported doing more reading online than older Americans. Although the survey captures reading practices among recent high school graduates (and

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[4] http://www.scholastic.com/aboutscholastic/news/kfrr08web.pdf

drop-outs), it does not reflect possible impact of school-based literacy instruction: "As the results make clear, the recent rise in reading is not a school-based trend but a broader, community-wide phenomenon" (NEA, 2008).

While *Reading on the Rise* (NEA, 2008) did not attempt to identify the causes either for (young) adult reading or for changes in reading behavior, another report – *A Snapshot of Reading in America in 2013* (Pew Research Center, January 16, 2014) – revealed a connection between a jump in device ownership and a spike in e-reading among American adults ages 18 and older. Importantly, the vast majority of those who read e-books and listen to audiobooks reported reading print books as well. This finding seems to suggest that if one is a reader, s/he is likely to read in any format, depending on the circumstances, reading purposes, and the like.

Some suggest that the discussion of how much reading and writing people do should also include other types of literacy practices, not just book reading. Gomez (2008), for instance, maintains: "If you factor in things like email, social networking, websites, blogs, and wikis, people now read probably more than they ever did" (p. 34). According to Kaiser Family Foundation (January 2010), 7th-12th graders spend an average of 1:35 a day sending or receiving texts. However, Baron (2008; 2015) and other researchers (Bauerlein, 2008; Carr, 2010; Wolf, 2007; Wolf & Barzillai, 2009) insist that the sorts of reading and writing that people do have to be an essential part of the discussion. Baron (2015) inquires: "What 'counts' as reading? For reading, do we include comic books? Online newspapers? And does just starting a book qualify?" (p. 11).

In the Digital Age, the printed word can be accessed in a variety of formats, which sparked a discussion about the relationship between the reading medium and the

quality of the reader's engagement with the written text. Some researchers argue that print and digital formats lead us to read on them in particular, qualitatively different ways. Print medium encourages long-form "deep reading" – "the array of sophisticated processes that propel comprehension and that include inferential and deductive reasoning, analogical skills, critical analysis, reflection, and insight" (Wolf & Barzillai, 2009, p. 33). Screen medium, on the other hand, promotes "hyper reading" – "reader-directed, screen-based, computer-assisted reading that includes searching, skimming, hyperlinking, and extracting fragments from longer texts" (Sosnoski cited in Baron 2015, p. 166). These differences, Baron (2015) asserts, have potential consequences that ultimately go beyond individual reading choices and drive us "to think about culture" (p. 153).[5]

Yet another body of research reveals no effect of the medium of delivery on reader achievement. Thus, Margolin et al. (2013) found that for adolescent and adult readers, reading narrative and expository text on paper, on a computer, or a Kindle made no difference in readers' comprehension and suggested that reading can happen effectively in a variety of presentation formats. Baron (2015) reviewed a number of studies measuring adults' and young adults' reading comprehension in print and onscreen, which yielded mixed results: some studies reporting no differences in reading comprehension while others – better comprehension scores for subjects who did their reading in print. Baron points out that this could be attributed to differences in "subject age, reading material, testing methodology, and user's prior experience with reading onscreen" (p. 170). She also highlights that a bigger issue with these studies is that they

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[5] To the best of my knowledge, there is no research on the relationship between popular forms of screen reading (e.g., Web browsing) and the development of interest in long-form reading, which would be an important line of inquiry.

involved only brief readings followed by comprehension/memory questions. Baron concluded that a more nuanced approach to researching reading experiences in different platforms should involve "close reading of continuous texts," or deep reading.

Intrigued by the polarity of findings and opinions on the subject, I, too, have joined the debate by conducting a research study on technology-mediated and traditional literacy practices in a secondary school setting. The following questions guide my research:

- What "affordances" (Kress, 2003) do digital technologies offer the English language arts curriculum? What do these affordances make possible in the English secondary classroom that would not be possible otherwise?
- In what ways do different reading formats shape what and how students read and teachers teach?
- What teaching practices foster adolescents' interest in *literary* reading in the Digital Age?
- What factors – digital technological and sociocultural – contribute to the culture of reading among 21st century adolescents?

These research questions are inseparable from the question of the "worth and value" (Honan, 2009): What is the significance of traditional literacy skills in contemporary education, culture, and society? Three decades ago, Postman (1980) wrote that "improved language behavior originates in the deepest need to express one's personality and knowledge, and to do so with variety, control, and precision" (p. 27). Here Postman simultaneously articulates particular desirable language abilities and emphasizes the

value an individual should place on them. In 2009, Gelernter, a computer scientist at Yale University, remarks:

> The most important ongoing change to reading itself in today's online environment is the cheapening of the word. In teaching college students to write, I tell them (as teachers always have) to make every word count, to linger on each phrase until it is right, to listen to the sound of each sentence. But these ideas seem increasingly bizarre in a world where (in any decent-sized gathering of students) you can practically see the text messages buzz around the room and bounce off the walls, each as memorable as a housefly; where the narrowing time between writing for and publishing on the Web is helping to kill the art of editing by crushing it to death. The Internet makes words as cheap and as significant as Cheese Doodles. (para. 4)

The above quotation implies that online literacy practices do not only have a formative effect on reading and writing *habits* and *abilities* of Millennials but also affect their judgment about the *value* and *relevance* of traditional literacy skills. Baron (2015) observes that such a mismatch of expectations on both sides – university faculty and students – is often a source of frustration for both parties involved. She also raises a question whether "our standards as readers, writers, and even publishers are becoming less discerning" (Baron, 2008, p. 166) and inquires whether it is possible that "[w]e are raising a generation of language users (who, in turn, impact the linguistic patterns of their elders) that genuinely does not care about a whole range of language rules" (p. 169).

 The research presented in this dissertation addresses the question of value by exploring how digital literacy practices are shaping traditional assumptions regarding reading and writing and discusses a framework for reconceptualizing secondary English language arts curriculum in the Digital Age.

Assumptions and Theoretical Framework

I bring certain assumptions about print literacy in general and about reading, in particular, to this dissertation research. I share the belief that reading – a literacy practice that involves sustained immersion in a written text – has been "a cultural practice par excellence" (Hutchins, 2008) that uniquely contributes to our linguistic and conceptual development, as well as to our creative imagination. This view compels me to insist on finding ways to foster a love of reading in the younger generation and, by doing so, to maximize their chances of attaining high levels of print literacy. I also believe that our changing cultural environment forces us to reflect with renewed vigor on the value of print literacy and, at the same time, to rethink our approaches to teaching reading and writing in light of digital technological possibilities and challenges.

Reading, a term central to this research, is typically subsumed by the term literacy but is neither synonymous with it nor unambiguous (Alvermann, 1999). In the literature, reading often has a psycholinguistic connotation and is discussed as a set of discrete skills: decoding, word recognition, and comprehension of literal meaning. Acknowledging that reading is a complex psycho-lingo-socio-cultural process, this dissertation research examines it as a sociocultural practice. At a most general level, "a reader's experience with any work is always a negotiation with text, writer, society, and self" (Johnson-Eilola, 1994, p. 206). Thus, reading is both an individual and social act. It is individual because: 1) the work of engaging in and completing this "negotiation" has to be done by each individual reader; and, 2) each reader brings a unique set of circumstances, abilities, and intentions to the text, which profoundly shape his/her comprehension of and engagement with it. Reading is social because: 1) the context (both

the immediate environment and a larger, broader sociocultural context) within which

reading occurs shapes it in important ways; 2) the reader's "unique history" reflects some

shared, socially acquired experiences; and, 3) "[j]ust as the personality and concerns of

the reader are largely socially patterned, so the literary work, like language itself, is a

social product" (Rosenblatt, 1983, p. 28).

Another concept central to this dissertation research is that of *engaged reading*.

Reinking (2001) points out that although this concept "has strong intuitive appeal,

capturing many of the ultimate goals of educators interested in promoting literacy beyond

rudimentary decoding ability," it is difficult to precisely define what engaged reading is.

He writes:

> [M]ost teachers could easily identify students whom they would categorize as
> engaged readers and others who are not, even if they could not define the term
> precisely…Although it may be unsatisfactory from a theoretical perspective, it
> may not be crucial to press for a precise definition of engaged reading. Rather, it
> may be more important to focus on achieving rather than defining a goal that has
> strong intuitive appeal. (pp. 201-202)

As discussed at length throughout this dissertation, some teaching frameworks seem to

create more favorable conditions for engaged reading, one of them being the transactional

reader-response theory (Rosenblatt, 1978, 1983, 1985; Iser, 1980).

Rosenblatt's (1985) transactional theory of reading emphasizes readers as active

participants of the production of the textual meaning and as co-creators of the written

work during the transaction between them and the text. She maintains, "The reading of

any work of literature is, of necessity, an individual and unique occurrence involving the

mind and emotions of some particular reader, and a particular text at a particular time

under particular circumstances" (1985, p. 36). Rosenblatt (1985) also emphasizes the text

as an active element in the reading process "that offers guidance and constraint, yet it is open, requiring the creative contributions of the reader" (p. 36).

By highlighting the reader's creative contributions, the transactional reading framework validates multiple interpretations of a particular text and, therefore, offers each reader an opportunity to discover its personal significance. Adopting and canonizing one specific interpretation of reading, on the other hand, is problematic precisely because it cuts off "the potential multiplicity of connections" (Iser, 1980) that each text has to offer to its readers. As Edmundson (2004) maintains, "To reduce literature to one ethos, when it contains a nearly infinite number, robs great writing of its diversity, and life of its richness" (p. 37). In other words, any single interpretative frame cannot be expected to do justice to a diversity of ideas and experiences both the writer and the reader bring to the printed page or electronic screen.

Ironically, at the institutional level, the history of reading has not been "the history of each of its readers" (Manguel, 1996) but either a history of schools of literary criticism and theory-based text interpretations or ideology-driven reading instruction, which imposed arbitrary interpretive frames on the reader. As a result, the English classroom has become, as Shwartz (1999) put it in his introduction to *For the Love of Books*, "a cold clinic in which to deconstruct literature, a place where bad things happened to good books" (p. xv).

Reader-response criticism, unlike any other reading framework, "does not promote one set of critical questions over another" (Probst, 2002, p. 31) but emphasizes the importance of "making the student's response the starting point for all growth in understanding and critical powers" (Rosenblatt, 1976, p. ix). This aspect of the reader-

response criticism has often been overlooked by its critics, who claim that one of the major problems of the transactional theory of reading is that it does not provide a critical stance. Responding to some common misconceptions of the reader-response theory, Cai (2008) writes:

> [I]f we move beyond transactional theory and bypass the essential first step of personal transaction with the text in hopes of developing critical reading ability in the reader, we run the risk of imposing a certain critical point of view on the reader without the reader really understanding and accepting it. It would be a throwback to a text-centered approach that neglects the reader's personal transaction with the text. Consequently, the critic or the teacher would again become the authority on the criticism of the text as a social construct, very much like they were the authority on the criticism of the text as an object of art during the heydays of New Criticism. (p. 218)

Cai highlights the "essential first step" of forming a personal connection with the text as the only way to avoid an authoritarian reading framework of any sort, which we have had many.

"Taming" the reader has always been a salient part of the institutional literate culture, which can be at least partially explained by the nature of the written language: "it defers negotiation over what things mean away from face-to-face communication to what we might call 'interpretation police'" (Gee & Hayes, 2011, p. 41) – teacher, priest, elder, or leader.

Privately, though, over the centuries readers have been creating personally meaningful interpretations of literary texts, including canonical texts, drawn to "the ability of literature to set free new identities," (Gee & Hayes, 2011). Thus, Gee and Hayes (2011) discuss a published collection of stories from the eighteenth through the twentieth century of British working-class people "who interpreted canonical literature as representing their own values and aspirations and not those of the wealthy and powerful"

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(p. 38). A case in point is Mary Smith (born in 1822), a shoemaker's daughter who read

Shakespeare, Dryden, and Goldsmith "with delight" as these authors made her feel akin

to "the whole human race," gave her strength, and filled her with enthusiasm (p. 38). Gee

and Hayes (2011) argue that the interpretation police neither from the Left nor the Right

could have anticipated such a deep appropriation of "controversial" canonical literature

by a British working-class woman. Without resorting to any reader-response terminology,

the researchers essentially describe the idiosyncratic process of "evocation" of a literary

work by the reader to explain why Mary Smith "read canonical works as affirming her

humanity and rights to equality in a hierarchy society" (p. 38):

> She identified herself with the characters and viewpoints in these books. She
> projected herself into them. She didn't distance herself from the hero because he
> was a male and a king in a Shakespeare play, however much she might have
> wanted and certainly deserved female heroes. She saw herself as projected into
> that powerful monarch. Perhaps sometimes when she read Shakespeare, she was a
> king and other times a queen. Perhaps sometimes when she read Shakespeare, she
> was not a traditional monarch at all but a monarch shoemaker with the dignity and
> the human worth of a traditional monarch. Perhaps sometimes, she was all these
> and more. Remember, she was not just taking on the life of a virtual character in
> the book or play. She was also projecting herself into that character, *creating*
> *something that both she and Shakespeare made, neither of them alone* [italics
> added].

The above passage is a powerful testimony to the viability of the reader-response

framework, within which "[t]he individual personal transaction with the text becomes the

basis for growth in the ability to engage in increasingly complex and demanding literary

transactions" (Rosenblatt, 1985, p. 49) and the world. Rosenblatt insists that the

classroom must be a place that fosters such growth by providing students with

opportunities for personally meaningful *evocations* of literary works and for responses to

these transactions with the text.

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The distinction Rosenblatt (1978; 1985) draws between *the text*, "the set of signs capable of being interpreted as verbal symbols," and *the poem*, the work which a reader elicits, or *evokes* in a transaction with the text, is important for a fuller understanding of her theory. "The poem" is not an object but an event, a lived-through process or experience. By insisting on the "poem as event," Rosenblatt underlines "the importance of the personal, social, and cultural context, recognizing that 'our own actions, like the author's work of art, are the organic expression not only of a particular individual, but also of a particular cultural setting'" (Rosenblatt, 1985, p. 36).

The digital revolution seems to be rapidly changing the text, the author, the reader and, therefore, "the poem." The presented research examines these changes and capitalizes on the insight that "[t]he ubiquitous nature of technology in today's classrooms provides an opportunity for teachers to nurture and encourage reader response both individually and collaboratively in multiple contexts" (Arnold, 2006, p. 6).

Significance of the Study

What makes the presented research important is that it adds new insights to the ongoing evaluation of the attempts to incorporate digital technologies into English education. It re-introduces the notion of a reader into current debates about technology-mediated literacy practices and presents an educational framework that illuminates "the value and relevance of reading in the education of citizens for the 21st century" (Waxler & Hall, 2011, p. xi). It does so through an in-depth examination of lived experiences of English teachers and library personnel at a high school that has been at the forefront of technological innovations when it comes to literacy education and, at the same time, has committed itself to building a strong reading culture among its students. The research

considers implications of the transactional theory of reading for teaching literature in a cultural context defined by digital media.

Insights from this study are particularly significant in light of the widespread concerns (either well-grounded or merely perceived) about adolescents' waning interest in reading as their everyday lives become more and more saturated with personal digital technologies. Findings from this research shed light on what kind of educational practices at the secondary school level can potentially develop more engaged readers.

The study is presented in the following progression. The next chapter – Chapter 2 – is literature review that walks the reader through the issues that emerged from my theoretical framing. This stage of my inquiry was instrumental for identifying knowledge gaps and for articulating my research questions as well as designing the study. Chapter 3 represents a detailed account of the research design that enabled me to collect data relevant to the purposes of this study. Chapter 4 presents my findings in a thematically organized manner. Chapter 5 offers an in-depth analysis of the findings presented in the previous chapter, names pedagogical and socio-political implications, and identifies areas for further research.

CHAPTER 2

REVIEW OF THE LITERATURE

Introduction

Broadly speaking, literature reviews involve exploration and analysis of what has been said about the topic of the researcher's inquiry. While the researcher aims to be inclusive and comprehensive in the way s/he conducts a literature review, the process is inherently selective: authors and arguments that get to be included and discussed in each literature review inevitably reflect the researcher's subjective judgments regarding their quality, relevance, and importance for the purposes of his/her research. My goal in writing this section is twofold: to provide a comprehensive overview and analysis of the existing literature on the relationship between traditional and digital literacy practices, between literacy and technology and to sufficiently support the ideas, concerns, and considerations that are central to my research questions.

My own search practices for conducting the literature review illustrate the synergy between digital and print resources, between digital and traditional literacy practices. Such databases as ERIC and JSTOR were often my starting points for identifying relevant literature. Works cited/references/bibliography sections of the books and articles I read were often a source of additional readings. Because there is a synergy between my research and my academic advisor's research interests she also introduced me to resources tailored to my line of inquiry.

In addition, I have been a frequent reader of online discussions, which were

triggered by publications of articles on topics of interest to me (e.g., I subscribed to

receive *New York Times* articles on "electronic reading"). I found these forums to be a

valuable communal reading experience and a window into a broad readership. Another

valuable form of social reading I extensively used was Amazon.com. As Ofstad (n.d.)

points out, Amazon devised a revolutionary approach for selling books: it created "a

social word of mouth environment online," which works on different levels. The

company builds a database of the books purchased by each individual buyer. Then, based

on these purchases, Amazon suggests books, including new releases, geared towards

his/her idiosyncratic interests. Furthermore, it links together readers with similar

interests, offers customer reviews and most importantly – a virtually unlimited supply of

new and used, paper-based and electronic books. As Ofstad (n.d.) highlights, "Amazon

doesn't just get books sold; it gets books read." Therefore, it is essentially a "catalyst for

reading and more reading" (Ofstad, n.d.). Recommended by Amazon.com or identified

through other means, I have purchased an enormous amount of full-length books that

informed the research presented in this dissertation. Most of these purchases were paper-

based to satisfy my preference to work through a text with a pencil.

The framing of the literature review reflects the logic that I followed as I was

doing my search. The starting point for the search was an exploration of the "worth and

value" (Honan, 2009) of traditional, or print literacy. This line of theoretical inquiry

allowed me to address my own initial "literacy bias" (Meacham et al., 1999) and to

articulate essential understandings about print literacy in a historical perspective. I

explored the following questions: How does print literacy impact individuals and

societies? Why has reading been historically considered "a cultural practice par

excellence" (Hutchins, 2008), including the current focus on students' ability to "comprehend texts of steadily increasing complexity as they progress through school" (Common Core State Standards[6])?

As my inquiry moved to literacy practices in the Digital Age, the literature review transitioned to the theoretical exploration of the following questions: In what ways is digital reading different from traditional, paper-based reading? How might these differences affect the new generation of adolescent readers? What are epistemological and pedagogical implications of integrating multimodal literacy practices into the English curriculum? What is likely to be gained and lost when a particular mode is used?

Throughout my literature review inquiry, I was guided by questions to which I did not know the answers. Consequently, at that time, I did not have an informed stance towards the issues that were raised by the researchers whose work I was reviewing, analyzing, and citing. My literature review is essentially a dispassionate analytical account of facts, findings, and often contrasting opinions on the topic I feel passionate about.

The Worth and Value of Print Literacy: A Historical Perspective

> Works of fiction – the writings of Jane Austen, Leo Tolstoy, Toni Morrison, William Faulkner –
> allow us to inhabit fascinating worlds we couldn't have envisioned. Works of scholarship – the
> economic analyses of Karl Marx and John Maynard Keynes, the histories of Thucydides and Edward
> Gibbon – provide frameworks for making sense of the past and the present.
> -   Howard Gardner

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[6] Within the CCSS framework, text complexity is determined through both qualitative (levels of meaning, structures, language conventionality and clarity, and knowledge demands) and quantitative (e.g., varuous readability measures) analysis of the text. For more information, go to
http://www.corestandards.org/assets/Appendix_A.pdf

Throughout history, reading has been many things to many peoples (Fischer, 2003).[7] Rosenblatt (1985) writes that the literary transaction is a unique "form of human behavior" (p. 39). This idea is reflected in Akinnaso's (1991) observation that the ability to engage in a literary transaction is more than a mere competency but an attitude and a lifestyle:

> [B]y the time I completed college, literacy had come to mean, for me, a way of life, a way of knowing, a way of talking, and a way of doing. It gave me pleasure and stimulation. It widened my horizon. More importantly, literacy made me engage in thinking as a deliberate, planned activity. The observation and description of regularities and irregularities in patterning became a conscious activity. Certainly, literacy had practical benefits, but I already took those for granted. What Ajegunle farmers considered to be primary functions of literacy were almost its secondary functions for me. (p. 92)

The implication here is that "'literate thinking' involves specific ways of perceiving the world and talking about it, a perception that may result from interacting with either text or text user" (Akinnaso, 1991, p. 74). Akinnaso essentially highlights print literacy as a tool that enables a literate person to mediate social reality at a qualitatively different level. This echoes Vygotsky's (1978) beliefs about cognitive/psychological abilities falling into two categories: "higher" and "elementary." According to Vygotsky (1978), elementary, or "natural" mental functions that we are born with undergo a transformation through the process of socialization to various new practices. Acquisition of higher, or "cultural" mental functions enables us to participate in new forms of engaging with the world, such as going beyond our immediate experiences to examine them at an abstract level. Thus, on the one hand, Vygotsky emphasizes the social origins and social nature of

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[7] For comprehensive historical overviews of the history of reading across cultures, see Manguel, 1996; Gold, 2002; and especially Fischer, 2003.

higher mental functions. On the other hand, he highlights the transformative role of tools/signs (e.g., literacy/written language) in mediating higher mental functions.

Purves (1990) explores the transformative nature of literacy through a different angle. In *The Scribal Society,* he writes: "Many people during the course of the world's history have learned to read and write to a certain extent," which "enabled them to function within the society, but they were hardly masters of the written language in the way that scribes were" (p. 38). He makes a distinction between "the literate" and "the scribal" emphasizing that being a scribe entails an awareness of literacy that extends far beyond the mechanics of reading and writing:

> The group of highly literate people in a society, those whom we call the scribes, have been distinguished by having in common a knowledge of the particular coding system that is written language…[T]his knowledge was and is complex; it is more than simply knowing how to sound out or make out marks. Scribes were more than literate, they were learned. (p. 37)

In the above passage, Purves is essentially highlighting the important distinction between utilitarian functions of literacy and literacy as an intellectual agency. McKenna (2001) further elaborates on this distinction, maintaining:

> As educators, we must acknowledge that reading does have an instrumental utility, in the workplace and in a range of other contexts, but we also aver that optimal participation in a literate culture requires frequent, active engagement in reading as a valued social activity and as an intellectual agency. (p. 153)[8]

Gold (2002) cautions against having the goal of basic literacy as the motivator for teaching people to read: "This desire to have everybody functionally literate easily

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[8] Pre-literate and post-literate cultures require/prioritize competencies rather than reading to ensure optimal participation and intellectual engagement of their citizens. Besides, as Gold (2002) reminds us, "[I]n pre-literate cultures the same limitations applied to everybody. Once writing and reading appear, the control of information becomes a means, the most powerful means, to absolute control of minds" (p. xxiii).

becomes an attitude, a concession to basic reading and a limitation on teaching and learning. People know why they need to read warning labels on poisons, but they do not know why they need to read *Genesis*, *Hamlet* or *Jane Eyre.* We have to be careful then not to feel too good about having a population that is only basically literate*"* (p. 236). Nineteenth-century debates over the British government policy of compulsory education is a historical reflection of Gold's concerns:

> Opponents of government policy were worried that schools might succeed in educating people to a point where there would be a surplus of scholars and critics who might undermine the social hierarchy. Such fears were allayed by reformers emphasizing elementary practical literacy and numeracy (the three Rs of reading, writing and arithmetic) rather than a liberal education in the classical tradition, which remained as much the preserve of an elite of *literati* in 1900 as it had been in 1200. (Clanchy cited in Olson, 1994, p. 10)

Having print literacy as an intellectual agency implies, then, "an attitude and a lifestyle" that are text-mediated in some significant ways. To articulate the impact of this mediation, one needs to look at print literacy through a historical lens.

In a historical perspective, having a written text (i.e., stored information that is immutable, retrievable at will, etc.) as a mediating tool has had major consequences for humanity. Akinnaso (1991) points out four major areas of experience where the impact of literacy has been most noticeable: language and speech; thought; religion and culture; and social organization (p. 85). While reviewing them all is beyond the scope of this literature review, below are some of the major advancements in these areas.

The invention of the written sign boosted the evolution of language. Birkerts (1994) writes:

> The storyteller was naturally constrained by the attention of his listeners; thus the tales were often formulaic, built around repetitions and mnemonic tags, and structured to maximize suspense. But the word on the page is implicitly a memory

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device, and it long ago liberated the writer to pursue nonformulaic incentives. Our more serious literature incorporates levels of difficulty – in narrative sequence, referentiality, syntax, and linguistic density – and presupposes a reader who is free to hover over a phrase, reach for a dictionary, and dart back. (p. 145)

Thus, it appears that we owe lexical, syntactic, grammatical, and semantic complexity to the emergence of the written language. Literacy also contributed to the advancement of scientific and social thought.[9] According to Gee and Hayes (2011), the use of written language in specific contexts gave rise to "specialized languages to deal with abstract and complex things" (p. 12). Purves (1990) writes that the mere opportunity to store information has enabled humans to keep a record of their past and of their explanations of the world, thus giving rise to such fields as history and science. This also laid a foundation for building a society governed by written law, which provided "a more secure rule that does not entirely depend on force" (p. 19). The religious text has enabled people to form communities around shared cultural values (Purves, 1990; Fischer, 2003).

To generalize, literacy "freed ourselves from concreteness, from the here and now" (Gee & Hayes, 2011) and allowed long-term preservation, accumulation, and transmission of vast amounts of collective knowledge, which seem to have advanced human development. As Zaid (2003) put it,

The preservation of texts and other works in a physical medium is an external support of biological memory that facilitates creation…The physical preservation of creative work didn't only extend collective memory in time and space. It also made it possible for the human species to build a creative heritage, thus accelerating human development. (p. 113)

Particular literacy practices appear to have shaped human development in other ways, too. Thus, one of the most fascinating changes in the development of reading, first

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[9] If science is defined as acquiring functional knowledge of one's environment, then "...no human society is or ever has been without the rudiments of science" (Lloyd, 1970, p.1).

documented in the Latin West, was transition from ubiquitous reading aloud to widespread silent reading (Saenger, 1997) around the year 1000, which led to the notions of interior life, interior self (Landow, 1996). This shift essentially meant a revolution not only in the way texts were regarded, but in the way consciousness was formed (Carroll, 2007):

> Whereupon silent reading, wherever it was practiced, introduced a new dimension to the performance, one that endures to this day. Reading went from a public to a private act. A reader no longer shared the text with others…or even tied sounds to letters. She or he could read confidentially, unheard, accessing concepts directly, letting thoughts proceed at a higher level of consciousness, cross-referencing and comparing, considering and evaluating. This changed Western reading profoundly, influencing not only reading's external circumstances and matter, but also its psychological affect on the practitioner. The accomplishment became part of one's internalized existence. (Fischer, 2003, p.162)[10]

However, there appears to be little written in the research literature about the relationship between reading and the reader's inner life (however it is defined). Most references to the direct connection between the two deal with the famous example of St. Augustine watching his mentor St. Ambrose read without moving his lips: This was "an instance of pure interiority, reading as entry into a contemplative world. Augustine here embraced the philosophical ideal that would define him from then on – inner life as absolute" (Carroll, 2007). Vygotsky (2003) explicitly wrote about the relationship between a literary work and one's inner life and proposed that "a literary work shapes our inner world, our thoughts and feelings exactly the same way technological tools shape the outer world, the natural world" (p. 250). As Fischer (2003) put it, "As food is with the body, so is reading with the mind" (p. 316).

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[10] For additional information and historical evidence, see Fischer, 2003, pp. 89-92, 97, 159-164, 201-202.

Gold (2002) tackles the subject of the relationship between reading and one's

inner life by creating a profile of a non-reader who considers reading literature "a waste

of time":

> As one acquaintance of mine puts it, "I've got no time for other people's
> fantasies." Such a view indicates the absence of inner life, an absence of his own
> fantasies, desires, thoughts, dreams. This is a practical man who believes in
> tangible things. Trucks and tools, boats and motors, to him, the material world is
> "reality." So of course he has no knowledge or interest in literature as a powerful
> educator, a powerful healer, and the most useful means of all for creating identity.
> This man, a decent fellow, just is himself and has no knowledge that he can
> change himself or anything else. (p. 228)

While equating the lack of interest in reading "other people's fantasies" with an absence

of inner life or of one's own fantasies, desires, thoughts, and dreams does appear

extreme, the quote emphasizes a not-so-uncommon attitude to reading fiction as an act of

questionable value and "a waste of time." When *any variation* of this stance towards

reading fiction becomes an enforceable policy (e.g., finds its reflection in mandated

reading/literacy standards), it can potentially affect an entire generation of readers.[11]

Ironically, Bradbury's fictitious account of the effect of non-reading on one's

inner life and on society at large in Fahrenheit 451(2003) appears to make the strongest,

most memorable case for reading. According to the author himself, this novel is "about

the way television will make us into a nation of non-readers, which means being non-

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[11] For instance, considering the fact that Common Core State Standards
(http://www.corestandards.org/assets/Appendix_A.pdf) appear to priviledge non-fiction over fiction and
expect students *of all age groups* to read literary works *in the same manner* as expository texts (e.g., to
extract main ideas and find supporting evidence), it is quite reasonable to suggest that these standards are
written by "practical men who believe in tangible things."

reflective, hedonistic and conformist" (Blechman, 2007).[12] For Bradbury, uncensored

reading is a manifestation of intellectual freedom and a key method of cultivating

independent thought. In the society depicted in Fahrenheit 451, the effect of reading is the

refusal to conform to anti-intellectualism as a way of life and "to the television-induced

stupor of the general population" (Blechman, 2007). Schwartz (1996) echoes this idea in

her *Ruined by Reading: A Life in Books* when she observes, "I am not sure my mind

could be free without reading…" (p. 1).

A note of caution comes from Schroeder (2001) who observes, "literacies,

themselves, are not inherently liberatory or dominating" (p. 4). For instance, literacy

embedded within totalitarian regimes serves as a tool for reinforcing a particular ideology

and, therefore, acquires an oppressive function (Matusov & Julien, 2004). Thus, literacy,

as any other technology, does not by itself shape or determine outcomes. Gee and Hayes

(2011, p. 4) assert:

> No technology – books, television, computers, video games, or the Internet – by
> itself makes people good or bad, smart or stupid. Such technologies have effects
> only in terms of how, when, where, and why, they are put to use. They have
> different effects in different contexts of use. They can be forces for good or ill. A
> computer connected to the Internet in the hands of a child with good mentoring is
> often a force for learning. It may not be in other circumstances. The real issue,
> then, is social, that is, who has and who does not have mentoring, not technology
> alone.

This observation essentially underscores the importance of human mediation in our

transactions with tools. As Gee and Hayes (2011) emphasize, the mere

presence/availability of tools cannot be expected to determine outcomes from their use.

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[12] The focus on television in the citation is understandable: since its emergence in the 1950s, when
Fahrenheit 451 was first published, until very recently it was common to view TV as the medium majorly
responsible for eroding literacy (Neuman, 1995). Nowadays, digital technologies have replaced television
as a primary target in debates over their impact on print literacy.

Rather, it is the characteristics of the specific social environment where these tools are used that have a potentially shaping effect on our ability and motivation to use them for some purposes rather than others.

The Worth and Value of Print Literacy: Reading and Imagination

A number of researchers talk about the unique role of reading in developing creative imagination. Schafer and Anastasi (1968) reported that high school students considered being creative (as judged by their teachers) read more than average students, with more "creative" students (in both "Creative-Artistic" and "Creative-Scientific" groups) reporting that they read over 50 books per year. Of particular interest is the study's focus on the subjects' experiential background in its relation to the development of their creative imagination. For instance, the study revealed that parents of more "creative" students often had artistic or scientific hobbies and exposed their children to their interests. Both fathers and mothers of "creative" students read more books than those in the control group, and reading was more often listed as the father's favorite leisure-time activity. The types of literacy materials always present in "creative" students' homes were also found to be a distinctive formative factor: e.g., regularly available magazines were more likely to be of the scientific or political commentary-foreign affairs or the cultural-intellectual types. The study seems to suggest that exposure to a greater pool of ideas/knowledge fosters imaginative development, both scientific and artistic. This gives students something new to think about, provokes further thoughts and encourages new connections between them. As Eco (1996) put it, books "are machines that provoke further thoughts" (p. 296).

Neuroscientist Wolf (2007) writes about the generative capacity being at the heart of reading: "The rich associations, inferences, and insights emerging from this capacity allow, and indeed invite, us to reach beyond the specific content of what we read to form new thoughts" (pp. 16-17). Gold (2002) writes that "[w]ith the combinations of information the brain can produce, we can think to do and experience almost anything" (p. 197). He also emphasizes that reading cultivates the process of imagination, not merely the content.

Kress (2003) and Iser (1980) shed light on how the process of reading nurtures a particular kind of imagination. According to Kress, words are, relatively speaking, empty of meaning. The word needs to be filled with meaning: "The imaginative work in writing focuses on filling words with meaning – and then reading the filled elements together, in the given syntactic structure" (Kress, 2003, p. 4). The role of the reader, then, is to render visible "that which writing suggests in hints and shadows" (al-Haytham cited in Manguel, 1996, p. 39). It is this characteristic of words that leads to the well-known experience of having read a novel – filling it with our own meaning – to realize when we see its screen adaptation that other people filled the words with very different meanings.

Iser (1980) describes the process of "picturing" done by our imagination as one of the activities through which we form the "gestalt" of a literary text. When we read, we visualize characters of a novel virtually for ourselves, and our imagination senses a wide range of possibilities. For Iser (1980), the creative work of reading is "the coming together of text and [the reader's] imagination" (p. 34). He writes that

> the reader often feels involved in events which, at the time of reading, seem real to him, even though in fact they are very far from his own reality. The fact that completely different readers can be differently affected by the 'reality' of a

particular text is ample evidence of the degree to which literary texts transform reading into a creative process that is far above mere perception of what is written. The literary text activates our own faculties, enabling us to recreate the world it presents. (p. 34)

Rosenblatt (1985) emphasizes the uniqueness of the reading experience: it is not vicarious, not virtual, but a special kind of experience of its own right: "[E]ven when we feel ourselves as onlookers at the characters and situations of a novel we are also participants, having ourselves created the scenes that unroll before us"(p. 39).

Hence, it appears that reading fosters a particular kind of imagination that depends on the ability to "fill words with meaning" and, therefore, to recreate the world constructed by the author. With printed text, each reader has to activate his/her own inner resources – linguistic and non-linguistic – to create its interpretation.

Kress (1997) problematizes the notion of imagination by emphasizing its fluid, multifaceted nature. Having observed children draw different objects (such as cars, animals, plants, people, flags, etc.), he was intrigued by the widespread practice of cutting out drawn objects by these young artists in order to be able to physically manipulate them in different games. Having analyzed this continuum of actions, Kress came to the conclusion that

> [c]utting-out may offer the child one means of bridging a gap between two kinds of imaginative worlds, one in which the child 'enters the page' so to speak, and imaginatively enters into the life of objects in or on the page; and another in which represented objects come off the page and are brought into the world of physical objects here and now, which are then reanimated in the imaginative effort of the child. (p. 27)

Kress (1997) writes that through this series of actions, children are able to link two kinds of realism that engage their imagination: one that represents "practical engagement in and with a present three-dimensional world involving imagination"; and a different one that

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represents "mental engagement with a distanced world also involving imagination" (p. 27). Kress then inquires which of these imaginative involvements are "more likely to bring benefits in a future world" and which, therefore, should be prioritized in "institutionalized education."

Kress's answer to this question emphasizes the importance of "the successive transitions" from one mode of representation/engagement to another, from one form of imaginative effort to another. These transitions, he asserts, need to be a necessary part of human development, whether in institutional settings or at home: "The move, the transduction across modes, encourages the synaesthetic potentials of the child in their transformative, creative actions" (p. 29). According to Kress, integration of all modes and forms of representation into the educational process does not only allow to overcome the limitations imposed by one particular mode but also offers "an enormous potential enrichment, cognitively, conceptually, aesthetically and affectively" (p. 29).

Furthermore, McCormick (2011) argues that transmediation, i.e., the act of translating meaning across different sign systems, reinforces analytical thinking and enhances comprehension. She writes that creating meaning in a second sign system forces the reader, the artist, or the writer "to reexamine the central concept of the original composition" (p. 580). This requires that students go beyond "the reiteration of received ideas to the invention of new connections and meanings" (p. 581). Students must analytically examine whether meanings created in one system (e.g., written text) explain and expand meanings created in an alternative sign system (e.g., image).

If we accept the proposition that the transduction across different modes, or transmediation, nourishes each type of imaginative involvement, promotes analytical

thinking, deepens analysis, and enhances comprehension, then multimodal digital

technologies offer unprecedented opportunities to accelerate these processes.

The Worth and Value of Print Literacy: Development of Language Abilities

Empirical data on benefits of reading make a strong case for literature-rich

curriculum across different grade levels. In his compilation of century-long reading

research *The Power of Reading*, Krashen (2004) provides convincing evidence that there

is a relationship between reading and the development of more sophisticated language

abilities. He asserts:

> Studies showing that reading enhances literacy development lead to what should
> be an uncontroversial conclusion: Reading is good for you. The research,
> however, supports a stronger conclusion: Reading is the only way, the only way
> we become good readers, develop a good writing style, an adequate vocabulary,
> advanced grammatical competence, and the only way we become good spellers.
> (Krashen, 2004, p. 37)

Krashen (2004) gives us a particularly detailed review of research that provides

evidence of a correlation between reading and the development of lexical knowledge.

Thus, one of the reported studies concluded that the development of lexical knowledge

beyond basic words requires literacy and extensive reading across a broad range of

subjects (Hayes et al., 1988). The researchers in this study base their conclusion on the

analysis of ordinary conversations, whether adult-to-adult or adult-to-child, prime-time

TV, and various printed materials: about 95 percent of the words used in conversation

and television are among the most frequent 5,000 words, while printed texts include far

more uncommon words. Another study looked at the interpretative language of adults

who were "normal readers" and adults who were "poor readers" (Whyte, 1983). Whyte

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(1983) found that the normal readers used words with more abstract referents, while the poor readers used words with more concrete sensory referents.

The aforesaid findings do not only highlight the importance of reading for vocabulary development but also suggest implications for academic learning. Levine (2002) writes that, among other things, formal schooling is a progression towards acquisition of more abstract, or "higher" language, which enables students "to attain new heights of sophisticated thinking, reading, and writing. Higher language clears a path for the pursuit of complicated ideas as well as the ability to talk about such things…. It is difficult to get through high school unscarred without having higher language as an instrument for learning" (Levine, 2002, p. 126). He emphasizes a distinction between "automatic" and "literate" language, "concrete" and "abstract" language, "basic" and "higher" language. Automatic language tends to be very concrete and calls for high-frequency vocabulary (e.g., language spoken at the store); while literate language is often decontextualized, removed from everyday familiar background settings (e.g., language one encounters when studying ancient civilizations). Concrete language has meaning that comes directly from our senses and portrays things we can picture, feel, smell, or hear (e.g., "cat," "noisy"); while abstract language does not tap one's sensory experience and is resistant to instant visualization (e.g., terms like "elite," "irony," "symbolism"). Basic language is the language of primary or lower school. It can be quite literate but tends to be practical and directly to the point. Higher language, on the other hand, is "more abstract and symbolic, more technical, more densely packed with ideas and information, more inferential (not saying all it's meant to imply), more likely to be ambiguous, more apt to reflect a particular point of view than absolute fact. Poems contain symbols,

editorials express points of view, philosophical or political essays are drenched with implications that are never totally fleshed out for the reader" (Levine, 2002, p. 125).

Gee (1999) writes that at school, children are engaged in learning new "social languages," which are different from the first form of language they acquire in life – their "home-based vernacular." Social languages connected to school call for cognitive and social support beyond what is required for the acquisition of one's native vernacular to ensure that students can master "academic content at high levels" (Gee, 1999, p. 365). Although this support has many components,[13] both empirical research and findings reported by different foundations call attention to the connection between reading practices and academic performance. Thus, studies conducted by the National Endowment for the Arts (2007) and Kaiser Family Foundation (2010) report that more frequent reading correlates strongly with academic achievement. In addition, the National Endowment for the Arts (2007) report says that:

- Voluntary readers are better readers and writers than non-readers.

- Children and teenagers who read for pleasure on a daily basis score better on reading tests[14] than infrequent readers.

- Frequent readers score better on writing tests than non-readers or infrequent readers.

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[13] For instance, Gee (1999) writes about interactional talk as a crucial form of instructional support "for mastery of both the oral and written forms of social languages, as well as the forms of thinking and problem solving they involve" (p. 370). In his view, the most effective forms of interactional talk have three features: comprehensible input (Krashen, 1985), comprehensible output (Swain, 1985), and a focus on meta-reflection language and thinking (Bruer, 1993).

[14] This and other examples that use data from standardized reading tests are provided not to promote them as a valid tool to evaluate reading abilities but to illustrate the relation between recreational reading and the development of more advanced language competencies.

These findings are in alignment with what we know about the cumulative nature of reading, which is well-documented (to name one source) in Krashen's (2004) analysis of reading research and captured in Manguel's (1996) reflection: "I quickly learned that reading is cumulative and proceeds by geometrical progression: each new reading builds upon whatever the reader has read before" (p. 19). Among other benefits of extensive reading, Krashen (2004) emphasizes its crucial role for the development of writing abilities: "Writing style does not come from actual writing experience, but from reading" (p. 132). This finding, Krashen writes, is consistent with what is known about language acquisition: to acquire new linguistic forms, learners must have access to comprehensible input that is just beyond their current level of competence (Krashen, 1982). Thus, the quality and nature of the input— and not mere exposure—play a major role in language acquisition.

It needs to be highlighted that various forms of meaningful engagement with the input (orally and through writing) are also critical for language development, and language production, or output, is a necessary part of the equation (Swain, 1985). But the fact still remains: lack of or insufficient exposure to new linguistic input of gradually increasing complexity will affect language development. It is through the prism of these understandings that we need to interpret Krashen's (2004) assertion that "[l]anguage acquisition comes from input, not output, from comprehension, not production" (p. 136). Initially developed to explain *second* language acquisition, these principles can be applied to any context that aims to enhance language development.

Assuming it is true that nowadays adolescents engage in more reading (language input) and writing (language output) than ever before due to the ubiquity of personal

digital technologies in their lives, what effect do these literacy practices have on their language acquisition? This and other related questions are explored in the next section.

Digital Technologies and Literacy Practices: The Medium and the Message

Digital technologies seem to have transformed the old question "What to read and why?" into "How do different media affect what and how we read?" Marshall McLuhan was the first theorist to hypothesize about the non-random nature of the relationship between an idea (message) and the format for expressing it (medium). He famously stated in the 1960s, "The medium is the message" (McLuhan, 1967), highlighting that the medium of expression has a shaping effect on the message one can convey. McLuhan's (McLuhan et al., 1995) definition of medium is broad:

> [I]t includes any technology whatever that creates extensions of the human body and senses, from clothing to the computer. And a vital point I must stress again that societies have always been shaped more by the nature of the media with which men communicate than by the content of the communication. All technology has the property of the Midas touch; whenever a society develops an extension of itself, all other functions of that society tend to be transmuted to accommodate that new form; once any new technology penetrates a society, it saturates every institution of that society. New technology is thus a revolutionizing agent. We see this today with the electric media and we saw it several thousand years ago with the invention of the phonetic alphabet, which was just as far-reaching an innovation – and had just as profound consequences for man. (p. 239)

Today, as it has always been the case in human societies, our consciousness, as well as our social and literacy practices are being transformed by new technologies, or new *media*, to use McLuhan's term.

The spread of new digital technologies and of new literacy practices that sprouted out of them sparked a renewed interest in McLuhan's insights. Baron (2009; 2015), Bauerlein (2008), Carr (2010), and Wolf (2007; 2009), among others, have revived and

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considerably expanded the medium-is-the-message argument in their analysis of literacy practices in print and digital platforms.

In her discussion of print book and screen as reading platforms, Baron (2015) asserts, "all things considered, the two media invite opposite [reading] approaches" (p. 152). She writes that screen "seems to be privileging the search for data and information over reading for continuity of argument and reflection" (p. 153). Other researchers observe that the Internet is mostly used to access "timely, utilitarian information, efficiently pulled through the wires" (Proulx cited in Gomez, 2008, p. 34) or to plunge into the "formulaic scripts" (Murray, 1997) of computer games. Bauerlein (2008) asserts, "In general, the content encountered and habits practiced online foster one kind of literacy, the kind that accelerates communication, homogenizes diction and style, and answers set questions with information bits" (p. 148). An independent consulting firm Nielsen Norman Group, which conducts research on screen habits and Web reading, revealed that

> Teenagers don't like to read a lot on the Web. They get enough of that at school. Also, the reading skills of many teenagers are not what one might hope for, especially among younger teens. Sites that were easy to scan or that illustrated concepts visually were strongly preferred to sites with dense text. (Nielsen Norman, 2005)

The research (Nielsen Norman, 2001; 2003) found that the more Web pages look like book pages, the less people read them. Anybody motivated to read a text in a PDF format – a big, linear text lacking interactive navigation features – usually prints it to paper first. It is not completely surprising, therefore, that the aforementioned Margolin et al. study (2013) found no difference in reading performance of adolescents and adults when they read narrative and expository texts on paper, on a computer, or a Kindle: the study

participants were reading PDF documents on the computer screen and, therefore, were not capitalizing on the "affordances" (Kress, 2003) of the screen medium such as multimodality. On the other hand, it is precisely *because* PDF formatted web pages look like "real" book pages the subjects' "online" reading experience in this study might have been similar to a reading experience in the print format.

Gee and Hayes (2011) emphasize that both screen and book media are "delivery systems for language and other things." At the same time, each medium offers particular possibilities for the expression of meaning, or has specific affordances. The screen and the print book tend to be used primarily in accordance with the affordances each medium offers: the former – primarily for its multimodal possibilities, the latter – as a medium that encourages a language-based, long-form discourse that constitutes an integral, holistic, coherent, and cohesive account of a part of the world: "Whether as novel or as scientific treatise, the book presents an integral, coherent account of a world" (Kress, 1998, p. 65).[15] Baron's (2015) comprehensive analysis of research on reading habits since the early 2000s yielded a pattern that appears to be consistent across different populations and age groups: the more intellectually challenging the tasks associated with reading are, the more readers rely on paper-based materials:

> Online materials were fine for grabbing specific pieces of information but not for in-depth study that required comparing across sources and arguments. Print gave a sense of the whole, while online counterparts tended to be read in a more fragmented way. (p. 152)

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[15] It is important to acknowledge the evolution the book underwent to become the coherent means of communication as we know it: "In 1455, Gutenberg invented the printing press – but not the book as we know it…. It took fifty years of experimentation and more to establish such conventions as legible typefaces and proof sheet corrections; page numbering and paragraphing; and title pages, prefaces, and chapter divisions, which together made the published book a coherent means of communication." (Murray, 1997, p. 28)

Kress (2003) points out that screen readers, compared to book readers, differ significantly in what he calls "orientation" during the act of reading. He shares his observations of "expert [video games] players" and his amazement at his own inability "to take the written text and its information in the time during which it appears on the screen." The gamers, however, had no problem following the text:

> They were always ready to tell me their principles: "you read the letters as they come up"…And it is true that I had waited, and still have to do so, until what I consider a sufficient amount of text to be there on the screen. My orientation it seems really is different: I am oriented to notions of 'completed text'; they are oriented to notions of 'information as it is supplied." (p. 163)

This and other widespread forms of online reading (e.g., web browsing) have been referred to as "information snacking" (Crovitz, 2008), and they stand in sharp contrast to reading at the discourse level, which involves reading a holistic text consisting of at least a few paragraphs. Gomez (2008) offered a thematically similar metaphor for reading in digital platforms – "a buffet":

> Why would someone want to receive the content of an entire newspaper when all they're interested in is sports, or the front page? Similarly, books as we have known them for hundreds of years – static, unchanging, silent – will have to change, perhaps in such a way that they're shattered to allow for user manipulation. Non-fiction texts, especially, will be broken down into bits and pieces, 'microchunked' for the consumption of individual parts, consumers picking and choosing chapters and passages from different books as if they were at a buffet. (p. 98)

This passage essentially positions long-form reading as an obsolete literacy practice that is no longer valued or needed.

Bauerlein (2008) writes that online reading prepares individuals for only part of the communications demands of the 21st century – the information-retrieval and consumer-behavior parts – and it hampers "the abilities to concentrate on a single,

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recondite text, to manage ambiguities and ironies, to track an inductive proof" (p. 148). This, in turn, may jeopardize "the author's capacity to lay out a complex argument, which requires the reader to study and reread, following a circuitous course of reasoning" (Gardner, 2008). Consequently, since appreciation of discourse is a necessary ingredient of reading for pleasure (Levine, 2002), we should be concerned with children's and adolescents' under-exposure to longer texts. Baron (2015) cites Thomas Mann, a reference librarian at the Library of Congress, who argues that "if we make only electronic forms available, we will be undercutting students' ability to understand lengthy works as connected wholes" (p. 152).

Why read lengthy works? is an important question. Longer reading formats allow expressing more complex arguments and provide a more nuanced context for articulating ideas. In addition, it is helpful to distinguish between information and knowledge: while online information snacking may be an efficient way for us to stay informed, the construction of knowledge might require deeper immersion into ideas and, therefore, engagement with lengthier forms of texts.

Digital media appear to have a formative effect not only on content-related reading preferences of millennial readers; the linguistic forms that seem to prevail in online discourse are qualitatively different from those of print text. This made researchers talk about a new type of written discourse – online discourse (Gee and Hayes, 2011), screen discourse, "networked discourse" (Hawisher & Selfe, 1998, p. 8), or "electronic discourse" (Joyce, 1998). Gee and Hayes (2011) argue that digital media are "an interesting hybrid of the properties of oral language and of written language" (p. 1) and emphasize "permanent interactivity" as a key feature of online discourse:

Oral language is interactive but ephemeral (sound passes away quickly). It does not travel accurately because each person in a chain of communication can easily change it. Literacy is less interactive but permanent. It travels far and wide and it is harder to change as pieces of paper or books are passed down through a chain of people. When digital media carry language, language can be interactive, for example in a chat room, via text messaging, or on a Twitter feed, but also permanent. It can travel far and wide, but can be changed even more rapidly and thoroughly than a rumor as each user has a chance to modify it, for example, in wikis.

Implied in this quotation are enhanced opportunities for verbal interactions in an online environment, which allows one to capitalize on both the permanent nature of the written language and the dynamics of an authentic communicative event.

Online discourse abounds with cryptic short formulas and formulaic speech. It employs a language that is somewhere on a continuum between spoken and written language and is characterized by greater informality, by greater proximity to speech than to formal writing-like forms of language (Hawisher & Selfe, 1998; Kress, 1998). Historically, the written language began as transcription of speech: "just as a secretary takes dictation of a letter in shorthand code" (Zaid, 2003, p. 70). Kress (2003) expressed a supposition that as writing migrates to the medium of the screen, it might move back toward speech-like forms and might become mere transcription of speech again (p. 61). Proximity to speech, in turn, entails simpler syntax and lexicon.

Proliferation of shorter forms of reading with simpler syntax and lexicon, as well as of the buffet/information-snacking reading orientation might have a formative effect on reading preferences and abilities of the young. Thus, some argue that as texts become more "user-friendly," the complexity of the skills required to make meaning of a text diminishes (Purves, 1990).

Choosing to read in the digital platform almost always entails access to a range of attractive features – "interactivity, hyperlinking, searchability, multimedia" (Carr, 2010). Availability of these features gave rise to a new type of book – "amplified," "enriched," or "enhanced" (Bosman, July 2010), which are some of the terms used to refer to eBooks that contain sounds and videos, not written text alone. While these terms carry a positive connotation and imply an enriched reading experience, some argue that they encourage interruptions and, therefore, interfere with the flow of reading. The following reflections on reading on the iPad underscore this point:

> Another big issue I had with reading the ebook chapters was that, since they were on the iPad, I was always tempted to navigate away to check an email, browse the web, or look for another book on the iBookstore. This short attention span of mine only existed while I was reading on the iPad and not from the paperback, which means it wasn't the story's fault that I was so tempted to navigate away.
> (Grothaus, May 2010)

Chiong et al. (2012) conducted a study of children between three to six years old and parents "co-reading" print books, basic eBooks (i.e., "simple digitized versions of print books"), or enhanced eBooks. The researchers found that children were able to recall more details of the stories they experienced in the print format or when interacting with basic eBooks compared to enhanced eBooks. It was hypothesized that this was due to the fact that both types of eBooks, but especially the enhanced eBooks prompted more non-content related actions (such as conversations focused on the device itself) from both children and parents. The researchers recommended that "parents and preschool teachers should choose print or basic e-books to read with children *if they want to prioritize literacy-building experiences* [italics added] over ones intended 'just for fun'" (p. 1).

Hence, it appears that by choosing to read on a multipurpose device (e.g., computer, iPad), we make ourselves prone to spreading our attention among different tasks: more likely than not, the sheer availability of supplemental resources will make us divert our attention from a particular text to other readily accessible options (Kositsky, 2012). The findings reported by Keiser Family Foundation (2010) show that people multitask the most while on the computer: the computer is a multitasking station because of easy accessibility to other computer activities. Print media, on the other hand, were found to be among the least multitasked of all various media. Since multitasking suggests less focused engagement with a text (National Endowment for the Arts, 2007; Kaiser Family Foundation, 2010), one's reading experience becomes increasingly dependent on one's choice of a reading device (e.g., print book, iPad, computer, smartphone, etc.). In other words, reading becomes a device business (Kositsky, 2012).

Digital media also made possible some of the most popular leisure pursuits – creating user-generated content (e.g., YouTube, social networking, blogging, machinima,[16] etc.). Gee and Hayes (2011) emphasize the liberating effect of digital media on "everyday people." They argue that in a typographical age, "everyday people were meant to consume (read) and not produce (write, and certainly publish)," while "[d]igital media again offer us an opportunity for equality, for letting everyone be producers as well as consumers" (p. 3):

> With digital media people can often bypass official institutions and oversight to
> produce their own media, knowledge, products, services, and texts. They can

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[16] The term "machinima" is "a combination of 'machine' and 'cinema,' and is used to describe feature films or short clips that are created when gamers manipulate the characters in video games in ways divorced from the action, recording their movements on video and then writing dialogue for them to say and dubbing it on later…. The best known machinima creation is *Red vs. Blue*" (Gomez, 2008, p. 94).

easily distribute their productions worldwide. They can make ads, movies, and video games to compete with the "professionals" or to critique "mainstream" sources. Through the Internet, even people once considered "marginal" or not "mainstream" can find many others like themselves across the globe and group together. People without official credentials can debate those who do have them and compete with them to produce knowledge and ideas.

In other words, an online environment can offer an egalitarian playing literacy field that is intrinsically non-hierarchical and inclusive.

A much more skeptical view of user-generated content concerns its quality and centers around the argument that the online content produced by adolescent users is unlikely to contribute to their own and their consumers' language development. Thus, Bauerlein (2008) points out that that bad grammar, teen colloquialisms, shallow ironies, weak vocabulary, simple syntax, phonetic spelling, and low diction – the distinct characteristics of adolescent online discourse - provide little stimulation for verbal intelligence: "Just as weak-vocabulary encounters don't inculcate stronger reading-comprehension skills, so weak-vocabulary writing doesn't yield better composition skills" (p. 132). To draw on Bauerlein (2008) and Krashen (2004), progressively more complex input deepens one's verbal and conceptual reservoir. Entirely familiar input keeps the reservoir at existing levels.

Bauerlein (2008) also calls attention to the fact that the content of online "texts" (e.g., storylines in videogames) – "at its worst, juvenile loves and lusts, blood and guts, distortions of historical fact, petty clashes of reality contestants – is more important than [video games enthusiasts think]" (p. 90). Such content cannot be expected to significantly broaden one's background knowledge, which, in turn, will impede one's reading comprehension abilities. Reading always means reading some content, and prior

knowledge makes it possible to generate inferences necessary for making sense of the

text. Reading is inter-textual in nature and is affected by readers' experiences with the

"texts" they encounter online: these "texts" ultimately create quite distinct frames of

references within which the Millennials operate. Beavis's (1998) observations of children

playing the video game *Prince of Persia* illustrate the point well:

> Like me, the students read the game intertextually, and were conscious of a
> number of elements familiar from other genres. However, although our frames of
> references overlapped, they were different. Where I took *The Arabian Nights* as
> my major literary referent, for them it was the Disney film *Aladdin*. This was the
> text through which they met the narratives and iconography I associated with
> childhood stories of Sinbad and Aladdin, with Persian miniatures and Moorish
> architecture…. Whereas I read the splitting of the hero into two figures, the
> 'prince' and his shadow, in Jungian terms, delighting that the shadow had to be
> embraced before resolution could be achieved, for the students this was part of a
> repertoire of computer tricks, so they read it in magical rather than psychological
> terms.
> The conception of narrative, and the degree to which the computer text might be
> read in ways analogous to those of traditional story reading were significant point
> of difference. For me, the advancement of the action was dictated primarily by
> narrative logic, but their expectations were coloured by the patterns of obstacles
> and advancements encountered in other games. (p. 251)

For Bauerlein (2008) such a shift in frames of references is cause for concern

about intellectual habits and interests of the young generation. He describes a paradoxical

situation we find ourselves in now: technological advancements create seemingly

unlimited opportunities for education, learning, political action, and cultural activity.

However, Bauerlein argues:

> Instead of opening young American minds to the stores of civilization and science
> and politics, technology has concentrated their horizon to themselves, to the social
> scene around them…The fonts of knowledge are everywhere, but the rising
> generation is camped in the desert, passing stories, pictures, tunes, and texts back
> and forth, living off the thrill of peer attention. (p.10)

Teen online discourse falls under the category of "primary discourse" (Gee, 2001), which we acquire through socialization with our family, peers, and community. However, it is going beyond the familiar through the acquisition of "secondary discourses" (Gee, 2001) that, as children mature, plays an increasingly important role in expanding their verbal, conceptual, and social repertoire. In contrast, long-term immersion in teen-based discourse "stultifies" the verbal skills of adolescents and "disqualifies them from most every academic and professional labor" (Bauerlein, 2008, p. 130).

This argument resonates with studies that show a connection between reading and ultimate success: "Omnivorous reading in childhood and adolescence correlates positively with ultimate adult success" (Simonton cited in Krashen, 2004, p. 36). According to the National Endowment for the Arts (2007), more than 60 percent of employed proficient readers have jobs in management, or in the business, financial, professional, and related sectors; only 18 percent of basic readers are employed in those fields. Although there are many social factors that shape people's access to higher-level academic or professional work, more advanced print literacy is an important consideration – "the ability to understand multiple plots or complex issues, a sensitivity to tone, the expertise to know immediately what is crucial to a text and what can be skimmed. These [competencies] can be acquired only through years of avid reading" (Leonhardt, 1998). Thus, reading seems to be one of the most egalitarian ways of getting acculturated to "secondary discourses" (Gee, 2001), which are associated with participation in different educational, economic, political and other social institutions.

Finally, there is a set of data that sheds light on peoples' online behavior. Thus, Nielsen Norman Group (2001; 2003; 2005) reports findings that show that the Internet aligns with motivation of its users. These findings highlight the fact that the online environment is a consumer-driven habitat:

> Web users seek out what they already hope to find and…judge what they see not on objective traits of the content delivered, the quality of language and image, but on subjective traits of familiarity and ease. Inertia and familiarity rule a user's actions, not long-term learning goals, and the tendency holds most especially with adolescents. If presented with a series of sites with more and less challenging content, users do what nature inclines them to do: patronize the least taxing and most customary zones. (Bauerlein, 2008, pp. 148-149)

The quotation highlights the familiarity principle that seems to govern people's online behavior, which has enormous educational implications. On the one hand, it suggests that each user's online actions are largely defined by his/her background: immediate social environment, education, life aspirations, culture, etc. On the other hand, it suggests that, if unmediated (e.g., by a teacher or a parent), children's and adolescents' online behavior is likely to stay within the realm of the familiar rather than to expand their experiences.

Digital Technologies through the Lens of Possibility

Having established the continued relevance of reading and identified some challenges associated with this cultural practice in the Digital Age, it would be important to examine new reading technologies through the lens of possibility and to explore the question: What properties of new technologies can potentially help us turn "digital natives" (Gardner, 2008; Gomez, 2008) into readers?

According to Gomez (2008), this would require capitalizing on the affordances of the screen medium – nearly unlimited potential of hypertext "for weaving in various strands of multimedia and user interaction" (p. 144) – as these are the features that make

the medium unique and attractive. Adapting literary content and text "to our increasingly electronic future and lifestyles" (Gomez, 2008) is one of the manifestations of this approach:

> And, if it [literary content] doesn't, then people won't only turn away from books but they'll also turn away from the stories and ideas found inside books. According to *Reading at Risk,* 'as more Americans lose this capability [to read][17], our nation becomes less informed, active, and independent-minded. These are not qualities that a free, innovative, or productive society can afford to lose.' It is these qualities we should be afraid of losing, not books themselves. (Gomez, 2008, p. 47)

Referring to the success of the *Harry Potter* books, Gomez (2008) expressed the supposition that if these novels were made available as eBooks, "it could begin to get them [the young] into the habit of merging the reading of text with the use of computers, and it would be a chance to reverse some very serious trends in terms of youth illiteracy" (p. 28). Dierking (2015) writes, "Most students enjoy technology, are naturally drawn to it, and appreciate the novelty and the connectedness it provides. Merging reading and technology seems an obvious choice" (p. 408).

Reinking (2001) hypothesized that multimedia technologies create conditions that are likely to promote reading engagement: 1) active orientation to texts; 2) fulfillment of a broad range of psychological and social needs; 3) easy rather than difficult reading; and 4) reading as a creative and playful activity. These suppositions are discussed below.

<u>Engaged reading</u>

Engaged reading requires a reader who is actively interacting with information presented in a text. Reinking (2001) points out that interaction with a printed text is

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[17] For comprehensive data on national reading trends, see the reports issued by the National Endowment for the Arts*: Reading at Risk: A Survey of Literary Reading in America* (2004, June*)* and *To read or not to read: A question of national consequence* (2007, November).

figurative, not literal, because it is entirely one-sided: since texts are "static and inert,"

the entire responsibility of activity falls on the reader. If a reader cannot be or chooses not

to be active or engaged, a printed text can do nothing to promote the active orientation

that is necessary to successful reading. Digital texts and the various symbol systems they

entail, on the other hand, can create a reading experience that is literally interactive

(Reinking, 2001). Lanham (1993) asserts: "The interactive reader of the electronic word

incarnates the responsive reader of whom we make so much. Electronic readers can do all

the things that are claimed for them – or choose not to do them. They can genuflect

before the text or spit on its altar, add to a text or subtract from it, rearrange it, revise it,

suffuse it with commentary" (p. 6). Gomez (2008) addresses the notion of interactivity in

a similar fashion:

> A new generation of kids, weaned on being 'prosumers,' will want to interact
> with and, to a degree, create the material that they read…. Today's kids are not
> going to want to pick up a big book and spend hours in a corner silently, passively
> reading. Why in the world would they do it? It's not interactive. They can't share
> the experience with their friends. There's no way to change the book to suit their
> own tastes. Instead, they're going to ditch the hardback and head over to
> Facebook. (p. 97)

These observations suggest that on the one hand, in-built interactive, malleable features

of digital technologies are intrinsically more responsive to adolescents' social needs. On

the other hand, digital technologies seem to further distance Millennials from solitary,

"passive" reading.

Scaffolded reading

Reading a digital text is a scaffolded experience, as different modalities it employs

aid comprehension: "All kinds of reading assistance – spoken accompaniments, language

glossing embedded hyper-textually, dynamically interactive bilingual texts – can

enfranchise non-native-speaking minorities within the world of letters" (Lanham, 1993,

p. 10). These features, some researchers claim, might encourage and enable readers to

tackle more challenging texts.

Playful stance

Reading, when perceived as a creative and playful activity, is more engaging.

While the world of conventional texts abounds in "serious," "culturally valued" literature,

electronic texts, primarily due to their multimodality, tend to invite less serious, more

creative and playful stances toward reading that are more naturally engaging:

> Less introspective and serious intents of the electronic media have broad cultural
> implications….Printed texts are more reflective and serious, encouraging the
> reader to focus on the writer's intent. Electronic texts, on the other hand, strip
> away the authority of the author because they are easily manipulated and modified
> by the reader. Electronic texts, therefore, create a reading environment that is less
> serious and permanent, which also invites more creative and playful stance.
> (Reinking, 2001, p. 207)

Rienking's suggestion to adopt a "less serious, and thus less confining" stance towards

literacy to make it easier to promote reading and writing seems to summarize the above

stated arguments in favor of electronic text: "The more informal, sometimes

conversational modes of expression that are characteristic of electronic texts, coupled

with the availability of easily used tools for blending various symbol systems, may make

reading and writing inherently more engaging, more interesting" (p. 209).

A word of caution regarding the blending of traditional and popular media texts in

the literacy classroom comes from a number of researchers. Thus, Alvermann and Heron

(2001) wrote, "When teachers attempt to situate popular media texts alongside the more

traditional texts of classrooms, they run the risk of burying youth's pleasure by exposing

them to adult critique" (p. 121). Rutledge (2007) echoes this concern:

> Perhaps a larger part of what youth value about alternative texts is their existence as a space outside of education. They raise the provocative possibility that bringing in an alternative literacy like digital video and exposing it to the rubricated rigors of schoolishness might destroy the very playfulness that attracted students to it in the first place. (p. 150)

In other words, the chasm between inside- and outside-of-school literacies might have become so wide that adolescents might perceive a mere possibility of bridging them as a threat.

And yet, digital devices appear to have some intrinsic characteristics that make technology-mediated literacy practices more attractive for adolescents. Colwell (2013), for instance, writes about how mobile and online social technology can transform literature discussions due to "the power these tools hold to engage students in literacy and connect school and reading to their everyday, technology rich lives" (p. 16). Dierking (2015) observes that even reluctant readers, being intrigued by digital technologies, tend to be more engaged in reading done on electronic devices. She suggests that devices like eReaders can actually create incentive to read through their novelty, flexibility, and privacy.

<u>Accessibility</u>

Greater accessibility of electronic texts may also be a factor contributing to increased reading. Reinking (2001) remarked that, compared to a trip to a library and manual search for a needed book, electronic texts are readily available (p. 206). Similarly, "the efficiency hypothesis" views digital technology as an added resource, which increases efficiency of its users (Mokhtari at al, 2009): "For instance, if a college student is able to access academic resources online more quickly than going to the library, doing so may free up time to spend on other activities such as free voluntary

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reading" (p. 610). Besides, the rise of small, lightweight, portable digital technologies made digital texts always available, which maximizes opportunities for reading. Thus, never before have we had such an immediate and customized access to literacy materials.

Social reading

Digital technologies have expanded opportunities not only for private reading, but also for social reading encounters. Multipurpose devices, as well as dedicated electronic reading devices such as Nook or Kindle have build-in features that allow readers to connect with each other in a variety of ways: e.g., by being able to see what other readers found particularly meaningful/important (e.g., through the Kindle's "Popular Highlights" feature), by participating in online book discussion forums, etc. Baron (2015) remarks, "Given the explosion of online connectivity, digital technologies are poised to turn reading from a largely individual activity to a quintessentially social one" (p. 115).

Baron also expresses a concern that by relying on other readers' judgments and interpretations, we compromise our own construction of meaning. Although this is a very valid observation with important epistemological implications, looking at this dilemma through the lens of possibility allows us to recognize that technology helps us to realize a need that is integral to our experience with books, paper-based or electronic: the need to express our reactions to reading with others.

In 1988, Carlsen and Sherrill published their analysis of reading autobiographies of thousands of college-age people from different parts of the Unites States and of various backgrounds, "both culturally and environmentally." The researchers found that many of these autobiographies indicated that reading has a strong social component: "Again and again, our respondents tell of their need to talk about their reading" (p. 148).

Carlsen and Sherrill observed that readers of all age groups felt the need to "externalize" their reactions to books. However, as the ability to verbalize one's responses grows as the child grows older, so does the need for sharing one's reading experience.

In "the heyday of print culture" (Baron, 2015),[18] when Carlsen and Sherrill were collecting their data, adolescent readers relied on face-to-face interactions with friends to fulfill their need to discuss books "without being told what to think or how to interpret the literature they read in class" (Carlsen & Sherrill, 1988, p. 148). When they became older, many of them joined book discussion clubs or "took night school courses where they could discuss literature with others" (Carlsen & Sherrill, 1988, p. 148). Thus, it is reasonable to argue that digital technologies are not "responsible" for turning reading into a largely social activity. Rather, they provide an additional venue for fulfilling a need that has always been part of the reader's experience.

Multiliteracies through the Lens of Difference

It is somewhat paradoxical that it took recent advancements in digital technologies to force us to fully acknowledge the multimodality of the world outside the classroom, which has always been there, and to formally admit that it takes multiliterate people to fully engage with it (Rutledge, 2007). These new realizations coupled with capabilities of multimodal technologies call for a broader integration of different modes (e.g., printed word, image, sound) and different media (e.g., screen, printed book) into the classroom. However, availability of multiple formats for engaging with literacy materials raises an important question: How do different modes of expression affect the nature of

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[18] According to Baron (2015), print culture lasted "from about 1700 to the dawn of the internet" (p. 115).

the educational event, the nature of learning and, therefore, the nature of student development (Rutledge, 2007)? Despite its importance, there appear to be very few studies that address this question.

One such study is Rutledge's (2007) research on multiliteracies in a high school videography classroom, which examines traditional literacy and new literacies practices through the lens of difference. Besides working with his own data, Rutledge analyzed a study[19] that involved a high-school English student "who struggled with traditional literacy tools" but "flourished" when given an opportunity to create digital video assignments as an alternative and even "became the technical guru for the entire school" (pp. 147-148). Acknowledging the positive aspects of this student's experiences, Rutledge questioned the nature of that success and inquired: " Did his learning change from a literate experience to a vocational experience? By becoming a 'master editor' did he fail to develop other important skills and thinking? Did teachers simply give up on developing his orthographic skills?" And most critically, what are the implications of having an alternative literacy route "for this student's long-term cognitive development?" (p. 148). Rutledge argued:

> [I]f in encouraging his technical abilities his teachers ceased expecting him to learn traditional literacy skills, then, no matter how well intentioned the teachers might be, they would be committing an ironic act of injustice by expecting less of this student and hindering his participation in literate discourse. (p. 149)

This observation draws attention to possible negative unintended consequences of not having high expectations for the development of strong traditional literacy skills.

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[19] Miller, S.M. & Borowicz, S. (2005). City voices, city visions: Digital video as literacy learning supertool in urban classrooms. In L. Johnson, M. E. Finn & R. Lewis (Eds.), *Urban education with an attitude*: Albany: State University of New York Press.

The researcher concluded that "variety does not imply interchangeability":

although there may be any number of modes and literacies, this does not mean that

therefore "one mode is as good as another for solving specific communication problems

or helping students develop certain skills and styles of thinking" (p. 158). He, for

instance, argued that images seem to foster expressivism and open interpretation, while

the written text seems to be the best format for expressing ideas with precision. Since

different genres and different modalities lend themselves to different tasks, conceptually

sound literacy pedagogy should involve making decisions regarding which literacies

should have more room in any particular task:

> If my goal were to promote precise reasoning about something like contrasting a
> democracy and a republic, then I would give more room to orthographic writing
> than to videography in a curriculum or consider how writing and videography
> could work together. What I am arguing against would be simply allowing
> students to simply choose between writing and videoing as if the two modes were
> interchangeable. (Rutledge, 2007, p. 147)

Similarly, a more recent view of a multiliteracies pedagogy emphasizes the

importance of "extending one's representational repertoire by shifting from

favoured modes to less comfortable ones" (Cope & Kalantzis, 2013).

Conceptually, these considerations are based on the design perspective offered by

Kress (2003), who raised the issue of the potential "epistemological losses" associated

with the shift from one mode of representation to another. These insights suggest that

educators should take into account potential epistemological gains and losses each mode

entails to ensure optimal student development.

Summary of Literature Review

There is a shared understanding among literacy researchers that the ubiquity of digital technologies and the popularity of the screen medium among the young make it imperative to continue to invest in the research and study of how to capitalize on "affordances" (Kress, 2003) of digital media to expand the reader's experiences, to enrich classroom instruction, and to integrate students' new literacies skills (such as the skills needed to effectively communicate in multimedia formats, for instance) into the educational process. However, it is equally important to recognize that something is likely to be gained and lost when a particular mode is used (Kress, 2005) and to act upon this understanding when integrating multiliteracies into the English curriculum.

The literature review also established "the worth and value" of print literacy in a historical perspective and showed its relevance to education in the 21st century. In particular, it emphasizes the importance of engagement with progressively more complex input for the development of increasingly more sophisticated linguistic and conceptual abilities and competencies and, ultimately, for participation in different educational, economic, political and other social institutions.

On the one hand, the literature highlighted the need to integrate digital technologies into school-related literacy practices of digital natives in order to elicit their interest/enthusiasm for long-form reading and writing. On the other hand, there is a considerable divergence of opinion as to whether reading on multimodal devices fosters or hinders adolescents' reading engagement.

The research presented in this dissertation applies the above-mentioned theoretical considerations to a particular educational setting – my research site – and

offers an analysis of a framework for integrating digital and traditional literacy practices into the English classroom. Its intention is to provide additional insights for building comprehensive literacy pedagogy in the Digital Age.

Since one of my primary aims in conducting this research was to come to deeper understandings of the shifts in the literacy landscape, I chose in-depth, phenomenologically based interviewing and classroom observations to gain insights into the issues identified by my literature review. I explain my methodology, describe the research setting and introduce the study participants in the next chapter.

CHAPTER 3

RESEARCH DESIGN

Research Setting

For my research site, I chose a high school that was not "afraid" to lose books as physical objects and, at the same time, declared reading as one of the most essential skills for the 21st century. Bolster Academy[20] is an independent coeducational boarding and day school for grades 9 through 12. It is located in quiet suburban New England and boasts a well-groomed campus with redbrick buildings, grassy lawns, and athletic fields. According to the 2015 School Data, it enrolls 400 students from 28 states and over 30 countries. Eleven percent of its learners are "students of color" and 35 percent are international students. All English as a Second Language (ESL) students have to demonstrate at least the advanced intermediate level of English proficiency at the time of enrollment. Eighty-five percent of the Bolster students and 70 percent of the faculty reside on campus. Founded in the mid-nineteenth century, the school has a long tradition of offering a rigorous academic curriculum and a wealth of arts, athletic, and other extracurricular activities. An important part of the school's mission is to create a social and academic environment that promotes character building and personal growth, and encourages active participation in all spheres of life. The school also offers a comprehensive academic support program, whose goal is to help students with varied learning needs and styles to develop the habits of mind, skills, and abilities they need to become independent learners and to academically succeed at Bolster Academy and beyond.

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[20] The name of the school has been changed to preserve confidentiality.

Bolster Academy became known in the region due to its decision to replace its traditional library with a digital one. In September 2009, the school library was transformed from one that relied on print resources to one that relies primarily on digital resources to support both the school-wide reading program and its research and information literacy services. A person with extensive experience in library information technology was hired to aid the process of transformation. Says Jeff,[21] a newly hired executive library director and my research participant: "One of the things that appealed to me about this position was that Richard [school headmaster] really wanted it to be… not just creating a good library for one boarding school in the lands of New England but to be something that would be modeled even outside of the boarding school environment. Especially when the conditions allow for it to be…. You know, I had to set up a model that can maybe work in other institutions down the road." This statement is reflective of the sense of purpose-driven exploration and acute awareness of the pioneering nature of the innovations conveyed by my research participants.

Some of the main goals of the transition were making resources available more easily to students and faculty digitally and integrating digital eReaders like the Amazon Kindle into the school's workflow. The school's twenty-thousand book collection was donated to other institutions of academic learning, while the library space was transformed into a community lounge – an informal learning environment, which students and teachers can use as a study area and a place for interacting and sharing ideas. All students and teachers have laptops and can access millions of electronic books and journals through Wi-Fi anywhere on campus. The school also provides students who

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[21] *All* names of people mentioned in this study have been changed.

want to read in a more eye-friendly format with eReaders, such as the Kindle. But the expectation is that students will do most of their research on their laptops.

The school leadership saw this transformation "as a model for the 21st-century school" and presented it to numerous inquiries from the press as such. There was a mixed reaction to this innovation, though. At one extreme, some parents of potential students decided against sending their offspring to Bolster Academy, contrary to their initial intentions. Such dramatic change went against the tradition: "In a boarding school and in any type of academic institution, especially in New England, changes have to happen slowly, and changes have to happen with a prototype" (Meg, research participant). At another extreme, anything less than what Bolster did was seen as outdated and not meeting the needs of the 21st century learners.

I learned about the controversy surrounding Bolster Academy from the press and recognized this as an important research and learning opportunity. I made my initial contact through the Headmaster's Office: there was no direct contact information about the Headmaster, Dr. Richard Bradley, and I called his administrative assistant to introduce myself, to request an appointment with him, and to explain the reason for the meeting. The administrative assistant suggested that I should email her my introductory letter and my research proposal (see Appendix A), which she would then forward to the Headmaster. Within a day or two, she emailed me back to inform me that Dr. Bradley would be "happy" to meet with me and suggested a few dates to choose from.

Dr. Bradley was extremely welcoming and enthusiastic. He immediately introduced me to some of the key people involved in creating the new technology-informed literacy paradigm at Bolster: the executive library director, the chief librarian,

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and the Coordinator of the 21st Century Curriculum. Their insights proved invaluable for gaining a fuller understanding of the school-wide changes happening at Bolster. Dr. Bradley's support and the introductory gesture were the critical factors that enabled the present dissertation research to be launched. As the executive library director, Jeff, put it: "It's great that you approached this so smartly – as academic research. This is one reason, I think, why it is so appealing to Richard to encourage this kind of…. He is certainly a person who is aware of the value of scholarship done right."

Methodology

In-depth Phenomenological Interviewing

I entered the research site at the time of transition: the school had only recently begun its shift from conventional, paper-based reading to electronic reading. The transition was both physical (the act of replacing physical books with electronic ones, redesigning the library space into a learning commons, purchasing e-Readers, etc.) and psychological (for teachers, students, library personnel, and administrators – all those who had been exploring and coming to terms with the possibilities and challenges of the new physical, structural, and conceptual reality). The transformations Bolster Academy was going through essentially meant that the entire school community was in the process of making meaning of the new experiences, which was a perfect entranceway for my phenomenological research: phenomenology is a study of "lived experiences" of human beings and, according to Seidman (2013), "[w]hile focusing on human experience and its meaning, phenomenology stresses the transitory nature of human experience" (p. 16). In

other words, phenomenology fully integrates an understanding that human experiences are not static but are in a constant state of flux.

Although there is no single approach to conducting a phenomenological inquiry, the interview is considered the main method of data collection in phenomenological research (Wimpenny, 2000): "it provides a situation where the participants' descriptions can be explored, illuminated and gently probed" (Kvale, 1996 cited in Wimpenny, 2000, p. 1487). The research presented in this dissertation is largely based on the framework developed by Seidman (2013), which he came to call in-depth, phenomenologically based interviewing. This method combines life-history interviewing and focused, in-depth interviewing informed by several basic phenomenological assumptions, especially those of Schutz (1967). Schutz (1967) maintains that human lived experiences are comprised of a flow of events that can be apprehended, distinguished, brought into relief, and marked out from one another by "an Act of reflective attention" (p. 51). It is through a process of reflective reconstruction that these events become "phenomena" and take on deeper meaning.

A phenomenological view of human experience also emphasizes the importance of an insider's perspective and his/her subjective understandings. Seidman (2013) writes that the goal of researchers' using a phenomenological approach to interviewing is to come as close as possible to understanding the essence of participants' experience from their subjective point of view. In addition, because meaning is best derived in context, researchers should take the time to establish a contextual history for their participants' experiences (Seidman, 2013, p. 20). Due to these considerations, interviewers should use

"primarily, but not exclusively, open-ended questions. Their major task is to build upon and explore their participants' responses to those questions" (Seidman, 2013, p. 14).

I used the in-depth, phenomenologically based interviewing methodology to turn my participants' attention to their experiences with the purpose of reconstructing, exploring, and assigning meaning to them. My interviewing involved an exploration of my research topic in the context of my participants' lives and the lives of those around them.

My prior involvement with phenomenological, in-depth interviewing (through a pilot study, in partial fulfillment of my doctoral program requirements) allowed me to experience the efficacy of this method of knowing and understanding when it comes to researching human experiences and practices. "Practices" can be defined as "the creations of people – those events that result from human decisions and actions… These events are a function of human intelligence interacting with environment…"(Postman, 1988, p. 5). This definition of "practices" underscores the central role of human agency in the creation of "events" – pedagogical, educational, historical, etc. It also echoes one of the basic assumptions underlining phenomenological research: that the meaning people make of their experience affects the way they carry out that experience (Seidman, 2013). Using the in-depth phenomenological interviewing methodology as a research tool allowed me to capitalize on these understandings and to examine the literacy practices adopted by my research participants as the result of the decisions they made in the context of their experiences.

Another advantage of using the in-depth phenomenological interviewing methodology for the purposes of this research is that it did not only allow a more in-depth

exploration of issues in a given context; it also enabled the research participants and me

to transcend its boundaries by providing the opportunity (1) to explore the experiences

they were recalling in a historical perspective (i.e., over a more extended period of time)

and (2) to integrate any other relevant factors and contexts (e.g., home environment,

broader social forces) into research. Studying a complex phenomenon that is very much

in flux – the shift from traditional to digital literacy practices in the English classroom –

requires that we consider a multitude of relevant influences/factors that appear to be

shaping this transition, including ones that are not available/accessible through a direct

(ethnographic) observation.

Interviewing Process

A classic model of in-depth phenomenological interviewing involves conducting

three separate 90-minute interviews with each participant, allowing from three days to a

week between the interviews (Seidman, 2013):

> The first interview establishes the context of the participants' experience. The
> second allows participants to reconstruct the details of their experience within the
> context in which it occurs. And the third encourages the participants to reflect on
> the meaning their experience holds for them. (p. 21)

However, my previous experience with the phenomenological in-depth interviewing

methodology[22] taught me that these three tracks/themes tend to merge during one single

interview, each of them demanding immediate attention. Thus, it becomes virtually

impossible to separate the details of someone's experience from the context within they

occur and, at the same time, prevent any meaning-making reflections from entering into

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[22] During the course of my doctoral studies, I conducted research titled *Reading as a (trans)formative
experience: Meaning-making through in-depth phenomenological interviewing*. Its findings were presented
at 2010 NEERO Conference (New England Educational Research Organization) in Portsmouth, NH.

the conversation. As a result, I had to change the suggested structure to be able to capitalize on the sense of emotional and intellectual immersion that emerges out of the conversation between two people who feel deeply involved in the topic of their discussion. This change happened very naturally: disrupting the flow of the conversation would have felt forced and artificial. Table 1 below represents the stages I progressed through while collecting interview data.

Stage	Purpose	Timing	Activities
Initial interview session	The researcher asks participants to recreate past and current experiences relevant to the research topic and to reflect on the meaning of these experiences on the go.	Depends on the availability of the participant.	Audio-recording the interview Taking notes during the interview session.
"Intermission": an interval between the initial interview and the follow-up session	Serves as a preparation for a follow-up interview session and gives an opportunity for the interviewer to reflect on the data generated during the previous session, to see if there are any missing links or gaps, and to determine if there is a need for follow-up. These kinds of reflections also allow the researcher and the participant to engage in a more in-depth conversation during the follow-up meeting.	Prior to the follow-up session	Reviewing notes taken during the previous interview Listening to the audio-recorded interview *As/if time permits*, transcribing and then thoroughly reviewing the contents of the previous interview session. *Ideally*, sharing the transcript with participants *prior* to the follow-up session to give them an opportunity to reflect on the ideas generated during the first

		meeting.
Follow-up interview session	Follow-up on the themes raised during the previous session; more in-depth exploration of meaning of the discussed experiences For the participants, an opportunity to clarify/amend if needed	A few days after the initial session, but largely depends on the availability of the participant. The goal is to proceed from one interview to another in such a way that "allows time for the participant to mull over the preceding interview but not enough time to lose the connection between the two" (Seidman, 2006, p. 21).	Audio-recording the interview Taking notes during the interview session. Unstructured conversation during which the researcher takes notes
Informal member-checking	Obtain quick/brief clarifications, explanations, additional details, confirmation, etc. needed for further analysis	Any time during the data collection or data analysis process Depends on the availability of the participant.	Informal brief conversations during which the researcher takes notes Email exchanges

Table 1. Interviewing process.

During the interviews, I asked the participants 1) to reconstruct their experiences that steered them toward becoming interested in teaching English or in pursuing a degree in library and information science, depending on the participant's background; 2) to convey the details of their experiences since the implementation of the campus-wide transition from paper-based to electronic reading; and 3) to reflect on the meaning of the recollected past and present experiences. Although the interviewees were encouraged to

recall their relevant experiences in as much detail as possible, the emphasis was placed on so-called turning points – circumstances and nuances that seemed to have impacted them the most. Each interview session was audio-recorded and then transcribed and analyzed, as described further.

The interviews I conducted were organized around my research interests and questions (see Appendix C), which reflects a phenomenological principle that states that "many research questions must arise from the researcher and therefore a conceptual map of the phenomenon already exists" (Wimpenny, 2000, p. 1490). At the same time, the process of interviewing itself was participant-centered, open-ended, reciprocal, and dialogically constructed. As an inquirer and facilitator, I kept the conversations with research participants focused and dynamic, as well as comprehensive and exploratory. My questions (including follow-up questions) set directions for the exploration of particular threads of my participants' experiences, while the open-ended nature of my questioning allowed the interviewees to bring up any topics they found relevant (see Appendix C for sample interview excerpts). This semi-structured nature of the in-depth interviewing technique allowed for the mutually enriching co-existence of my research agenda and of the integrity of the participants' stories. Looking back at the interviewing process, it becomes evident that my participants and I were jointly constructing meaning. In fact, one of the research participants, Jane, made the following observation:

> Thank you for inviting the English department to be a part of your
> research. Our discussion yesterday was quite beneficial to me as well – it
> forced me to consider the purposes behind what I do as an English
> department faculty.

An understanding that meaning is a result of co-creation between the researcher and the

researched is at the heart of the phenomenological tradition. Applied to the interview process, this principle highlights the need for a reflexive and joint authored approach between interviewer and interviewee in the creation of knowledge. Thus, within the phenomenological research framework, participants are viewed as co-authors and not merely repositories of data (Wimpenny, 2000).

In many ways, interviewing is a cumulative process. Each completed interview session is an opportunity to reflect on one's skills as an interviewer. After each interview, I asked myself whether I had inquired deeply enough into the participants' experiences to reveal their essence and meaning and whether my follow-up questions could have been more thoughtful. Acting upon these reflections is critical for one's growth as an interviewer. "[T]he use of reflection, clarification, requests for examples and description and the conveyance of interest through listening techniques" (Wimpenny, 2000, p. 1487) are some of the interviewing skills that need to be constantly practiced and polished for a researcher to be able to do justice to the participants' stories and to obtain rich data.

Moreover, data from each interview point to areas to explore during subsequent interviews, which allows for a more in-depth exploration of issues and, ultimately, of the topic under study. For instance, my first interview was with the executive library director, who informed me about the availability of Kindles and the library's policies regarding their use for recreational and school-related reading purposes. In every subsequent interview, I would inquire about the use of these reading devices in the context of English classes. This highlights "the development and refining" that "occurs between interviews as the researcher's exposure to the phenomenon increases" (Wimpenny, 2000, 1489). It should be noted, however, that such refinements did not compromise the inherent

openness of my phenomenologically based interviewing: irrespective of the number of interviews I conducted, my emphasis remained on the idiosyncratic experiences of the participant who I was interviewing at the moment.

During the interviews, I felt that my participants were looking for precise vocabulary that would most accurately express the meaning they wanted to convey. Thus, their choice of words was not arbitrary but motivated:

> [S]igns are motivated combinations of form and meaning…in which the form is already the best, the most apt, representation of the meaning which the maker of the sign wishes to represent. That means that form and meaning do not stand in an arbitrary relation to each other, but that the relation is motivated: 'this form best expresses the meaning that I wish to represent' (Kress, 2003, p. 144).

Therefore, by including the participant's own words, "the interviewer allows those words to reflect the person's consciousness" (Seidman, 2013, p. 122). Hence, the actual language my research participants used to describe their experiences has become an important part of the present study and is substantially integrated into the presentation of data.

Research Participants

Seidman (2013) maintains, " The major criterion for appropriateness [of a participant for the study] is whether the subject of the researcher's study is central to the participant's experience" (p. 52). Following this recommendation, my goal was to find research participants whose experiences would include the use of new digital technologies as they taught English language arts to adolescents. This approach represents "purposeful sampling" (Patton, 1989), i.e., establishing criteria for selecting participants that match the purpose of the research.

My preliminary online research of the site showed that there are nine English teachers at school. They became my target participant pool. My next step was to email each English teacher an invitation to take part in the research. Each email invitation included an informed consent letter, sufficient details that informed the potential participants about the purpose of the research, the methodology that will be used, and possible benefits to the participant and a broader educational community (see Appendix B). I heard back from five teachers, who responded within two-three days. Having waited for another week, I re-emailed my invitation to the remaining four teachers but have never heard back from them. I refrained from any other/further modes of persuasion: as Seidman (2013) put it, "[i]t does little good to try to persuade a reluctant person to participate in an interview s/he would rather not do." Thus, I started to look forward to working with the seven participants – five English teachers (one of them was also the 21st Century Curriculum Coordinator), executive library director, and chief librarian – who had confirmed their interest in my study, for one reason or another. Table 2 below presents verbal sketches of the participants, constructed out of representative quotes from the interviews.

Name, position, & age at the time of the interview	Participants' core beliefs about reading, teaching, and the purpose of English classes	Participants' list of must reads
Jack English teacher 62	"I try to use literature as an avenue into self-exploration, or self-discovery for the student. Through the literature and engaging with the ideas in the literature that they can become more reflective or understanding of themselves, of others, and of the world around them. I guess	***Hamlet*** ("You got to read *Hamlet* if you are going to be a slightly educated person.") **Ken Kesey's *One Flew Over the Cuckoo's Nest***

that is what we teachers are hoping to generate in them. So, I try to use the literature as …what do you want to say….as a tool, as….I don't want to say….as a device….but it is kind of device to open up areas for exploration so that, hopefully, they can kind of connect to the ideas of today's world, for them."	"Certain writers of Black Literature, Native American Literature, Women's Literature; Neale Hurston – certain things that are embedded in the culture… And history. It gives you that connection on some level to everybody else, on some level, who has read this book."
"I am using more or less classical text or modern text to open up the issues, to explore the issues that I think are relevant to them [students] to ask themselves about the society in general."	**Graham Greene, *The Quiet American*** – "Just for the language, the use of language. Just the way he tells a story, but also just the elegance of the expression."
"All we can do on this level is to plant a seed – the old cliché, you know. What you hopefully plant, or expose them to through the literature, through the YouTube, through this or through that, whatever that may be, is that in the future they might be faced with choices or opportunities or decisions or the road not taken, which is your pathway, you come to that point. And how are you going to stop and make that choice? that informed decision? What are you going to base that on? And maybe thinking back on the literature or your education in general when you come to that decision point, that choice point. How are you going to make that choice?"	**Joseph Conrad, *Heart of Darkness*** – "Just different layers, and layers, and layers of what's happening in the story." **Fitzgerald, *The Great Gatsby*** – "Just the elegance of expression."
[English classes are about] "reading and writing. And, overall, just the comprehension of the written word. So, I think that the goal of the English program is in some ways to be counteractive to these trends in society – to not reduce language but to increase language, to counterbalance to what is happening in society."	

Jane English teacher/ Department Head mid-thirties	"The most important goal of an English class is to teach about humanity and what makes us human. And below that is teaching the ability to communicate, to think critically. But I think the most important thing is to teach students what it means to be human through reading and through writing about literature." "I want to make sure that I have a mix of classic texts and more contemporary texts. So, I really do try to be thoughtful about that and making sure that we are looking at the same theme through many different lenses so that they could understand it in many different ways. I want to have a balance between classic texts in the canon and also more contemporary texts." [Reading cultivates] "the ability to recognize tone. It forces us to think critically because we need to be able to read subtext and to understand how words are put together to create meaning. I think tone is a piece of that, understanding diction is a piece of that, understanding language in context." "Ultimately, I think, the goal is that students engage with the literature."	**Faulkner**: "I don't know if I ever want to teach Faulkner to high school students because I think it's incredibly difficult. But for myself – I am pretty fascinated by Faulkner. The way he explores the human condition. I think his understanding of human nature is incredible, and I am really intrigued by that." ***To Kill a Mockingbird***: "The innocence that is explored in it. And I just think the issue of respecting other people." **Safran Foer's *Extremely Loud and Incredibly Close:*** "It's a beautifully written book. And I think just for me, anything that deals with human nature is so important."
Jeff Executive Library Director 50	"What we've done with the Kindles is…. We really focused their use for providing independent, mostly for-pleasure reading and replaced what used to be the role of popular fiction and non-fiction print collection – to encourage students to read for the sake of reading; reading not necessarily tied to curriculum. They are reading their own… Reading for fun, just to keep them active as readers. So, when students come on campus, we want to	N/A

	make sure that they are already readers. They came to campus as big readers, we want to make sure we provided them with the resources they need to continue reading, even though we did not have paper, print books."	
	"We want to make it easy for them [students] to pick up a book."	
Meg English teacher/ Coordinator of the 21st Century Curriculum 47	[English is about] "reading, some sort of communication (and there are many ways of that now), and overall critical thinking and approach to a topic." "English classes should be more cross-discipline: when you can still use literature as a vehicle to understand an idea or a topic or social change or what have you." "All I am trying to do is create love of reading in the kids. And everything else comes from that. And it has been wildly successful…It's blurring the line between pleasure reading and school reading. And now it's reading." "Because we work with teens, it always goes back to your place in the world: who you are, universal truths, that sort of thing. And trying to develop an ethical, and balanced, and clear-headed citizen. I think that, at the end of the day, that's what we are all striving for – to help them in their journey to figure who they are, and who they are going to be. And in any crisis, in any situation, whether it is a digital device or not, what do they fall back on to? And who really are they? And what morals do they have? And I think that's one of the goals of literature to help develop those, too. Yes, you have to add that in."	Reads what her students are reading to be on the same page (as discussed below).

	"I don't want to promote any particular kind of reading. I want to prepare them [students] for the different kinds of reading that they are faced with. So, if you look at the spectrum of from a very simple text all the way to a scholarly journal to a novel to a blog post to a newspaper…. I mean, we are talking about very different kinds of reading…. a math textbook versus a poem…. So, I don't want to promote one over the other. I want to instill the skills and the strategies to be able to handle whatever reading comes about."	
Moira Chief Librarian 59	"To promote kids' love of reading is my primary mission. Just reading for pleasure. You know, those who read succeed."	*To Kill a Mockingbird* *The Catcher in the Rye* *Lolita*
Nick English teacher 61	"I think it's [English] about life. I think it's about what living means and I think that all the great books show you, teach you, let you share life, and life as it really is." "There are certain universal and timeless themes and subjects that you need to explore regardless of what book you use to explore it: friendship, loyalty, love, steadfastness… And what I have found is that, well, maybe I am jumping the gun, but using technology and using other things like the Internet it's all to compliment that." "I really like the idea of experiential opportunities: Going out in the world and seeing a whale out there in the ocean [to complement the reading of *Moby Dick*]. Or, if you can't do that, going to the whale museum. Making it more real for them [students] than just	**Melville** **Tolkien** *The Brothers Karamazov:* "Dostoevsky has this *amazing* compassion for people that comes out of his books. And the book in a way is about compassion, I think. And about learning how to live your life without being cut off from people." *The Great Gatsby: "*Because I think *The Great Gatsby* does for the 20th century what Melville did for the 19th. It's an important statement about the society that he was living in and what was happening to it. It is beautifully written." *Love in the Time of Cholera*: "All my books are about these deep feelings that people have."

	what they are seeing on those pages that they are reading. If you're reading Shakespeare, take them to a performance of that play. I read *Huckleberry Finn* with some kids in the summer program a few years ago and I took them whitewater rafting in Maine, and we rode the rafts down the Kennebec River for a while and camped out along. And we would create scenes from the raft passages. It was perfect. It was a nice blend of life meeting imagination." "And instilling an ability to appreciate language used well – its subtleties, and its power, and its beauty – which I think the kids need to get better at."	
Sam English teacher 35	"It's one of my most important goals – to get students to read. If they do that, I'll find a way to work with them on whatever level they are at and to have a positive experience." "The relevance of ideas and the transcendence of emotions [in the texts selected for English classes] are enormously important." "English and reading should be a lens for them [students] to interact with the world. If they can appreciate whatever connections – as superficial or profound as they might be – and reflect upon them and then internalize that meaning into awareness and action for themselves. I think that there is an opportunity and a freedom to do this in the realm of literature, when you can test out ideas and see ideas work out in a way that could be significant in terms of how you use them in your life. And so, for students to be able to do that means that I am being successful in	**Safran Foer's *Extremely Loud and Incredibly Close*:** "The range of emotions - it's unbelievable. It's so human... You read the first two pages and you are hooked. So, it's captivating from the very beginning," **Ralph Ellison's *Invisible Man*:** "In both instances [*Extremely Loud and Incredibly Close* and *Invisible Man*], the characters' search for their own individuality. And that's the power of the main character in *Invisible Man* – he is so relatable to, on so many levels. And it's that experience that has its specific applications. And the time and the experiences that he is going through, but the underlying emotions and the complexity of ideas transcends to any number of experiences. As long as the reader is willing to work through those connections, that's when the

	some way."	greater connections are made."
	"At the end of the day, I think that English classrooms still need to be about communication. Largely writing but not exclusively so. And presentations that require articulation of thoughts. Maybe that's the way to say it – the articulation of thoughts is still of the utmost importance. And to do so in language. And that's what makes teaching English different than teaching art where the means for us as English teachers is language as opposed to painting or ceramics or any other medium."	

Table 2. Research participants in their own words.

Although my participant pool was slightly smaller than I had initially anticipated, the study ultimately proved to have enough participants to yield rich data. Seidman (2013) emphasizes that "enough" is "an interactive reflection of every step of the interview process" and varies from study to study. Most importantly, he asserts, "The method of in-depth, phenomenological interviewing applied to a sample of participants who all experience similar structural and social conditions [italics added] gives enormous power to the stories of a relatively few participants" (p. 59). The fact that all my participants experienced the same "structural and social conditions" – working as a team under the same leadership – also contributed to reaching a point in a study "at which the interviewer begins to hear the same information reported" – a state called "saturation of information" (Seidman, 2013, p. 58). Having multiple opportunities to revisit and re-discuss same key issues with different participants brought me to a point of acute awareness of my sufficiently in-depth grasp of the context and, therefore, of meeting the saturation of information criterion.

Classroom Observations

To supplement the data that were collected through the in-depth phenomenological interviewing, I conducted observations of the participants' classrooms. While the interviewing methodology allowed my participants to articulate their own constructed meaning and to integrate relevant information from a broader context, the observational component of my research enabled me to gain additional, "independent," classroom-based insights. Seidman (2013) points out that "[t]hrough observation we can observe others' experience from our point of view" (p. 17).

During each observation, I was taking detailed notes "to linguistically imprison a series of motions and actions" (Goodall, 2000, p. 87) that were unfolding in front of me. Similarly to the in-depth interviewing framework, my observations were semi-structured: on the one hand, they were guided by my initial research questions and by the interview data I had collected by then; on the other hand, I was also alert to any new input during actual observations.

I observed the following 55-minute-long classes: *Honors Literature and Composition* (taught by Meg), *Honors Composition* (taught by Nick), *The Literature and Culture of the 1960s* (taught by Jack), *The Island Experience* (taught by Sam), and *21st Century Film Adaptations of Literature* (taught by Jane). All classroom observations occurred after I had completed the initial round of interviews with all research participants. This timing was deliberate: I wanted to prevent my interviews from turning into a version of a post-observation conference – a routine practice in clinical supervision. This practice would have inevitably affected the scope of issues discussed

during the interviews.[23] It would have also altered the nature of the interviewing: instead of positioning my research participants as experts in the phenomenon being studied and letting them select and bring their relevant lived experiences, both past and present, to the fore, I would have been inclined to discuss the phenomenon I was seeking to understand through the prism of my own perceptions of the practices I observed in the participants' classrooms. Later on, I did have an opportunity to ask clarification questions about some of the observed practices/behaviors during the post-observation meetings with my participants, which took place right after each classroom visit. Also, some participants chose to add comments to contextualize the lesson and/or to highlight its connection to their overall pedagogical paradigm/curriculum.[24] I took brief notes to record the participants' clarifications and comments. These post-observation meetings were rather informal and were not audio- or video-recorded.

Classroom observations provided me with highly contextualized insights, many of which I had not initially anticipated and which had not been part of the interviews. The field notes from the classroom observations and post-observation meetings were then analyzed to inform the research, as described below.

Data Analysis

Interview transcript is central to the phenomenological research process. It is studied as textual evidence that allows the researcher to get at the essence of the participants' experiences that are being examined (Seidman, 2013). In accordance with

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[23] Having accumulated years of practicum supervisory experience by the time of the present research, I might have easily slipped into the post-observation discourse mode.

[24] Although I had access to the course descriptions of each of the observed classes, most insights about my participants' pedagogical framework and teaching philosophy came from the interviews and observations.

an understanding that only verbatim transcripts reflect the interviews as fully as possible (Seidman, 2013), I personally transcribed, verbatim, all audio-recorded interviews.

There is no single approach to doing transcription, and researchers need to choose a method that is suited to the specific needs and goals of their study (Davidson, 2009). At a most general level, the selection of a transcribing method is said to "correspond to certain views about the representation of language" (Oliver et al., 2005 cited in Davidson, 2009). Within some approaches, "language represents the real world." Other approaches promote the view that "within speech are meanings and perceptions that construct our reality" (Oliver et al., 2005 cited in Davidson, 2009). So-called "naturalized transcription" (Bucholtz, 2000 cited in Davidson, 2009) occurs when written features of discourse have primacy over the oral. Therefore, written-down talk exhibits many features of written language that do not occur in speech: commas, full stops, paragraphing, etc. (Bucholtz, 2000 cited in Davidson, 2009) refers to naturalized transcription practices as "literacized." "Denaturalized transcription," on the other hand, preserves the features of oral language such as "ums," "ers" (Bucholtz, 2000 cited in Davidson, 2009), and other idiosyncratic elements of speech.

To draw on these classifications, I was mostly using a naturalized, literacized approach to transcribe my interview data and treated the language my participants used as a textual manifestation of their experiences. I made a conscious decision not to include any nonverbal signals such as signs, coughs, outside noises, or pauses, as they did not appear to add value or insight in the context of my inquiry. The only nonverbal communication that I chose to transfer to the transcripts was laughs, as I deemed them

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potentially insightful: e.g., they could signal the participants' (self)-ironic or humorous stance. I also took the time to punctuate the transcripts to ensure that they convey meaning in a most effective way, which required some initial analysis of interview data. As Seidman (2013) points out, "Punctuating is one of the beginning points of the process of analyzing and interpreting the material and must be done thoughtfully" (p. 118). Thus, the choices I made in transcribing the interviews reflect the understandings that "notation of talk and interaction need to vary to meet specific goals of individual studies" and that "transcription is a selective process reflecting theoretical goals and definitions" (Ochs, 1979 cited in Davidson, 2009).

Transcribing interviews is a labor-intensive process. Doing this myself, however, proved its merits, as it became my first mode of analysis: as I was transcribing the interviews, I began to notice emerging topics and was able to start coding the data early in the process. Charmaz (2012) defines coding as a process of assigning labels to segments of data that describe what each segment is about. She writes that coding "distills data, sorts them, and gives us a handle for making comparisons with other segments of data" (Charmaz, 2012, p. 3). I was also writing preliminary analytic notes, or memos, about the generated topics and about any other ideas about the material that occurred to me, as I engaged with the data through transcribing.

After transcribing all the interviews and doing some accompanying (limited) coding, I conducted a more in-depth, systematic, and thorough analysis of the transcripts. My approach to data analysis is reflective of both phenomenology and grounded theory. On the one hand, I never lost sight of those experiences of my participants that seemed to

reveal the phenomena I wanted to study and understand in the first place – a practice that is referred to as keeping "the phenomenon of reassurance in focus" (Wimpenny, 2000, p. 1490). On the other hand, I approached data analysis with no preconceptions of what I might find. Citing Glaser (1978), Wimpenny (2000) writes, " 'No preconceptions' is identified as having as few previous ideas and a priori conditions as possible. Therefore, 'no preconceptions' suggests a style of research in which the researcher adopts an approach to studying 'what is there to be studied' putting one's trust in the emergence of the problem" (p. 1490). Applied to working with interview data, this meant that I did not read the transcripts with a set of categories for which I wanted to find "supporting evidence." Rather, I let categories arise out of the transcripts in their own right.

First and foremost, making sense of interview data required that I immerse myself in my participants' verbalizations of their experiences. As Seidman (2013) puts it, "[t]here is no substitute for a total immersion in the data" (p. 130). I reread each transcript multiple times and marked passages that stood out as particularly informative or insightful. I then assigned labels that seemed to accurately capture the subject of the marked segment. Some of these labels contained words or phrases that were mentioned in the passage itself. Others expressed the main idea articulated in a given segment. Some examples include: different media for different purposes; media affordances; more reading; library atmosphere; reading for pleasure versus scholarly reading; purpose of English; project example; reading format; autonomy; advantage over English teachers who have always loved reading; Kindle; and the like.

Next, I searched for connections among the interviews and participants in terms

of the topics they revealed to form categories. Charmaz (2012) writes, "By making and coding numerous comparisons, our analytic grasp of the data begins to take form….Our analytic categories and the relationships we draw between them provide a conceptual handle on the studied experience" (p. 3). All the way through the process, I was writing memos "to elaborate categories, specify their properties, define relationships between categories, and identify gaps" (Charmaz, 2012, p. 6). I followed up on identified gaps through member checking through short email exchanges or informal conversations.

Finally, I interpreted the established connections in light of my research questions and in light of current literacy and media theories. In addition, the interpretative stage was guided by the following open-ended question: What did we learn from the participants' experiences? Thus, to borrow from the grounded theory framework and to rephrase Charmaz (2012), I built levels of abstraction directly from the data and gathered additional data as needed to check and refine my emerging analytic categories. The work culminated in "an abstract theoretical understanding of the studied experience" (p. 6).

<u>Triangulation of Data</u>

Yin (1998) asserts, "a robust fact may be considered to have been established if evidence from three (or more) different sources all coincides. To get such convergence, you must ask the same questions of the different sources of evidence" (p. 233). At least two elements of the present study suggest that I have achieved such convergence. Firstly, I gathered and analyzed data from more than one source: interview audio-recordings, classroom observations, and member checking. Secondly, I studied the same phenomenon – digital and conventional literacy practices in the English classroom in a

transitional period – through multiple angles, i.e. through the eyes of seven participants of rather different convictions about reading, technology, and the purpose of English classes. This allowed me to "ask the same questions of the different sources of evidence" – my participants. Seidman (2006) maintains, " [B]y interviewing a number of participants, we can connect their experiences and check the comments of one participant against those of others" (p. 17). After multiple rounds of inquiry about the same set of issues – in-depth interviews with seven participants and then classroom observations – I was able to gain a more complete, accurate, and nuanced understanding of the studied phenomenon. Thus, a "total experience" (Patton, 1989) that attempts to capture the essence of the studied phenomenon was constructed out of each participant's unique perspective on challenges and possibilities associated with in-school literacy practices in the Digital Age.

As I present each of the two final chapters, I provide a detailed account of the social practices, both school-wide and specific to the English classrooms I observed as well as of the aspirations, considerations, and concerns of my research participants. Their description (Chapter 4) and subsequent analysis (Chapter 5) contribute to our understanding of factors fostering reading engagement among adolescents in the Digital Age.

CHAPTER 4

FACTORS SHAPING STUDENTS' LITERACY PRACTICES:

MAJOR FINDINGS

Introduction

Broadly speaking, the research presented in this dissertation is concerned with

reading in the Digital Age. As indicated above, the high school where I conducted my

research considers reading to be "an essential 21st century skill." However, "reading" can

be defined in many different ways, especially when it is discussed in the context of

technological innovations. Thus, one of my goals was to establish a shared definition of

reading that would contextualize the discussion of findings. My analysis of study data

revealed that the participants mostly refer to *long-form literary* reading when they discuss

their approaches to engaging their students in reading. As Jane put it, "I think that in

terms of the English Department, the reading that we do is mostly fiction, it is mostly

literature. We do fiction, we do a lot of poetry." Jeff, the executive library director,

describes it as "vertical or immersive reading that you would do for reading a novel or a

piece of popular non-fiction, where the idea is to read from beginning to end." My

analysis of research data revealed an increase in this type of reading among the students

at Bolster Academy. Both digital technological and non-technological factors have

contributed to this increase and to shape students' reading practices, as discussed in this

chapter.

Library Services and On-demand Book Acquisitions

The library's shift toward digital resources has enabled a fundamentally new

approach to book acquisitions – a "just in time" method. It involves getting something digitally when someone needs it and constitutes a sharp contrast to the approach that was used before – a "just in case" method, which involved building and maintaining a collection and hoping that if someone asks about a certain item, the library would have it. As the Executive Library Director put it, "We try not to think 'What do we own?' and 'What can I read?' based on what the school owns, but 'What can I read?' based on what is out there. And then we can facilitate getting that title to them very quickly."

Students are encouraged to look at what is available on Amazon (which is 2,954,780 Kindle Editions[25] as of January 6, 2016, with new titles being added every day), and if they see a title that interests them, library staff will get it for them right away. Students come to the library to get a title they like. And while they are standing there, library staff would buy it for them. Students can also request a book via email, and library staff would deliver it to them. The whole process takes less than five minutes. As chief librarian put it, "It's immediate. Everyone wants immediate gratification, and we are getting more and more to be that kind of a society. We expect that. So, I think that in that sense it's been good."

The library acquired a large number of Kindles to meet the demand, and they are available at the library. If students continue to read on the Kindle they borrowed, if they continue requesting books on it, they can keep it for the whole semester and do not have to bring it back. According to the executive library director, "Almost to a person, there have been few exceptions, students really have found that they read more on the Kindle

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[25] http://www.amazon.com/books-used-books-textbooks/b/ref=nav_shopall_bo?ie=UTF8&node=283155

because it's a very pleasurable reading experience, and they are able to get new titles very quickly."

The number of students on campus exceeds the number of Kindles the library purchased, however. More and more students are getting devices on their own that they can use for reading. If the device students acquire has a Kindle application, they still can read the library's Kindle collection and, therefore, have free access to eBooks. At the time of data collection the library's digital collection had about 1,000 books that were purchased almost completely from demand, based on requests – a combination of student requests and faculty/staff requests (60 percent student-driven and 40 percent faculty/staff-driven). A lot of it is teen romance – vampires, *The Clique* series – whatever adolescents are interested in. Thus, the Kindle replaced what used to be the role of popular fiction and non-fiction print collection – to encourage students to read for the sake of reading, to read for fun, "just to keep them active as readers." The new school library continues to provide students with resources they need to read for pleasure, even though it does not purchase paper-based, print books. Supporting this type of literacy practice is part of the library's *reading* services.

The library's information and research services, on the other hand, are supporting "horizontal reading – a scanning type of reading," when one "looks at a chapter in a book to find salient ideas and to make notes." Part of the information and research services is to teach students information literacy skills and to help them with their research: how to find credible online resources; how to use certain programs to organize their research and then to present it; how to create bibliographies using particular technologies; how to capitalize on the resources available on the new library website. Information literacy

skills are a critical addition to the 21st century "toolbox" and benefit both students and

teachers. One of the English teachers, Sam, remarks:

> One of the challenges that I have embraced in my own teaching is trying to get
> them [students] to recognize all the directions that the information is coming at
> them [through technology] and also to be able to think about it critically. It's kind
> of that two-part process recognizing that everything is potentially a source of
> value and meaning, but not instantly, not until that critical process that leads to
> reflection and awareness.

As is evident from the quotation, Sam clearly recognizes the demands of new literacy

practices and integrates this awareness into his teaching.

At Bolster Academy, two different types of reading – "vertical" and "horizontal"

– are supported by different technologies. The Kindle is used to support the immersive,

long-form reading, while the laptop is used for information resources and for research

purposes. Jeff emphasizes:

> We never really, at least since I have been here, we never really saw the Kindle as
> a competitor to the laptop. It was never the idea for the Kindle to replace the
> laptop. The Kindle is really a specialized piece of hardware for particular type of
> reading and not a research tool.

In other words, the school adopted a very strategic approach to implementing different

types of technology that considers both advantages and disadvantages of their use for

different purposes.

Differentiated use of technology as a theme came up in all interviews. Almost to a

person, my research participants expressed strong preferences for certain types of

technology when it comes to reading for different purposes. For instance, Jane shared: "I

like Kindles for pleasure reading. I don't like Kindles for scholarly reading… But if I

found a book that I wanted to teach, I would then go and buy a physical copy of the

book." She then explained that she finds it easier "to cite quotations, to find your place,"

and to annotate when she uses a printed book. "I haven't used the annotation tool on the Kindle, and I know it exists.   But to me it seems really cumbersome**,"** she adds. Similarly, Sam explains his differentiated use of media:

> For superficial reading experience, I don't have any problem reading on an iPad at this point. By superficial, I mean just reading fiction. It's sort of for me the primary experience – you are just reading; and you are thinking about it, but it's not nearly as active experience with the text. That secondary experience comes for me when I sit down with a pen and a book, and I start underlying passages and writing ideas, or I start just jotting down…. I don't annotate a lot. I underline a lot, and I have all-star passages and different ways of marking different things in the book. But that's a whole different way of engaging with a text. That's necessary for me to either be able to write about it or be able to teach it. So, if I don't plan on writing or teaching a book, then I don't have problem just being able to read it. And just whatever I get out of it is what I get out of it. And I know I am missing things, but I am content with that.

Thus, most participants seem to concur that reading onscreen feels like a more passive process compared to reading on paper, when they actively engage in reacting to the ideas expressed in the text, which then takes a physical form of marking up the pages.

Library as an Information and Social Space

The value of the new library goes beyond its virtually unlimited supply of instantaneously available reading materials. The school library has been transformed into learning and social commons, into a collaborative space with a café, comfortable furniture, and an atmosphere that actually invites conversation. The chief librarian observes, "Certainly we have a lot more kids in the library now, in the physical space. It's a popular place to be. I am sure, that comes into it, too**:** 'I'll come down here, and maybe I'll get a Kindle out and read a book.' I am sure that has some effect, too." Just like the coffeehouses opened in London in 1652 that are considered to be "the earliest organized gatherings of readers to talk about works appearing in print," as well as to socialize and

to drink coffee (Baron, 2015, p. 119), the renovated library is a popular place among students.

Not all conversations one might hear in this new library space revolve around the reading or research the students are doing – many of them are of social nature. But one also often sees students working in groups on their projects. Jeff, the executive library director, points out that one of the biggest challenges is to create a physical space that "serves something like the purpose of a library space in the past but without the need for shushing." Jeff explains how the Digital Age changed the library culture by transforming it from a place that promoted reading as a silent, solitary, isolated activity into a more social environment:

> The need for a library to be a quite space is changed now because no longer do you have to have a physical space to do research that you need to do. In the past, that's where the material was, and you had to maintain a proper decorum for people to go in and to be able to use those resources in that space. There were no other options. I mean, you could check them out sometimes. So, partly because the resources were there and you had to have a quiet space to use them is one reason why you had to have a quieter space. Also, the library was seen as a place to do kind of solitary reading. It's almost two different roles. But in terms of what's changed in our case is that no longer students need to be here to do their research. They can do it just as easy from anywhere: from home, from their dorm. So, that requirement shifts: you are not disadvantaging students that might need to do their research by making this space more of a social atmosphere.

On the surface, this might seem of secondary importance, but a library atmosphere, depending on its characteristics, can either promote or inhibit a culture of reading. For instance, my own earlier research on reading practices (Kositsky, 2010) revealed that it was not unusual for younger library patrons to feel rather unwelcome or even intimidated during their visits to school and town libraries. The following quote from one of my former research participants captures this quite vividly:

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I borrowed books from the school and town library. But I never had a good rapport with the librarians in my school. I didn't like them because they were, you know…. Probably because you never really got to interact with them about books. They were always yelling at you for talking. They were authority figures. I don't remember their names, but I can picture their faces and I remember they were not likable people. (Kositsky, 2010)

It would be a significant overgeneralization to imply that an average paper-based library shares characteristics with the one described in the above quote. But it is not too far-fetched to suggest that the *affordances* of a digitally enabled library do not only allow a customized access to a vast supply of reading materials to its patrons but also offer a more inclusive socio-informational space.

It should be noted that although there are no rules about silence at the new library at Bolster, its staff is trying to make it clear that this is "an information space," and it is different from a social club. A few large flat-screen TVs may display book covers of the latest Kindle purchases that the library has or run book trailers, created by the library personnel as animoto videos. "What we are trying to do is to create that kind of atmosphere that respects information and reading and thinking without having to walk around saying 'Shush!' all the time or having rows and rows of books to kind of create this atmosphere," says executive library director. The goal is to create a space where students have a place where reading can happen in a more social way, as well as engage in research and do face-to-face project work.

"It's Literally the Device."

When students borrow the Kindle from the library, they are able to explore what is already on it. They can look and see what other people have been reading: on that particular Kindle, there might be listings of books that have been purchased before,

requested by other readers. And students might decide to read something else. Even though they started out asking for a particular book, they might read some other books, too. Thus, they constantly discover new titles on the Kindle, which has been good for promoting reading. Besides highlighting a beneficial "side effect" of a dedicated piece of technology – the Kindle, the practice of reading more "just because it is there" disproves a commonly held concern that only wondering among bookshelves with "real" physical books can one make serendipitous discoveries of unanticipated items. As Jeff remarks:

> You know, one of the arguments you'll have is that if you remove printed books, you've lost that kind of serendipity, that students won't see stuff that they weren't necessarily even seeking out but they were just walking by or whatever.

Essentially, having an eReader in one's backpack is like having a portable library at hand, whose collection can satisfy a range of reading moods. Meg observes:

> Students have said to me, "I'll keep my Kindle in my backpack." And, you know, what is it – 2400 books or something? - They keep on a Kindle now. So, they have this huge library of books with them. And they'll say, "If I go on a weekend, or if I go on away game on a bus, I'll pull out my Kindle and I'll read because I know there is going to be something there for me to read." As opposed to literally thinking like a teenager packing books in a backpack: What book are you going to want for that moment? Are you going to want a quick read, or are you going to want a longer read? The homework? Whatever? It's not intuitive for them to do that. But to have this one device, it's amazing what it has done.

Thus, digital portable technologies seem to have exponentially increased opportunities for both private and social reading.

Choice-Driven English Curriculum and Teacher Autonomy

The English Department at Bolster Academy adopted largely a choice-driven curriculum. This manifests itself in the following ways: 1) students choose their own courses rather than teachers choose for them; 2) teachers design courses and select readings based on their intrinsic interests in either particular authors or themes; 3)

teachers design courses and select readings based on their judgment of what might potentially interest their students; 4) for *some* courses, students select their own readings. At the junior level, for instance, students traditionally take the American literature class. Each teacher who offers that class is doing it from a different point of view, which is based either on the books they are really interested in, or the point of view they are really interested in. For instance, there maybe several choices of approaches to the American literature: e.g., the African-American experience, the Native American experience, female writers, etc. In that way, every student has a choice as to how s/he wants to study the American literature, through what lens.

The senior sections are all seminar-driven, teacher-designed, and present a great variety to choose from. Teachers have "an enormous amount of latitude" in designing senior seminars: "basically designing our classes as frequently or infrequently as we would like, moving text in and out," as Sam put it. For instance, one of the seminars offered to seniors explores very loose adaptations of the literature written before the 21st century. All of the films that are selected for the course were made in the 21st century. This course is conceptualized as a way of inviting students to look at how something can be made relevant in today's world even if it is based on something written many years ago. Senior seminars change from term to term, and year to year. In that case, the books change constantly.

There is an ongoing trend among the faculty to blend classics with more contemporary works. Both classic and contemporary texts are used to explore issues and to open up discussions that aim to make students "more reflective or understanding of themselves, of others, and of the world around them." Some examples include reading

Mary Shelley's *Frankenstein* to discuss the role of ethics in science (as applied to human cloning, for instance); or exploring the theme of *hero's journey* through engaging with the contemporary novel *City of Thieves* by David Benioff or Homer's *The Odyssey*. Teachers try to engage students by selecting books that adolescents either will have a great tendency to like or finding a way to help them see "the relevance of ideas and the transcendence of emotions" in a classic text. Thus, each course reading is a result of a very careful selection process. As Sam put it, "I'd rather spend my time trying to come up with the right book for the right class for the right reasons and trust that if I do that part, then they [students] will read it."

Correlation between the Instructional Framework and the Tools Used in the Classroom

The study revealed two distinct instructional frameworks used by the English teachers who have participated in the research: teaching *supplemented* by technology and teaching *transformed* by technology.

<u>Teaching Supplemented by Technology</u>

Teaching practices in the classroom supplemented by technology are grounded in the belief that the role of technology is to augment teaching and learning. Within this framework, the use of technology is guided by the question, "Will this tool make teaching and learning more effective?" The Internet and the SMART board are two principal tools used within this pedagogical paradigm. Typical activities within this framework include viewing and comparing different interpretations of a particular play, or watching

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documentaries that contextualize course readings. Jack's reflections are representative of

this framework:

> Now on the Internet there are ten versions of Hamlet. And I can go and show the exact same scene in three different versions and then discuss: "OK, what's the interpretation? How is this actor interpreting? Why is this one better? Why is this one worse? Why did they do it this way? Why did they do it that way?" And then, of course, you have parodies of Hamlet on the Internet. So, you have The Simpsons version of Hamlet – that is kind of lightening it up a little bit. What I am doing today I could not do 30 years ago.

As this description points out, the sheer variety of resources made available by digital

technologies coupled with deliberate use are bound to enrich students' understanding of

the material.

Sam talks about how technological tools might enable the teacher to capitalize on

spontaneous associations and thoughts that arise during in-class discussions:

> Oftentimes my classes are very organic. I have ideas that I want to talk about, but frequently it's difficult, if not impossible, to pick the trajectory that the discussion is going to go. And I am OK with that. And in any given class, there is going to be a couple of key moments where the students are right on the cusp of understanding an idea. There are times when that means that just pushing them a little bit further with discussion what that means. So, if there is some sort of magic wand to say, "That's what we need, at this particular moment." If that means teleporting to an island somewhere or just instantly going somewhere or being able to pull up a resource.

Sam acknowledges that the Internet and the SMART board often play the role of that

"magic wand" and, therefore, are "incredible resources and an invaluable luxury."

In the classroom, where technology plays a supplemental role, students read and

discuss the same text, in a format of their choice: it could be a paper-based book, the

Kindle, a smart phone, an iPad, or a laptop. Sam observes that students are very

pragmatic about their choice of the reading format for their English classes and choose

"whatever it is going to be easier for them in class." Most of them choose the paper-based

format because it aligns well with the flow of the instruction. Sam explains:

> From a teaching standpoint, it is much easier for me to say, "Turn to page 98, and
> we are going to look at the third paragraph on this page." With a Kindle device,
> they are in trouble. They are looking at their friends and try to find a phrase that
> they can type in. They get there, but it's not the same. When we are talking about
> passages and really doing some close reading, students will be taking notes in
> their book knowing that these passages are important for one reason or another, or
> that could be important for them when they write eventually. And, again, it's just
> more cumbersome with the electronic devices.

As the above quote suggests, students are likely to consider the interaction patterns

prevalent in a particular classroom when making decisions regarding a reading platform

for their classes. This highlights the fact that education is a reciprocal endeavor, and

teachers inevitably create incentives for the use of certain types of technology over others

by orchestrating their instruction in particular ways.

Teaching Transformed by Technology

The classroom transformed by technology is anything but conventional. Now we

are in a former gym and dance studio. It is a large space with mirrors on two walls, sofas,

armchairs, and a few standing lamps. Regular ceiling lamps and standing lamps allow

different light arrangement during the lesson. Upon entering the classroom, students sit

themselves on the armchairs and sofas, looking relaxed and engaging in small talk with

one another. Each student has a laptop open in front of them and is busy checking email,

Facebook, looking up websites. Although the lesson has officially begun, the teacher

ignores these off-task behaviors – one of the students is setting up equipment for a

presentation (laptop and LCD projector), and the rest of the class continues to behave

quite informally while waiting for the first presenter.

The homework was to choose a poem to one's liking, to find music and visuals that convey the poem's mood and message, as interpreted by each student. There is no right or wrong – just individual creativity materialized for others through a computer-assisted presentation. After each presentation the teacher tells students to take a few moments to write up their comments and to send them to her via email.

Next on the agenda is choosing next reading and forming reading groups. As part of their homework, students have prepared to talk about a book they would like to read next and to give a rationale for that particular choice. As each student talks about their selection, the teacher finds that book on the Amazon and opens up an excerpt from it "to give a sense of the prose" to the listeners/viewers. The text is projected on the board, but some students prefer to read this information on their laptops, which they access immediately. The teacher always has something to say about each book the students present. Later she told me that she reads every book the students select in order to be able to talk about it, which amounts to quite a bit of reading. The selected books range from contemporary young adult fiction to classic novels: Tim O'Brien's *The Things They Carried*, Dan Brown's *Angels and Demons*, Stieg Larsson's *The Girl with the Dragon Tattoo*, Ayn Rand's *The Fountainhead*, George Orwell's *Animal Farm*, Audrey Niffenegger's *The Time Traveler's Wife*, James Carroll's *An American Requiem*, Stephen King's *The Shining* (as the student who picked that book remarked, "It is a classic, but I have not read it."), and many others.

Although it is an advanced English class for seniors, the teacher does not object to any of the students' choices – her overarching goal is to develop love of reading in her students: "All I am trying to do is create love of reading in the kids. And everything else

comes from that. And it has been wildly successful." The students are listening to each other quite attentively – at the end of the class, they will need to form reading groups based on their interests and on what they have heard about each book. Some may change their mind regarding their initial book choice if they find somebody else's book selection more appealing. After reading groups are formed, the students within each group collaboratively make a reading schedule.

Meg, whose classroom is described above, gives her account of the two pedagogical frameworks for English instruction – a more traditional one and one totally transformed by digital technologies:

> So, the traditional offering: here are the three or four books we are going to read this spring. And we are going to read them, and we are going to talk about them, and we'll probably have some quizzes, and then we'll take a test, write a couple of essays, and then you'll know about the books. And maybe they are within a movement or a theme, or however you want to organize it. Now, my kids read at least eight or nine books during the same period of time. And they probably read two or three on their own at the same time. So, the amount of reading that they are doing is hugely increased.

Although there is no formal requirement regarding the reading format in Meg's class, about 90 percent of her students use the Kindle. Two factors influence this choice: 1) with the Kindle (or the Kindle app on other devices, such as iPad or iPhone), the access is immediate and 2) students do not have to pay for eBooks – they get them for free through the school library. Meg emphasizes that reading 12 books per term would not be possible financially with paperbacks: "It is literally not feasible for many families to do that." For that same reason, Meg and her students also use the resources made available by *Project Gutenberg* (www.gutenberg.org), as well as other sites that provide open access to the content of value. With so many versatile resources instantly available electronically, Meg

hopes to blur the line between pleasure and school reading: "And it just becomes reading and critical thinking and active engagement with whatever it is: if it's storyline, if it's information, whatever it might be. It's that engagement that, I think, is so important for us as adults to keep doing with the kids."

"Developing a Peer Set of Readers"

The strong social element inherent in this framework also contributes to creating a culture of reading among students. Says Meg:

> What happens is: because they can see what other people are reading and because I do a lot of reading groups, and I have them do a lot of independent reading. And the kids are noting what they [other students in the class] are reading, and they are writing it down, and they are reading them. You know, based on that social, "That's what I am doing." And I have a Ning for our class, and the kids talk about their books on the Ning, and they respond to each other during the night, during their study hall period: "Wow, it's a really interesting book. Tell me more about it." So, they start these conversations about the books. They are very excited about reading because a friend of theirs is reading it and really likes it.

This echoes Moira's observation that Bolster Academy students "hear about a lot of books from each other" and confirms the power of positive peer pressure. Since research shows that peer recommendations "may be the most important motivator for voluntary reading" (Worthy, 1998 cited in Krashen, 2004, p.90), an educational environment that integrates this understanding seems to be most promising.

Technology as the Extension of Teacher and Student

McLuhan (2003) famously asserted that technology is an extension of humans. At Bolster Academy, technology serves as the extensions of both teachers and students.

Social Interactions

Online environment has created unprecedented opportunities for sharing ideas and arguments with a larger and more authentic audience. Says Meg, "An online discussion will either prep the discussion for the next day or be a follow-up for what we didn't finish in class. Or someone raised an interesting question and I say, 'OK, put that in a blog tonight and let us talk about it.' "

At Bolster, different teachers use various social media to extend class discussions: Google docs; Skype; a class Ning; *co-ment* – a wiki-style online editing environment, which allows users to attach their comments to excerpts of text or to work collaboratively on text writing. Says Nick:

> I'll take a chapter of Moby-Dick or Poetics or anything else, and I put it up on this page where they [students] can all annotate together. So, they cannot only read their own annotations; they can read annotations of other students and respond to them. So, it's very cool to see how a dialogue would start. And so there's so much more thought and writing about a piece of text than would have gone on if I would have just said, "Highlight!" So, that particular site [co-ment.com] is invaluable.

Nick emphasizes "the whole cross-fertilization thing" of this format: students are not just getting the teacher's opinion; they are getting each other's opinions. As a result, it becomes a real forum and not just an isolated conversation between the teacher and the student. Meg points out that any class is too short for a really thoughtful conversation:

> And I don't think their attention span is always long enough either. So, even if they want to talk about it more…. Teenagers, after 15 minutes – they are done. But let them think about it during the day, give their brain a chance to process, and the stuff they come up with is just fascinating. So, that's one of the things that I think is the best about having an authentic audience. In a Ning or another secured site, the community is by invitation only. So, they know who the community is. So, if I say it's just our class, then they know that it's safe and it's

just them. And if I say that we are opening that up to everybody, then they might change the way they approach it.

In this case, "everybody" could be the world, or could be the whole school.

Sometimes teachers invite parents in and have an open URL. This becomes an

excellent tool for developing students' sense of audience, too: "that ability to shift

your voice, the tone we are using, the word choice, the phrasing – it's all part of the

message; and it's all part of the communication of ideas."

Class Participation

Technology extends opportunities for class participation. For instance, in the past,

teachers had to rely on students' ability to speak their ideas during in-class discussions to

evaluate their level of understanding. But, as it has always been the case, not all students

are comfortable doing it. Says Jane:

> They [students] might be brilliant, but they are just not comfortable, and it's not really fair for me to expect that. So, I think about such a tool as Google Docs where we can have two levels of discussion going on: we can have a verbal discussion, but everybody could be signed on the same Google Doc or something. The discussion can also be happening on the written level, and everybody can be involved in that discussion on the written level.

Similarly, Meg reflects:

> It's very interesting how when you are able to extend the discussion online, not only to get to those quiet, really smart folks who are just really timid to talk, unlike the loud, chatty folks. [The quiet students are] chiming in, in writing, majorly, long, extensive, insightful pieces at night when they don't say a word during the day. And then other people are like, "Wow! I didn't notice this about you! It's great!"

The above observation echoes Colwell's (2013) reflections on how she saw her students

"who had never enjoyed or felt comfortable speaking up in discussions shine with online

discussion tools" (p. 16).

Engaged, Playful Reading

Online discussion forums are not the only way digital technologies extend opportunities for self-expression. There is a shared belief among the English teachers that students can engage with the literature and show their understanding of a text in multiple ways. For instance, the theme[26] of Jane's American literature class is civilization versus wildness, and students read three thematically relevant texts per term. To show understanding of each of them over the course of the term, students have to write an analytical paper, do a creative writing piece, and complete a multimedia project. Jane lets the students decide which type of final assessment they want to do for each piece of literature that they read. Jane remarks that the students' multimedia projects do incorporate language in the form of passages from the text (as opposed to students' reactions to the passages from the text); but most of their reactions are done through image, sound, artwork, and photography. Jane believes that, ultimately, the goal is that students engage with the literature and that language, although very important, is only one of the available modes to exhibit understanding.

Twelfth-grade students in Jack's African-American Literature class have to create a Movie Maker project as their final assessment. The students are to find a poem written by an African-American poet, read the poem very thoroughly and carefully to discover what might be its deeper meaning, and then use images and music to explore or to exemplify the text. The text of the poem has to be superimposed on the images with a soundtrack of music. The students can read the poem themselves, or they can have someone read the poem, or they can have the poet read the poem. Jack mentions that a

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[26] Themes change from year to year.

lot of students went around to different teachers and asked them to read the poem. Other students read the poem themselves. Yet other students were able to actually find the poet reading the poem [on the Internet].

In Nick's class, students exhibit their understanding of literature through portfolio projects. Nick has students take a theme central to the book they are reading, *Twelfth Night* for instance, and explore that theme through different media and in different ways. Firstly, students have to design a new cover for the book, which would reflect the text. They can either draw or make a collage or design it in any other way. The new cover for *Twelfth Night* will then be top of their portfolio binder. Next, students have to choose a song that they think relates well to the theme of *Twelfth Night*, ("much of which has to do with appearance and reality"). Students have to print the lyrics of the song and to explain why they chose that song. Then they have to pick a work of art that they think relates to either one of the characters or one of the themes of the play and write a short essay in which they explain what that relationship is. Next, they have to do a skit with other students in their class in which they add a scene of their own that they think should be in the play but somehow got forgotten. The final piece of this assessment is that students have to turn in their books to show the teacher that they have annotated, that they have written notes, and that they have highlighted. Nick emphasizes the "multidimensionality" of this experience, "when you are using art and music, when different parts of your brain are being called to the task."

Scaffolded Literacy Experiences

Electronic environment provides a scaffolded reading experience, which might enable all learners to access more difficult texts. For instance, the Kindle's instant dictionary and the text-to-speech feature are very appealing to many students at Bolster Academy. English language learners and students with learning differences, who are referred to as academic support students, are two groups of students who benefit the most from technology-assisted reading and writing. Says Moira, "We have academic support teachers come down. This has been happening quite a bit: 'We only want that book for this student if it's available in text-to-speech enabled on Kindle.' And they would choose a different book if it weren't text-to-speech enabled."

Jane also observes that the use of digital technologies seems to be linked to learning style. All teachers at Bolster get profiles of the students enrolled in the academic support program. "And sometimes it [profile] will say, 'Please allow the student to use a computer for note-taking.' And that forces us to be more flexible, too. We have students who really have to be taking notes on the computer," says Jane. Similarly, Meg explains:

> Here we are pretty aware of IEPs and of students' learning profiles. So, if ahead of time, I know that there is a person in my class who has a learning difference, especially visual or higher executive functioning or even an auditory, I will approach them differently than I would someone without a profile. I would allow them to express themselves in this way [more visual formats] to develop a strength and a strategy to succeed later on.

Lately, more English language learners (ELLs) at Bolster Academy have joined the library book club: reading and discussions in English in an informal atmosphere help them improve their English language skills. A greater number of book club members among ELLs can be attributed to two factors: 1) the changed demographics – there is

currently a higher percentage of international students at Bolster compared to the previous years; and 2) the fact that only books that are available on the Kindle are selected and purchased for the book club; therefore, all book club readings occur in a scaffolded electronic environment, which aids reading comprehension.

English Curriculum in the Digital Age: "Adding More Skills to the Toolbox"

Personally meaningful engagement with ideas through reading, writing, and multimodal works seems central to the English curriculum at Bolster. Thus, Jane emphasizes the value of exploratory engagement with content through journal writing: "I let them [students] write journal entries that are complete free writes. In whatever format: whether it will be in a blog… And it gets them to engage in any way. I almost don't care what they say as long as they are engaging in some way because it forces them to make connections."

For Nick, students' ability to think critically and deeply takes precedence over the mechanics of writing. He does not take off points for misspellings, for grammatical errors, or for errors in punctuation when he assesses student work in the online environment. Nick observes that, otherwise, students "become almost too obsessed with the small stuff and will get the grammar and punctuation right but then will not really dive into the text. I'll alternate, I'll trade grammatical mistakes for a really insightful response to a question."

The participants share an understanding that responses to literature are likely to be enriched when multiple formats are used and the text is approached in a variety of ways – different modalities can potentially reinforce, or "cross-fertilize" (to borrow Nick's words) one another. Sam, for instance, essentially talks about a synergy of resources that

the merging of modalities allows: "different approaches will translate and unify themselves somehow in meaningful ways" *if* they are incorporated in "thoughtful, interesting ways."

At the same time, teachers at Bolster Academy are keenly aware of the fact that each form of literacy represents a distinct ability. Therefore, including multiliteracies within the English curriculum means "adding *more* skills to the toolbox." For instance, Sam reflects that, in the end, effective communication requires language:

> I am thinking of art. Like a painting potentially communicates but in ways that aren't through language. But that's mainly one-sided communication: you can't ensure that exchange, that precision with the exchange of ideas; whereas any time you are actually trying to convince somebody of something or to get them to understand something with clarity and purpose, you are required to use language.

Teachers emphasize that articulation of thoughts through language is what differentiates English from such subjects as art. Sam continues:

> The articulation of thoughts is still of the utmost importance; and to do so in language. That is what makes teaching English different than teaching art, where the means for us as English teachers is language as opposed to painting or ceramics or any other medium.

Teachers at Bolster Academy do not see any lessening of the importance of language skills in the digital world. They observe that adolescents read and write more than ever. And they are not just writing for the audience of one: the Internet and the possibilities with software enable students to produce meaningful work for a larger audience. Developing students' communicative competence is, then, not as important as ever, but more important:

> If the goal is to become an active communicator and active citizen, in the end, if you have ideas that you want to communicate, you have to be able to write about

them and you have to be able to read other people's thoughts about them. And that's the end of the line – you can't do that without the curriculum that reaches that goal.

The English Department also "keeps its eye on certain universal realities that shouldn't be forgotten and are as important to a kid in high school today when he goes out there," as Meg points out. She says that some of these "realities" are concerned with "a cultural knowledge" needed for navigating certain frames of references embedded in culture:

> To have a cultural knowledge, you need to have the knowledge of some of the great writings. So, we just did *Great Expectations* because I think it's important to understand that story by Dickens. It's part of our language, and the concepts in there are so clearly across culture for Americans.

Similarly, Jane remarks:

> I think that having a pretty general knowledge of common literary references is important in order to understand allusions, art… So much art that is created in today's world is not completely original; it is based on things from the past. And so having those references is good. It's good in order to understand a lot that goes on in the world.

The above reflections underscore the intertextual nature of reading – an awareness that is integrated into the English curriculum at Bolster Academy.

Other "realities" require skills necessary for effective participation in a range of literacy practices that "the world" still needs. As Meg put it, "At the same time I want them [students] to be able to function at some level successfully with the traditional. So, I still offer tests and quizzes and all that because the world is going to need them to do that too."

Building a strong foundation of traditional literacy skills is an important curriculum goal and an understanding shared by all English teachers. Says Jack,

"Students have to be able to put together a cogent, coherent, logically developed argument." Expository academic writing skills are taught through the SPA (Statement, Proof, Analysis) paradigm, where "statement" is the writer's topic sentence, "proof" is a direct quote from the text, and "analysis" is the exposition of how the quote connects to prove the topic. The idea is that students become more skilled, independent, and confident writers by the time they graduate. Because if they don't, it would leave them "handicapped." Students are also expected to learn the conventions of the written language. Each term they write analytical papers and critical essays where they have to exhibit their knowledge of grammar and punctuation. Says Nick:

> When they write a formal critical essay, I am looking at the whole thing: I am looking at grammar, sentence coherence, paragraphs, if they supported what they have to say... And that's a skill. I mean they have to learn how to do that. There is no question.

It should be noted, though, that the assessment of the overall student performance reflects the high value placed on meaning: students' informal writing makes up 70 percent of their final grade, while analytical and research papers – 30 percent. This is because "that 70 is comprised of their most thoughtful writing, ironically," as Nick highlights.

To sum up, a combination of the traditional and the innovative; the classical and the contemporary; free expression and correctness of form; paper and screen; various interests, ages, strengths, approaches, and personalities of the teachers make the English education at Bolster a comprehensive experience that develops a wide range of students' literacy skills.

The final chapter represents an analysis of the above-mentioned findings with the purpose of assigning meaning to them, drawing pedagogical and broader social implications, and suggesting venues for further research.

CHAPTER 5

DISCUSSION

Throughout this dissertation research, I was guided by the broad question "What factors contribute to the culture of reading among 21st century adolescents?" Several months of interviewing, transcribing, and classroom observations yielded rich data that had to be analyzed, interpreted, and translated into a coherent narrative that would adequately convey the details of this inquiry process. Most importantly, making meaning of the data involved addressing the question " What have I learned?" In this chapter, I discuss the complexities of the literacy landscape in the Digital Age as revealed by this study and draw implications for educational and broader social contexts.

Liberating Reading Environment

Multiple factors – both digital technological and sociocultural – have been found to contribute to the development of a school-wide culture of reading at Bolster Academy. First and foremost, this involves creating a liberating reading environment that allows students to engage with high-interest reading material for both recreational and academic purposes on a reading platform of their choice.

Transformation of the traditional library into a digital one proved instrumental to the dramatic increase in recreational reading among students: student-driven on-demand book acquisition, almost instantaneous access to the desired content, and the availability of eReaders allow to capitalize on the momentum opportunity to reinforce a student's intrinsic interest in reading. The advantage of a digital-based collection over a traditional one is that it is not tied to books as physical objects. Therefore, the school library does

not have the limitations of a physical collection, which involves buying books upfront, putting them on a shelf and hoping that they will get used. With a digital collection, librarians and patrons can be much more proactive, and the book acquisition process can be much more student-driven.

However, by no means is Bolster Academy a paperless institution: at this school, reading occurs in a variety of formats. The choice of a reading format is determined by idiosyncratic preferences of students, as well as by pragmatic considerations they might have. Sam, for instance, observes:

> I'd say that the only patterns I see in my classes thus far are more pragmatic than anything else. They [students] won't be able to get to the bookstore before it closes. They know that they have a reading assignment to do. So, they come down to the library because it's open at night, and they can get a Kindle and they can get a book there… So, whatever is easier…. But it's a different financial aspect, too: when students go to the bookstore, they pay for it. When they get a Kindle, it's through the school.

The teachers' exploratory pedagogical stance towards the format of reading also contributes to the sense of choice students have. Says Jane:

> In terms of how they are reading it… I have a class where half of my students own the paperback book, and maybe a quarter of them are reading on the Kindle, and maybe a quarter of them found an online text. And I think in terms of how they are getting that information, at least for me, it doesn't really matter.

Allowing students to choose a reading platform is one of the most organic ways to blend in-school and out-of-school literacy practices. In the world outside the classroom, it appears to be a rather common practice among readers of all ages to alternate reading platforms depending on the purpose of reading and the circumstances, which makes them self-identify as *hybrid readers*.[27] Electronic platforms seem to be often used for pleasure

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[27] To read a representative discussion, go to http://www.nytimes.com/2015/09/23/business/media/the-plot-twist-e-book-sales-slip-and-print-is-far-from-dead.html?_r=0

reading and while traveling, while paper-based copies – for reading that involves some kind of active engagement with a text (annotating, underlining, highlighting, etc.). The often-cited rationale for these preferences is captured in the following quote: " Reading [on] paper is active – I'm engaged and thinking, reacting, marking up the page. Reading on screen feels passive to me" (Baron, 2015, p. 89). A rationale for *not* using electronic devices for study purposes seems to have a lot to do with a lack of user-friendly standardized features (e.g., non-cumbersome ways to annotate, or standardized page numbers). My research participants, for instance, indicated that they find using electronic devices too "cumbersome" from a technical standpoint for scholarly reading. However, it is reasonable to propose that, as technology improves, more readers are likely to resort to electronic devices for both recreational and scholarly reading purposes – format preferences seem to be a matter of convenience rather than a mere habit.

Going Beyond Tokenism about Technology

Choice is probably one of the key characteristics defining the Bolster environment, where the selection of a reading format is a technical detail with important implications. It sends an important message: what matters is the act of reading, the process of reading, the ideas, the content, and *not* the format. Says Meg:

> Reading is reading, and it does not matter what you are reading on. And to me, it does not matter how you are reading. OK, there might be a glare on the screen, or I might need to turn the lights on, or I flip the pages in a certain way, or click the button, or my page might be a different font size. You know, there are these things. But literally, when you are taking in these graphemes and processing visually and you are decoding them, that's what you are doing.

There are, however, more subtle processes at work here as well. Frequent, purposeful reading on electronic devices creates and reinforces a connection between a gadget and a

new purpose for which it is used, i.e., reading. As highlighted in the literature review, the use of technology aligns with the motivation, aspirations, and overall background of its users. Warschauer (2003) maintains:

> Education …helps determine how people use the Internet and what benefit they achieve from it. As the Internet becomes more widespread, it is highly likely that its use will be stratified, with some using it principally as an entertainment device and others using it to seek and create new knowledge. The mere existence of the Internet will not create researchers or knowledge seekers out of those without the requisite background or skills. (p. 109)

Strikingly similarly, Zaid (2003) wrote about a much older literacy technology – a printed book:

> The problem is not that millions of poor people have little or no buying power. You may have the money to buy a book but not the interest or the training to follow its content. (p. 68)

Thus, it is reasonable to argue that new technologies have put a new spin on the perennial challenge of finding effective ways to evoke student interest and to provide necessary, if not inspiring, "training." It takes a systematic, deliberate effort on the part of a concerned mentor (a teacher, a parent, etc.) to create "knowledge seekers" and readers. As stated above, if unmediated, students' online, just like their offline, behavior is likely to stay within the realm of the familiar rather than to expand their linguistic and conceptual horizons. Consequently, the use of technology will remain stratified: "elite" using it as a means to an end, while others – for purely entertainment purposes (Kress, 2003).

Therefore, it is critically important for educators to look beyond "the cutting-edge flashiness of new technology" (as Jack put it) and to examine the pedagogical work that makes students *want* to pick up a book, electronic or paper-based, in the first place. As

Meg observes, simply putting a student in a room with the Kindle would be similar to

putting him/her in a room with a shelf of books:

> If they are not a reader, if they are not interested, then they are not going to go for
> it. Just because it is bells and whistles does not really do it. Because we've been
> doing it for a number of years, we have gotten passed the bells and whistles stage,
> which is a natural stage of transition. I think that a lot of folks are at this stage
> right now: "I am going to get a Kindle for every kid" or "I am going to get an
> iPad for every kid and then I am all set." And they [think they] are all set because
> now they have a common playing ground of the device they are all comfortable
> with. I think this might have been what we thought years ago. But you have to
> understand that this is not helpful at all without the adult guidance of what we are
> doing with that. And why we are doing that.

What teachers bring *to* the technology are their pedagogical vision and a sense of purpose

– how different modes of engagement with the material might ignite students' curiosities

and help them learn something of substance and value about it. Mere exposure to an

inherently interesting text or latest digital gadget is unlikely to make a difference from an

educational point of view unless there is a curriculum that engages students in active

reading, writing, and learning. "It's that engagement that, I think, is so important for us as

adults to keep doing with the kids. That critical, executive functioning is not natural at

this age without adult intervention" (Meg).

Viewing digital technologies as tools, not gadgets, is not an obvious leap for its

users, especially those in their formative years. To illustrate the point, a recent report on

integration of digital technologies into a public high school in Eastern Massachusetts

(Balonon-Rosen, April 2015) features an interview with a junior who is technically savvy

enough to troubleshoot technology issues for peers, teachers, staff and parents:

> Although Moodie is thrilled about the opportunities the school's technology
> brings, he shares concerns about the devices themselves. As part of the district
> budget, Burlington students get new devices in first, third, sixth and ninth grades.
> The old devices are recycled. For Moodie, a junior, his device feels outdated

compared to the models of younger peers. "We have iPad twos and the freshmen have iPad fours," he said. "I don't think the capabilities that you have are enough."

The report stops short of specifying what "capabilities" Moodie finds lacking and, most importantly, how this affects the quality of his (academic) work. Although the article appears to be intentional about its focus on purely technical issues surrounding integration of technology into the classroom, it is quite representative of a larger body of reports that adhere to the "myth of tokenism about technology" (Rutledge, 2007, p. 123) – "that cutting-edge technology itself can transform teachers, students, and educational events" (Rutledge, 2007, p. 153). As shown above, only pedagogy-driven integration of technology can potentially serve as an extension of students and teachers and transform the classroom.

"We Just Have to Find Ways"

Just like the mere presence of cutting-edge technology in the classroom does not entail improved learning outcomes, mere exposure to potentially enriching input would not suffice either. Says Meg:

> If I give them [students] a long piece and I just give it to them for exposure, hoping that that input will then turn into some sort of, you know, ability to write a longer essay or what have you, I don't think that follows naturally without a curriculum that engages them in active reading... So, if I put that same book [as an alternative to a paper-based copy] on a Kindle and I give it to them, and then I do my whole spiel about.... you know, getting them excited, like any teacher might, and then I'll allow them to engage in different ways with the text, I have really a better chance of actively engaging them, and then all other rewards come from them. But you got to sort of meet them where they are.

As shown above, each research participant has his/her own "spiel" for meeting students where they are, with or without technology. As Jane summarized it, "We just have to find ways."

Choice-driven English curriculum and teacher autonomy have proved to promote student interest in reading. As discussed above, English teachers at Bolster have been empowered to design their own courses, which essentially allow them to share their literary "passions" with students. While the field of education has traditionally focused on the importance of capitalizing on students' strengths, it has underplayed pedagogical benefits of capitalizing on *teachers'* strengths. As Nick observes, "I am teaching Tolkien this spring because it is right up my alley. This is the stuff that I really like. But I know that because I really like it and really understand it then I can do better with it, and they [students] are going to profit from their experience as well." Research (Kositsky, 2010) has shown that having a teacher who is passionate about his/her subject is a formative experience for students: students might not remember what exactly their teachers told them, but they would remember their passion, their attitude, and some of this will be transferred to the students.

Transactional Theory of Reading in the Digital Age: Transmediated Reader-Response

Engaging English curriculum in the Digital Age involves "juggling" different modalities for acquiring, conveying, and evaluating knowledge and understanding. In practice this means expanding the traditional "read, test, quiz, essay, research paper" model to include blogging, ninging, dramatic reenactments, creating videos, Movie Maker projects, Prezi or PowerPoint presentations, and any number of other alternative formats. As shown above, English teachers at Bolster Academy allow students to alternate modalities in their responses to literature to show their understanding. Such inclusion of multiliteracies in the English

curriculum increases opportunities for student self-expression and for their engagement with text. Moreover, since students encounter multiple forms of meaning representation in their everyday lives, developing their competencies necessary for navigating these different modes of communication is one of the key objectives highlighted in the school's 21st Century curriculum.

Allowing a variety of ways to respond to literature is consistent with the reader-response theory. In her review of the status of reader response research, Hancock (2001) discusses how *transmediation* – communicating one's ideas through multiple sign systems (e.g., language, art, music, movement, drama, sculpture, etc.) – extends readers' understanding of literature. While making comments about a particular research study that involved a transmediated response to literature, she asserts, "Making sketches to represent literary ideas involves higher level thought and generated multilayered interpretations of literature, thus implying pedagogical practice for an extended view of reader response" (p. 101).

Digital technologies with their multimodal affordances extend the view of reader response even further. Says Meg, "Now you can offer different ways to highlight or to showcase your knowledge and understanding that can play to your particular cognitive ability and your strengths that wouldn't be necessarily available earlier." I would argue that these "different ways to showcase" one's knowledge and understanding became possible due to the capability of digital technologies to amplify one's abilities: for instance, one does not have to be a good artist in order to be able to express his/her perception of literary art through visual art. Although this

seems like a limiting factor on the surface, it is in fact empowering when it comes to older students – the age group that is the focus of this dissertation research.

While drawing is an important mediation tool for making and expressing meaning for young children, it stops being an adequate communication tool for adolescents (Vygotsky, 2003). Teenagers become acutely aware of their limited abilities as artists (unless they are advanced in this area, but even then they tend to doubt their skill). Vygotsky (2003) asserts that teenagers are not satisfied with producing a semi-skilled drawing and feel the need to have specific, professional-level skills in order to express their creative imagination (p. 315). This is when technology can serve as an extension of student (and does, as shown above). Although students need to be assisted in acquiring certain competencies with new technological tools (e.g., see Rutledge, 2007, who did a study on videography in a high school setting and showed, among other insightful things, that direct instruction of purely technical skills is needed in order to enable students to compose with video), by and large they are tech savvy and can often be well ahead of teachers in this respect. Thus, giving adolescents an opportunity to experience their "poems" (Rosenblatt, 1985) as multimodal events makes their interactions with literature more organic, as they reflect the cultural context that have shaped their personal and social selves. As Rutledge (2007) points out:

> Although Louise Rosenblatt was an orthographically centered educator, she recognized the need for students to have free, expressive responses to texts. Although she would never have imagined forms of response could include everything imagined, she did nod in the direction of loosening form of response in order to bring about a more spontaneous response to text. (p. 36)

As suggested by this quotation, embracing a multitude of possible formats for responding to text is quite consistent with the vision Rosenblatt articulated a few decades ago.

Remarkably, modern technologies such as functional magnetic resonance imaging (fMRI) and magnetoencephalography (MEG) essentially validate the *transmediated reader-response approach* to literature, as they make it possible to formulate neuroscience-based suppositions regarding the inner workings of the brain during the act of reading. Everding (2009) describes this process: "Readers create vivid mental simulations of the sounds, sights, tastes and movements described in a textual narrative while simultaneously activating brain regions used to process similar experiences in real life" (para.1). Thus, during the process of reading, *multiple* brain regions act in accord to recreate the world of the text the reader is comprehending. Furthermore, because each reader brings his/her background knowledge/knowledge of the world to the reading, "[t]he information available to readers when reading a story is vastly richer than the information provided by the text alone" (Speer, 2009). Thus, it is only logical to allow students to create vivid multimodal responses to literature that would reflect the complex associations reading evokes and that might approximate the mental simulations activated during the act of reading. To paraphrase Hancock (2001), the blending of different sign systems to mediate thinking about reading appears to be an organic way to engage with literature and, therefore, a legitimate component of the overall instructional framework in the English classroom.

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"Legitimate Differences"

The heading is borrowed from the abovementioned study conducted by

Rutledge (2007), who pointed out that good literacy pedagogy considers differences

in the modes, and overlooking these differences may affect the development of a

student.

Although my research participants displayed a range of attitudes towards the

integration of alternative literacies into the English curriculum, they all share the

view that we live in the world "where there are so many different methods of

acquiring information" and of showing one's understanding. Jane's reflections

below convey the general mood shared by the participants:

> I sort of feel that at this point, we just have to be flexible, we have to experiment
> with everything. And I don't know if it makes sense for us as an English
> Department or as a school to make some sort of executive decision when it might
> not be in harmony with the world that we live in. For me personally, why I feel
> like I need to be open-minded is because I don't know where we are headed. And
> I don't know what's best. The best thing that I can do is to be open-minded and be
> willing to experiment and to see what happens. And I think Bolster really
> empowers us to be comfortable with not knowing and to be comfortable with
> experimenting, and with trial and error, and all of those things.

However, this "experimenting" is not only emphatically pedagogy-driven but also

never loses track of the "legitimate differences" among modalities in the context of

English education. The mode of the printed word remains central to the English

curriculum at Bolster due its perceived value for student development:

comprehension of the written word through reading and "expressing one's

personality and knowledge" through written and oral language, and doing so "with

variety, control, and precision" (Postman, 1980) are considered to be essential

literacy skills required for effective participation in literate discourse, even in our

Digital Age. It is the medium through which the mode of the printed word is expressed that differs, depending on idiosyncratic preferences of students and teachers, as shown above.

Thus, based on the literature and study data, it seems reasonable to point out that a growing body of research that enthusiastically presents adolescents who perform well on their media projects as "capable and literate *if we view them from the perspective of multiliteracies*" (italics added) (O'Brien, 2001) and not through the prism of "(print) literacy bias," appears to overlook the specific skills each mode of communication and meaning representation requires. The "adding-new-skills-to-the-toolbox" approach adopted by the Bolster English teachers, on the other hand, offers a framework that considers the role of different modalities in student development in the context of the English classroom.

Summary

The research findings presented above have clearly demonstrated the changed nature of reading in the Digital Age. Hybrid reading – reading in a variety of formats depending on the purpose of reading and particular circumstances – has come to define the word "read." As we continue our quest for effective ways to ignite and maintain adolescents' interest in reading, it seems imperative to be responsive to and thoughtful about these new shifts in the literacy landscape, as demonstrated by Bolster Academy – my research site.

As shown above, digital technologies can play a prominent role in boosting Millennials' reading engagement. For instance, technology-enabled patron-driven book acquisitions and opportunities for multisensory expressions of the reader's

understanding of text seem to promote student motivation and interest – critical factors in literacy instruction. Ultimately though, the key issue is still social, and variables other than digital technology define reading experiences of the rising generation. Student-driven English curriculum, teacher autonomy, engaging pedagogical framework, and positive peer pressure are some of the factors that promote the discovery of a personal significance of reading. Thus, only when digital technologies are a part of a socio-educational context that is built on these principles can it be expected to have a positive effect on student reading engagement. To echo Rutledge (2007), "What matters most in any literacy is inside people – not equipment…" (p. 161).

Limitations of the Study and Implications

The study focused on the secondary English classroom and, therefore, does not represent a comprehensive discussion of learning in the Digital Age. For instance, it does not cover such areas as science education, whose benefits from multimodal representations of meaning are more straightforward.

Furthermore, the study only touches upon the processes of creating and assessing technology-mediated multimodal work in the English classroom. Focus on meaning (as opposed on form) seems to help the English teachers at Bolster to avoid "the rubricated rigors of schoolishness that might destroy the very playfulness that attracted students" (Rutledge, 2007, p. 150) to the alternative literacies in the first place. However, the challenge of integrating and assessing multiliteracies projects in the English classroom remains. Sharma (2013), for instance, argues that

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it is only when we actually teach students how to communicate complex concepts

and skills by using alternative literacies that we can grade them on those issues.

As mentioned above, the school library at Bolster Academy offers research

and electronic literacy services to students and teachers. For instance, the Executive

Library Director, Jeff, directly works with students teaching them how to access

and navigate digital resources. He also shows students how to use information

technology on their laptops: e.g., certain programs that help organize, share, and

present research.

In addition, I learned from one of the research participants that the school

had recently hired a new teacher, Tim, who became a resource person for teachers

and students alike when it comes to alternative literacies projects. Says Jack:

> We have a new teacher, Tim, who is very up-to-date with all the technology, you know. He co-teaches one or two 10th grade classes. He is up-to-date. He is a young guy, he knows everything. He knows every program. He knows how to take things from here and put them there, and do that, you know. For me it's like, "Forget about that!" He has been doing a couple of demos to the faculty during faculty meetings on how to use these things. He teaches English, he teaches academic support – small groups, like tutoring. And I think he is also at the History Department. So, he is doing like three things. But as I said, he knows all about technology. So, based on his demoes, I was like, "Maybe I should." It's painful, painful [laughs]. So, he came into the class and demonstrated how to make Movie Maker, and how to get music from here and put it there, and do this and da-da-da…you know. So, he was extremely helpful *on the technical side*.

The phrase "on the technical side" captures the nature of the inspiration and support the

Bolster teachers and students get with their multimodal projects, as yielded by my data

analysis. This, however, may or may not reflect the true state of affairs at Bolster

Academy: at no point during the data collection process did I directly approach the issue

of multiliteracies from the design/composition perspective, as this was beyond the scope

of my research agenda. In addition, I was unable to enlist the new tech savvy teacher, Tim, as a research participant. Having learned about his existence and his role as a technology consultant (formal or informal), I immediately sent him an email invitation to participate in my research but never heard from him. No doubt that interviewing Tim and observing him teach would have provided additional insights into multimodal learning at Bolster Academy.

Despite this gap and a lack of direct intention on my part, my analysis of study data yielded some additional insights that confirm findings from other studies regarding the nature and role of digital literacies in the English classroom. In particular, the data offered a bit of evidence that communicating complex concepts by using alternative literacies requires doing some serious conceptual work – an understanding central to all good writing and all effective writing pedagogy. Says Jack:

> I think that when you are making a Movie Maker project, it's just like your writing assignment: some kids are going to write an A+ paragraph, and some kids are going to be blah. The kids had the opportunity to use the new hot media, and some did a super job, and some did a lousy job.

Similarly, Rutledge (2007), who researched high school students creating digital video projects for their newspaper classroom, concluded that "competent coding [in any modality] involves undergoing full composing processes consisting of exploration, organization, composing, revision, re-composing, and final editing" (p. 122). He also pointed out that the textbook used by the English teacher listed similar steps to successful writing process: "prewriting (exploration), drafting (organization and composing), revising (revision), editing (final editing), and

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presenting" (p. 123). The striking similarities between the composing processes

involved in videography and the literate written discourse made Rutledge suggest

that having training and a mindset of a "compositionist" might be helpful in

addressing the problem of creating and assessing multimodal compositions.

Rutledge (2007) argues that because the Digital Age allows students to compose in

different modes, it is important that they "think of themselves as

compositionists…who can apply rigorous exploration, organization, forethought,

creation, revision, recreation, final touches, and presentation to various modes" (p.

159). He emphasizes that

> [t]he compositionist is not fooled by the illusion of the *other* mode. They
> understand or at least anticipate all the steps in the process that are required to
> compose in any mode. They would suspect that…it is easy to make video, but it is
> hard to make *good* video. I would extend this to say, that it is easy to do lots of
> modes, but it is hard to do any one mode well. All of them require rigorous
> process. (p. 160)

Thus, as Rutledge reviewed and analyzed his research participants' completed product

videos, he noticed that successful projects exhibited solid conceptual organization and

were the result of a rigorous composing process:

> [T]hey explored ideas for the sequence, discussed logistical problems, planned
> how to do the shoot, collected footage in an organized fashion, combined footage,
> revised footage, corrected errors, and revised again. Their successful opening
> scene coincided with their undertaking a complex, iterative process that involved
> all the steps of what I understand to be a rigorous, literate composing process. (p.
> 123)

Weaker video projects, on the other hand, demonstrated a "lack of tangible conceptual

organization." Rutledge observes, for instance, that one of his research participants

"pinpointed his problems with story coherence to a lack of thorough conceptual work,

explaining that he wished he had explored his topic more by writing until he had a clearer

controlling idea" (p. 124). Interestingly, Jack – my research participant who undertook the Movie Maker project with his students – refers to himself as "the concept man, the idea man" behind this project, who needed coaching on the technical aspect of the matter. As mentioned above, I did not take the issue further to explore whether any students had assumed the role of "the concept man," or a "compositionist," as suggested by Rutledge (2007), to create their multimodal projects.

I would argue that the (limited) data that my research incidentally yielded complement the existing literature on multiliteracies: they further illuminate the point that in order for alternative literacies to occupy a "legitimate" niche in the curriculum, they need to be accompanied by a rigorous conceptual work akin to the processes involved in more traditional literacy activities. Without this, students and well-meaning teachers might view alternative literacies as merely a way to merge out-of-school and in-school literacy practices – a limiting view of multiliteracies instruction. In addition, viewing student multimodal work as "compositions" that serve a particular communication goal and that show evidence of "the presence of elements of process and rhetorical thinking" (Rutledge, 2007) will provide a valid framework for assessment practices. Jack's reflections on the quality of student work highlight the potential benefits of having such a framework:

> And they [students] had about a good month to do this [the Movie Maker project]. And, again, some of the results were superb, top-notch, super. And others were like, you know…A range, like you find in any school. But the best were super. And amongst that were not so good were just… laziness or whatever. Anyway, this was their final project. I am thinking more and more now about, "OK, how can I do this Movie Maker to use as assessment more than just a straight…. you know – a paragraph. Which I think you still need to do, but to integrate more of these technology modes.

Although Jack, for one, was not misled by the cutting-edge flashiness of new technology, others might. As Rutledge (2007) cautions, researchers and educators might "overemphasize the quality of student learning and final [multimodal] products when digital technology is involved" (Rutledge, 2007).

The research setting – Bolster Academy – is a private boarding school, which differentiates it from the public school model in a number of important ways. Although there are certain standards that Bolster Academy has to adhere to, it is not as rigidly regulated as public schools. Therefore, there is a lot more room for teacher creativity and autonomy. As Jeff reflects on the Bolster environment in regards to the latest digital transformations that have been taking place there and that are the focus of the present research:

> It's a great testing ground for this kind of thing because there is a little bit of money to do, to achieve things that cannot be done in other environments. You don't have some of the regulation. Although some of the regulations are important in the regular schools, you don't impasse much of that in an independent school environment. It's a lot more options. There are certain standards that we have to meet, but it's not as rigid as in a public school environment. So, there is a lot more room for creativity and taking on interesting new challenges like this.

Importantly, since most students live on campus, there are many more opportunities for the positive peer pressure effect in terms of forming recreational habits, including the habit of reading for pleasure. Living on campus as a community involves sharing both academic and leisure hours, considerably expanding the social aspect of reading practices students engage in. Very much like in the 1988 study by Carlsen and Sherrill discussed above, students' life at Bolster Academy is full of "reading cozily in a friend's home during the afternoons" and "discussing teen romances during junior high lunch periods"

(p. 149). It is just for these students, "a friend's home" is a friend's dorm or the welcoming space of the new learning commons.

Although teen romances and fantasy – the most popular genres among the Bolster students – constitute so called "light reading" (Krashen, 2004), the experiences adolescent readers gain and the abilities they build serve as a springboard for more "serious" reading: "light" reading can serve as a conduit to "heavier" reading, as was the case with comic book and magazine reading in the 1950s (Krashen, 2004). As Hancock (2001) remarks, "The more one reads, the more one desires to share personal connections, innermost thoughts, and controversial reactions to literature" (p. 99). What is more, there seems to be a correlation between having opportunities to discuss literature and reading comprehension: *The Nation's Report Card* issued by the National Assessment of Educational Progress (2013) revealed that students who reported that they more frequently discuss interpretations of what they read scored higher on reading. This finding underscores the facilitative function of social interaction in promoting text comprehension.

Since it is a private boarding school, Bolster Academy is "kind of a little bit an artificial environment in terms of the rest of the world," as Jeff put it. However, the model that Bolster Academy is pioneering can be applied to a less privileged school setting as well. The idea is to get students interested in reading through an engaging pedagogical framework and patron-responsive library services and then support student-driven acquisitions of books without them entering a retail transaction on their own. Considering the benefits of extensive engaged reading, creating a culture of reading

drawing on the Bolster Academy model would represent a healthy alternative to the current over-regulated environment of most public schools.

Summative Remarks and Lingering Questions

Completing this dissertation research has been a transformative experience for me. As I acknowledged in an earlier chapter, I came to it with a strongly felt "literacy bias" and a concern that we might be witnessing the waning of reading culture as digital multimedia technologies lure the younger generation away from the worlds on page. Consequently, inquiries such as "what happens when we gravitate toward data and short-form, toward accessed [wirelessly delivered digital content] rather than owned [a printed book], as reading destinations?" (Baron, 2015, p. 153) resonated with me. As Baron further inquires, "The [above] question propels us to think on a much broader plane than individual reading choices. It drives us to think about culture" (p. 153).

As I have come full circle (reading professional literature, collecting data in the field, analyzing data, drawing conclusions about the patterns I observed, reading yet more literature, etc.), I have come to realize that, as Watkins (2009) succinctly put it, "technology in the end is never the problem or the solution. Humans are."

It is humans who create conditions that can either foster or hinder reading engagement. For instance, it has long been known that social environments that encourage reading[28] share some key characteristics: availability of reading materials; family members who read aloud to a child and discuss books with him/her; adults and peers who read; role models who value reading; sharing and discussing books (without

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[28] This particular list is partially based on Carlsen & Sherrill's (1988) research, but numerous other studies support these observations.

being told what to think about them[29]); freedom of choice in reading material;

pedagogical practices that foster a love of reading, and the like. All these conditions still

apply to raising a reader in the Digital Age. However, now we have many more tools at

our disposal, which entails the process of learning how to navigate available choices

purposefully and effectively. The discussion presented in this dissertation suggests that

there are grounds for an optimistic view of the present and future of reading. Naturally,

there are also some lingering questions that need to be explored further.

As it has been argued above, new digital tools can potentially increase student

reading engagement. For instance, they provide an almost instantaneous access to desired

reading content, which allows capitalizing on adolescents' spontaneous interests. They

are "anytime/anywhere" technologies (Watkins, 2009), which, on the one hand, prompted

some researchers to emphasize the level of distractions they generate. Watkins (2009), for

instance, writes that "[a]n unintended consequence of young kids' adoption of digital

media is that fast entertainment and continuous partial attention (CPA) are invading our

nation's schools" (p. 172). On the other hand, being available anytime/anywhere also

means virtually unlimited opportunities for reading. If you are a reader, you will willingly

engage with the printed word (which is a mode) on any medium (be it a large or small

screen, or a paperback edition). By allowing students to read in any format for their

classes, teachers can reinforce a connection between digital technology and the practice

of reading. It is reasonable to postulate that without this incentive adolescents would be

more inclined to perceive their personal multifunctional multimodal devices as primarily

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[29] Carlsen & Sherrill (1988) report, for instance, that "[i]n the secondary schools, students were impatient
and baffled by the search for 'the meaning' in the literary work. Their own 'response' to the piece of
writing was never enough" (p. 155).

entertainment. In this respect, adopting the "bring your own device" policy by an increasing number of schools seems to be a step in the right direction (for, instance, see George, September 14, 2014). In addition, strategic, pedagogically sound use of personal devices can help under-funded public schools to address some of their resource issues.

But how about "non-readers"? Can the Midas touch of technology (as McLuhan put it) potentially alter their attitudes towards reading? There is research that suggests that reluctant readers appear to be more willing to engage in the act of reading if it is mediated by technology. In her study of high school students who self-identified as non-readers, Dierking (2015) discusses an impact from the introduction of the Barnes & Noble Nook into the English classroom: "Most students reported they liked reading more on the Nooks, even while some admitted their overall attitude toward reading in general remained unchanged" (p. 411). The students in this study used the e-readers only once a week during their sustained silent reading time. The researcher noted that the sense of novelty that the students experienced while reading on the Nooks was one of the factors that contributed to their more positive perception of this literacy practice.[30] Importantly, e-reader ownership among this group of participants was rare, which certainly amplified their sense of novelty from the technology. Dierking remarks, "Novelty can make even the most inane thing tantalizing—until the newness wears off" (p. 412). The researcher did observe "a slight waning of interest" as the newness was wearing off. As one of the students in her study said, "She [the classroom teacher] brought the Nooks in, and I was

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[30] The other contributing factors were "convenience, escape [from regular classroom work], privacy, and flow" (Dierking, 2015, p. 411).

excited. Awesome.... After a while it's okay, Nook time, but I'm like okay as long as I don't have to do any English work" (p. 412).

Although e-readers in the Dierking study were hardly integrated into the flow of instruction to expect any significant shaping effect on the overall quality of instruction and student long-term motivation, the question still remains: as the sense of novelty and "coolness" from digital technology inevitably wears off with time, will "the very playfulness that attracted students to it in the first place" (Rutledge, 2007) be compromised?

Another important factor that needs to be considered when it comes to the relationship between literacy and technology is student age. Due to its focus on adolescent readers, this dissertation research only marginally discussed the benefits of the paper-based format for building young children's literacy skills compared to its electronic counterpart. Since optimal early childhood and childhood literacy experiences build a foundation for subsequent reading success, it is critical as never before to view literacy development as a continuum. In this respect, one of the most profound questions we need to consider is whether the medium of the printed book with its static, unchanging text and images is essential for developing a deep and abiding interest in reading and for forming a reader identity. As I write elsewhere (Kositsky, 2012), the reader of a paper-based text has to activate his/her own inner resources – linguistic and non-linguistic – to create its interpretation. Thus, the entire responsibility of the activity falls on the reader (Reinking, 2001). By contrast, the reader of a multimodal, hyperlinked text can rely on external resources supplied by creators of a particular enhanced content, which considerably diminishes the need to create its mental representation on the part of the reader. Hence,

the responsibility of the activity is shared. The question is whether it is critical for young

readers to learn to appreciate the process of bringing a static text to life by the power of

their imagination in order to be willing to engage in reading. Can digital technologies

with their multimodal affordances potentially compromise this? Are dedicated e-readers

(i.e., devices primarily used for reading digital books) such as the Amazon Kindle, the

Barnes & Noble Nook, or the Sony Reader safer choices compared to multi-use devices

such as Apple iPad or Barnes & Noble Color Nook?

Selecting digital technologies for secondary students to promote their reading

engagement also needs to be based on a number of important considerations. Dierking

(2015), for instance, instructs, "Consider critically your purpose for adopting e-readers

before purchasing" (p. 415). She further explains that the classroom teacher in her study

chose the Nook One-Touch as it only held novels for reading, no other applications. In

my own study, presented in this dissertation, the Kindle's success in promoting reading

among the students at Bolster Academy can be attributed, at least to some degree, to the

fact that the school's library adopted an earlier, non-Internet-enabled model that offered a

distraction-free reading environment and encouraged a long-form, immersive, "cover-to-

cover" reading. In some respects, replacing physical books with a dedicated reading

device has not been a huge leap in terms of technology. As Jeff, the Executive Library

Director, reflects, "In some ways, we've just made it easier to get access to the same type

of reading content that is very text-oriented. And it's easier to make it available and to

actually read it with an e-Ink device." Thus, ironically or unsurprisingly, it is a piece of

technology that resembles the print environment the most that has been found to offer "a

very focused reading experience" for its users. Jeff also expressed a concern that "once

you start mixing a lot of media with reading and you have this kind of new reading

experience that could happen on a multimodal reading device, I think the jury is still out

on whether that is going to result in more immersive reading." Very similarly, Jen Doll,

cited in Baron (2015), writes:

> People who read e-books on tablets like the iPad are realizing that while a book in print or on a black-and-white Kindle is straightforward and immersive, a tablet offers a menu of distractions that can fragment the reading experience, or stop it in its tracks (p. 8).

These considerations call for a more nuanced discussion of reading in electronic

formats, especially when it comes to its pedagogical implications. As Baron (2015)

emphasizes, "not all screens are created equal" (p. 15). For instance, although reading on

a dedicated device like the basic Kindle is technically "electronic," the reading

experience it offers is very similar (but not identical) to reading in the print environment.

Thus, it appears that adopting single-function devices to promote student reading would

allow educators to capitalize on the advantages they offer (e.g., instantaneous access to

desired content of value, having a portable library at hand, exposure to long-form

reading, built-in dictionaries and annotation tools, etc.) and, at the same time, to avoid the

distractions inherent in multifunctional devices (e.g., gaming applications). It seems

imperative, therefore, to take a strategic approach to the selection and use of digital

devices in the classroom (and beyond) to maximize desired outcomes. As schools move

to adopting multimodal tablets as their principal technology[31] while acquisition of

dedicated e-readers seems to taper off (Bensinger, January 4, 2013), the need for

integrating these understandings into educational practices only increases.

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[31] For instance, see a *Washington Post* report at https://www.washingtonpost.com/local/education/tablets-proliferate-in-nations-classrooms-and-take-a-swipe-at-the-status-quo/2014/05/17/faa27ba4-dbbd-11e3-8009-71de85b9c527_story.html

Pedagogical and Sociopolitical Considerations

Having adopted a 21st-century mindset, the educational community and public at large have come to perceive access to information technology as "a basic human right" (Ward, March 11, 2014) and a potential game changer in education. U.S. Secretary of Education Arne Duncan[32] declared technology "the new platform for learning" and emphasized that we desperately need it "to both improve achievement for all and increase equity for children and communities who have been historically underserved" (U.S. Department of Education, March 8, 2012). Warschauer (2003) maintains that "the rise of multimedia should provide an important opportunity to level the playing field of literacy by restoring the status of more natural forms of audiovisual communication that are in some ways more broadly accessible" (p. 116). Warschauer points out that expanding school literacy practices by integrating audiovisual elements into instruction would validate the social practices that have been traditionally marginalized (e.g., shared storytelling).

A 2010 report by Pew Research Center (February 3, 2010) indicated that by then the Internet had become "a central and indispensible element in the lives of American teens and young adults," with 93 percent of adolescents (aged 12-17) and young adults (aged 18-29), even in households with income levels below the poverty line, go online regularly. A more recent report from Pew Research Center (October 8, 2015) revealed that when it comes to race and ethnicity, trends in social media adoption are defined by similarities, not differences:

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[32] Arne Duncan was the United States Secretary of Education from 2009 through 2015.

- Whites, African-Americans, and Hispanics have adopted social media at the same pace.

- While in 2005, six percent of African-Americans, seven percent of whites and ten percent of Hispanics used social networking sites, in 2015 these figures are as follows: 56 percent of African-Americans and 65 percent of both whites and Hispanics.

These statistics suggest that the technical part of the "digital divide" problem might have been largely resolved. And yet the academic achievement divide among white, Asian, Hispanic, and African-American students persists, as evidenced by *The Nation's Report Card* issued by the National Assessment of Educational Progress (2013).

The juxtaposition of these two sets of data illuminates the idea that the impact of a tool (e.g., technology, literacy) is restricted to the practices and functions it performs. As Neuman (1995) highlights, "Used for mundane purposes, there is no reason to expect that reading will encourage intellectual growth anymore than does a nonsensical movie or television show" (Neuman, 1995, p. 98). Similarly, used for mundane purposes, technology cannot be expected to have any significant impact on student learning and overall academic performance. The fact that adolescent users have virtually unlimited access to information technologies and possess technical skills to navigate them does not automatically develop their ability to effectively comprehend, construct, and communicate new knowledge from/in a variety of formats. To be able to do this, they need to learn new skills (for instance, developing a "compositionist's" frame of mind to create conceptually sound multimedia content, as discussed above) through a mentoring process with a teacher and other community members.

Most importantly, "leveling the playing field of literacy" continues to require developing and maintaining sophisticated traditional literacy skills. As Kress (2003) points out, although "language-as-writing will increasingly be displaced by image in many domains of public communication, writing will remain the preferred mode of the political and cultural elites" (p. 1). Thus, print literacy skills are equally important for developing well-rounded adolescents and future adults. Colwell (2013) states, "Technology holds promise to enhance students' traditional, print-based literacy skills, emphasizing the importance of both types of literacy and the power they hold when combined" (p. 16). Moving towards a synergy of resources in the high school English classroom "holds promise" of creating more complete (since it is multisensory) and organic literacy experiences for digital natives.

The research presented in this dissertation is one illustration of how digital technologies can foster students' traditional literacy skills. It describes an educational framework that seems to have been able to capitalize on the potential of digital technologies to transform the whole school into a community of engaged readers. At the same time, the study reveals a multitude of other factors that contributed to this transformation. Most prominently, it is an overall social environment that allows capitalizing on the diversity of strengths that teachers bring to the classroom. It is also a school-wide philosophy, reflected in its mission statement that places high value on developing students' sense of agency. Bronson and Merryman (2013) define agency as "the capacity to act independently, to make one's own free choices, and to make decisions" (p. 226). The researchers write that in order to cultivate agency in children, we

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need to grant them freedom to form their opinions, to make choices and decisions, and to live with their consequences.

At Bolster Academy, adolescents are constantly engaged in decision-making. In the context of this research alone, they make decisions regarding courses they take, digital technologies they use (a printed book, Kindle, smart phone, iPad, laptop), modes of meaning to represent different projects, or books they read for their English classes.

Warschauer (2003) points out that independent schools (like Bolster Academy) "generally have better and more flexible conditions" (p. 123), where teachers and students are able to play to their strengths and administrators "help fine-tune the school each year" (Bronson & Merryman, 2013, p. 98). In contrast,

> teachers' behaviors in public schools are constrained in numerous ways by societal norms and expectations…. The requirements to cover curriculum, to prepare students for standardized tests, to change classes at fifty-minute intervals, and to maintain discipline and order make it difficult for teachers to engage in creative technology projects with students. (Warschauer, 2003, p. 123)

Needless to say that, under such conditions, providing students with meaningful mentorship becomes very limited or even non-existent. Being under constant pressure to respond to ever-changing regulations, public school teachers and administrators are forced to allocate most of their resources to complying with a constant flow of externally imposed demands and standards, as opposed to "fine-tuning" the school. The temporary nature of most such standards and regulations would make their in-depth discussion

within the context of this dissertation somewhat futile.[33] However, as standards come and

go, their lack of emphasis on student reading engagement as a valid pedagogical goal has

been very problematic. As my research participants emphasize, "finding ways" to

promote students' interest in reading, "creating a love of reading in the kids," "blurring

the line between pleasure reading and school reading" so that it becomes "reading" and a

personally meaningful experience are as important goals as the ability to read complex

expository texts to gain information – a key competency outlined in the currently debated

Common Core State Standards.

In addition, any mandated literacy standards should reflect an understanding that

we read differently for different purposes and that "the uses of reading are vast and

variegated" (Quindlen, 1998). As Anna Quindlen (1998) memorably maintains,

> [R]eading has as many functions as the human body, and not all of them are
> cerebral. One is mere entertainment, the pleasurable whiling away of time;
> another is more important, not intellectual but serious just the same. 'She had
> learned something comforting,' Roald Dahl wrote in Matilda of his ever-reading
> protagonist, 'that we are not alone.' And if readers use words and stories as much,
> or more, to lessen human isolation as to expand human knowledge, is that
> somehow unworthy, invalid, and unimportant? (p. 38)

Therefore, although extracting information from expository texts is a critical competence

that students do need to develop, it is not the only kind of reading practice that needs to

be part of the curriculum if we want children and adolescents to feel "satisfaction in the

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[33] To illustrate the point, since 2009 the field of public education has been affected by a new initiative –
Common Core State Standards (CCSS), which led public schools to invest extensive efforts into
redesigning their curriculum to integrate new expectations regarding student literacy development. In
many states, CCSS have been met with a lot of criticism, and a ballot initiative is currently under way in
Massachusetts that would ask voters in November 2016 to reject the Common Core State Standards and
restore the state's previous standards. For more information, go to
http://learninglab.wbur.org/2015/12/03/for-education-reform-activists-turn-to-ballot-initiatives/

sheer pleasure of reading" (Quindlen, 1998). Considering the cumulative nature of

reading, "everything else comes from that," as my research participant, Meg, summarized

it.

And last but not least: social environments, including any given school

community, shape human experiences in profound ways. In the 1960s, Marshall

McLuhan asserted that "environments are not passive wrappings but active processes"

(McLuhan, McLuhan, & Zingrone, 1995). Thus, an inspiring environment is something

that we should strive to create in any educational setting – public or private. As one of my

participants, Nick, maintains:

> I saw that book about the Facebook guy, what's his name? Zuckerberg. The
> workplace was…. You know, they had basketball hoops, they had people going
> through with roller-skates. The more liberating and more imaginative the
> workplace, the better off everybody is going to be. I think that the idea of sitting
> behind a desk, listening to somebody lecture, and taking notes is medieval. I just
> think that it's part of an educational system that's obsolete, frankly. More and
> more people are figuring that out.

APPENDIX A

INTRODUCTORY LETTER

Nina Kositsky
School of Education, University of Massachusetts Amherst
Email: XXXX@XXXX
Phone: XXX-XXX-XXXX

Dear Dr. Bradley:

My name is Nina Kositsky and I am a doctoral candidate at the University of Massachusetts

Amherst. I will greatly appreciate an opportunity to meet with you to discuss the possibility of

conducting educational research at Bolster Academy.

The research:

The research will address the following question: How to capitalize on the strengths of different

media (digital and print-based) to develop a secondary school English curriculum that effectively

prepares students for literacy demands of the 21st century? Specifically, the research will focus on

exploring challenges and possibilities of teaching reading, writing, and literature in the Digital

Age.

Why Bolster Academy:

I am familiar with numerous publications about the school's innovative practices in terms of

integrating new technologies into teaching and learning. Researching these practices is bound to

generate important insights for the larger educational community.

What Bolster Academy gains from participating in this research:

Findings will be shared with research participants (English teachers), as well as other interested parties at Bolster (e.g., administrators), which will add valuable information to their pool of theoretical and practical knowledge.

About myself:

I have B.A. in Linguistics and Teaching English to Speakers of Other Languages (TESOL) from Russia and M.Ed. from the University of Massachusetts Amherst. I have presented my research on literacy, reading, and technology at such conferences as Ethnographic and Qualitative Research in Education, Literacy Essentials, and New England Educational Research Organization (NEERO).

APPENDIX B

INFORMED CONSENT LETTER

Dear Participant:

This letter is to invite you to participate in a research study focused on exploring challenges and possibilities of teaching reading, writing, and literature in the Digital Age. Specifically, the research will address the following question: How to capitalize on the strengths of different media (digital and print-based) to develop the English curriculum that offers more authentic reading and writing experiences at school and effectively prepares students for literacy demands of the 21st century?

For the purpose of data collection, I will conduct a series of interviews centered on your experiences as an English teacher, both past and present. The interviews will be recorded for the purpose of preserving accuracy of their contents. I may also be taking notes during the interviews. In addition, I will observe your classroom to gain additional insights about your teaching context. We will jointly agree upon the time for the interviews and observations.

To protect your identity and to ensure privacy, your name will be changed in any oral or written reports. Any identifying information will be removed from the interview transcripts and field notes and will only be available to, handled by, and protected by the researcher, i.e., myself. Your signed Informed Consent Form will be kept separately from the recorded interviews, their transcripts, and observation notes. You have the right to review the material to be used in the study, and a final report on the findings will be made available at your request.

Participation in this research is voluntary and involves no unusual risks. You may rescind your permission at any time with no negative consequences.

The proposed research is expected to generate important insights about technology-mediated and traditional English teaching and learning. This will benefit you as an English teacher, your institution, as well as the larger academic community by adding new information to the existing pool of our theoretical and practical knowledge. There are no financial rewards associated with this study.

The findings of the study will be used in reports presented to a group of researchers at the School of Education at the University of Massachusetts Amherst, in presentations made at professional conferences, and in published articles.

Your signature below indicates that you willingly agree to participate in this study and that you give your permission to quote your exact words and ideas in academic reports

and presentations, as described above. We will both sign two copies of the Informed Consent Form, one for your and one for my records.

Thank you for considering this invitation.

Sincerely,

Nina Kositsky
Doctoral Candidate
School of Education, University of Massachusetts Amherst

_____

Name and Signature of the Participant   Date

_____

Name and Signature of the Researcher   Date

My contact information:
Email: XXXX@XXXX
Phone: XXX-XXX-XXXX

APPENDIX C

INTERVIEW QUESTIONS

The interview questions presented below are based on the issues and questions that emerged from my literature review. They represent a general framework, or a conceptual map, which I followed during each interview session. Since the in-depth phenomenological interviewing largely follows an open-ended, dialogical structure (see the methodology section in Chapter 3 for more details), I frequently diverged from the sequence of questions I initially designed (presented below) to ask numerous follow-up questions and to capitalize on the communicative opportunities that arose from my research participants' answers. As a result, each interview followed its own logical progression and explored the outlined topics through the lens of the participants' unique experiences and viewpoints.

The two interview excerpts below – with Jack and Nick – illustrate how different circumstances in my participants' family backgrounds affected the flow of each interview, as I was tailoring my follow-up questions to the participants' specific responses.

Excerpt I: Jack

Interviewer: Let's start with a particular turning point – the moment when you decided to major in English. What was most appealing to you about this path?

Jack: Well, I was brought up in a home with books, surrounded by books. And many of my…What do you want to say? … My ancestors, I guess, were writers and published many books. So, I had a kind of a family history of writers and teachers and professors and ministers in my family background. So, I guess, some of this was genetic. And then in high school, I just kind of gravitated toward reading, English, vocabulary. These subjects came easiest to me. Then when I went to college, I majored in English.

Interviewer: When you were in college, do you think it was the instructors, the readings, or the [teaching] approaches that sustained your interest in the subject of your choice? What made this experience interesting?

Jack: Probably just the level of the ideas. You know, there were many good instructors and many so-so instructors, like anybody. But basically it was just the ideas that were brought up in literature.

Interviewer: What ideas were you exploring in those years?

Jack: Well, just, you know, what it means to be a person. This was in the 60s. It was the time of personal exploration, I guess, you could say. We were exploring different things and different opportunities. A time of change, you know. Literature was reflective of that time of change. So, I guess, that was relevant, you might say, although I never really bought into that idea that it had to be relevant. But I just took many-many different classes in all different genres of literature, and different time periods, different authors. And they were all just…. What can you say? … Just very interesting for me.

Interviewer: How much of all this – the ideas, the spirit – do you integrate into your own teaching?[34]

Jack: Yes, right. I try to use literature as an avenue into self-exploration, or self-discovery for the students. Through the literature and engaging with the ideas in the literature, so that they [students] can become more reflective or understanding of themselves, of others, and of the world around them. I guess that is what we teachers are hoping to generate in them. So, I try to use the literature as…. What do you want to say? As a tool, as… I don't want to say… as a device…. But it is kind of a device to open up areas for exploration so that, hopefully, they can kind of connect to the ideas of today's world, for them.

Interviewer: Do you have the power to select readings that would make such explorations possible?

Jack: Yes, more or less. Not 100 percent.

Interviewer: What's the process? *[The next interview segment is a discussion of the process and rationale for selecting reading materials for Jack's classes].*

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[34] One of the courses Jack regularly teaches is *The Literature and Culture of the 1960s,* which illuminates how English teachers at Bolster Academy are able to integrate their own interests and passions into their teaching.

Excerpt II: Nick

Interviewer: Let's go back to the point in your life when you made a decision to major in English. What motivated you? What was the appeal? Who influenced your decision? Or *what* influenced your decision?

Nick: I think, like many of us, it was an English teacher I had in high school who got me excited and let me understand that I had some talent for it, and challenged me, and made me read books in addition to what was being read in class, and write, keep a journal. And he would respond to my journal entries. And he just… Essentially he took me under his wing. I loved reading always – since I began reading.

Interviewer: Did you grow up in a home surrounded by books?

Nick: No! My parents never even read to me. Not even children's stories. I am still feeling a little jealous of people who know these children's stories that I don't know. I wandered up into the attic of my home and found a dictionary of mythology when I was about seven or eight years old. And I read every page from beginning to end.

Interviewer: So, it was a serendipitous discovery.

Nick: It was just a serendipitous discovery. My parents actually were expecting me to take over their oil business and weren't thinking about college at all.

Interviewer: They had a small business.

Nick: Small business up in Maine. And I just was headed in another direction, and it was fairly obvious after a while to them.

Interviewer: Did your parents encourage this or were disappointed?

Nick: They never *dis*couraged me. They were surprised that I wanted to go to college. Neither of them had gone.

Interviewer: So, you were the first generation to go to college.

Nick: Yes, I was the first.

Interviewer: Do you have brothers or sisters?

Nick: I had a brother who took over the oil business. He is the rich one. So, I went off to school and then to graduate school. But essentially I just wanted to read and read and read. For me it was a way of…. It just immediately…. I became immersed in the world of a book. And it was better than traveling. It was better than just about anything. It enriched me, it taught me a lot.

Interviewer: How was it better than travelling?

Nick: Because it's so imaginative, and you create in your mind the environment and even the characters. You come up with images. It is a creative process, it's not just a passive process, I don't think. So, for me it was an escape and an adventure and all kinds of great things. It was just something I knew that I wanted to continue doing.

Interviewer: So, was it then an innate disposition for this kind of involvement – spiritual, emotional, intellectual?

Nick: I would say so, yes.

Interviewer: Is your brother a reader, by any chance?

Nick: My brother occasionally reads but not really, no. There are a few books in his house, but I think it's his wife who does the reading. He is more hands-on kind of guy. That's just the way he lives. He is very, very intelligent. He just doesn't express himself that way.

Interviewer: Is he a younger or older brother?

Nick: He is seven years older than I am. He is retired now.

Interviewer: I see. So, where did you get books to read? There were no books in the house.

Nick: Comic books were huge.

Interviewer: Did you buy them?

Nick: My mother allowed me to buy them, yes. So, there were lots of comic books. And there was the library. And I spent a fair amount of time at the library as well.

Interviewer: Was it a town library?

Nick: Town library. Small library – just one librarian. You know, I discovered the *Hardy Boys*. Those kinds of things.

Interviewer: And what about the school library?

Nick: It was a parochial school – they didn't have one. It was not until I went to middle school, which was ninth grade, no – seventh grade, when I actually saw a [school] library. And to be honest, I really didn't go there that much, I still preferred going to the town library after school.

Interviewer: And why wasn't the school library appealing to you?

Nick: School I associated with unpleasantness, and the town library I associated… It was a refuge. It was a place away from, you know, the chaos of middle school. I like some place quiet, and it was just the way it was.

Interviewer: So, when did you know that you want to be *professionally* involved in the world of books? *[The next interview segment is a discussion of many formative experiences that Nick had when he was first an undergraduate, then Master's, and then Ph.D. student at different universities.]*

Thus, each interview was a road of forking paths. However, the different paths I took at each fork eventually converged into a single path – my participnts' teaching English at Bolster Academy in the Digital Age. These detailed explorations of the participants' lived experiences revealed an intricate interplay among various social and deeply subjective factors that provided me with numerous insights about the phenomena central to my research.

Interview Questions

Part I: Participant Background/Profile

1. Can you please tell me a few words about your current position and your work responsibilities.

2. For how long have you been teaching at Bolster Academy?

3. Did you teach anywhere else prior to Bolster?

4. Please tell me a few words about your educational background.

5. Let's go back to the point when you made a decision to major in English. When did you know that you would like to major in English? What was the major attraction for you? What did you find appealing about this path?

6. Did your parents influence your choice of major in any way? How would you describe the home where you were brought up? Would you describe yourself as a reader as you were growing up? What about your siblings? Your close friends?

7. When in college, what readings/authors did you find most appealing? What was the attraction? What aspects of your English studies did you find most rewarding? Least rewarding?

8. In your view, was it the instructors/teachers, the readings, or the teaching approaches that defined your experiences as an English major in college?

9. What do you mostly read now? In what format? (print? electronic? what reading platform?) Does a reading format matter? Are your preferences part of what and how you teach?

Part II: English Curriculum

10. English has been "a lightning rod of a subject," and there are many divergent opinions about what it should be about. The lens through which English is viewed has a shaping effect on how it is taught. In your view, what is English essentially about? How do you integrate this understanding into your teaching?

11. How would you articulate the ultimate goal(s) of the English curriculum at Bolster Academy?

12. How is content selected for classes at Bolster Academy? What is the rationale behind the selection?

13. Are there any regular "digressions" in the English curriculum linked to student interests?

14. Do you ever assign books that students might never pick up on their own? What are your approaches to teaching them?

15. What are must-reads for adolescents, in your opinion? Do you include any of them in your teaching?

16. Did your book selection practices change in any way due to the resources made available by digital technologies?

17. In your view, what is reading essentially about? What is it that reading does for you?

18. According to the school's website, Bolster Academy "considers reading to be an essential 21st century skill." How is "reading" defined within the school context? How is this understanding reflected in the English curriculum? In your teaching?

19. What is read, how it is read, and how it is discussed all influence students' experience with literature. Have there been any shifts in regards to what is read and how it is read and discussed in the English classroom due to the recent campus-wide technological and conceptual (21st century curriculum) transformations?

Part III: Digital Technologies, Teaching and Reading Practices

20. There are different ways to articulate a *rationale* for integrating technology into the English classroom. Some of them are: 1) Digital technologies are integrated in all spheres of life, and educational system should incorporate them in order to adequately prepare students for today and tomorrow; 2) adolescents' online literacies should have relevance for classroom practice. How else would you

support the argument in favor of integrating digital technologies into the English classroom? In other words, is there an advantage to using technology when it comes to English education? What does it make possible in the secondary English classroom that would not be possible otherwise?

21. In what ways (if any) did the English curriculum at Bolster Academy change as a result of the integration of digital technologies into the school's educational process: 1) transformation of a traditional school library into a digital one and the availability of Kindles and Sony-readers; 2) personal digital technologies that students carry with them?

22. Bolster Academy is a laptop school. In addition, Kindles and Sony-readers are available to students through the library. What are your students' reading preferences in terms of the format? Do they use paper-based books, or do they prefer the Kindle or other electronic platforms? Does it differ from person to person? Or does it differ from genre to genre? Or does it depend on the purpose for reading (e.g. recreational vs. for academic purposes)? Do you notice any patterns?

23. Are there any patterns in terms of what kinds of students prefer what kinds of reading platforms?

24. What about the efficacy across a range of readers: what kinds of students benefit the most from new technologies?

25. Reading a digital text is a *scaffolded* experience (e.g., in-built dictionaries; the text-to-speech feature). These features, some researchers suggest, might encourage and enable readers to tackle more challenging texts. Does the

availability of multimodal scaffolding affect your choice of the texts you assign for your classes? Do you ever see your students taking advantage of these features to make sense of the assigned readings?

26. Do you observe whether merging the reading of *literary* text with the use of electronic devices (smart phones, Kindles) increases the time students devote to *literary* reading? To other types of reading?

27. How do digital technologies (e.g., access to the Internet through various devices) fit with your teaching routines? Do they make your teaching more or less satisfying or efficient?

28. One obvious gain associated with the Internet is that it offers a virtuously unlimited access to a variety of resources and, therefore, to multiple interpretations, competing perspectives, and conflicting facts. Do your students engage in activities/projects that allow them to benefit from this abundance? Does technology make exploration of ideas richer? More dynamic? Or does it distract?

29. The predominant form of text on the Internet is *expository/informational.* Do you observe that this increased exposure to informational texts has had any effect on the development of students' expository writing skills?

30. Are there any *new challenges* that digital technologies bring to your classroom?

31. In print culture, all discussions happened in real world/real time (e.g., in the classroom). The online participatory structure seems to provide more options for expression/discussion/engagement. Do your students engage in any kinds of online interactive activities to extend their reading/writing experiences? Do your

students use the online environment as a venue for academic (e.g., related to assigned readings) discussions and for sharing their ideas/thoughts/ arguments?

32. As a result of new literacy practices, do students learn how to use language in new ways? What ways? Why is it important?

33. Are your students expected to stick to traditional writing conventions (grammar, punctuation, etc.) in their online discourse? Or are there different expectations for their online writing compered to paper-based written assignments?

34. Did your assessment practices change as a result of new literacy practices your students engage in?

35. Reading is traditionally perceived as a solitary activity. However, it appears to become exceedingly social due to online communal reading opportunities. Is there a shift in the students' voluntary/recreational reading practices that reflect this trend?

36. For adolescents, the online environment is often a space in which they interact with an *authentic* and often *appreciative* audience. Has your teaching been influenced by this in any way?

37. Do you observe any shifts in the traditional roles of teachers and students (e.g., students find knowledge independently of the teacher's expertise; students select readings, etc.)? How do you see your role as an English teacher?

Part IV: Concluding Questions

38. *Lasting effect:* What do you want your students to remember when they leave your classroom? When they leave the school?

39. What is your ideal reading experience?

40. Provided you have all the resources and all the powers of decision-making, how would you organize your students' reading experiences so that they could get the utmost out of it?

41. What are the three readings that you would do over and over again? Why these books (authors, genres)?

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