From Connected Learning to Connected Reading

Understanding *What*, *Where*, and *How* Teens Read

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Abstract: In a digital age texts are available in multiple formats and across various technologies. Readers must make choices about *what*, *where*, and *how* to read. Teens, in particular, have embraced digital tools, yet we do not know much about their reading practices. This study explored the reading lives of adolescents through a survey of 804 students and 23 in-depth interviews. Results indicated that teens are connected readers—using the practices of encountering, engaging, and evaluating the texts they read—yet they varied in their application of critical-reading strategies. This study presents a theory of connected reading that draws upon connected learning principles to understand the practices of adolescent readers.

Framing the Problem

A recent Pew Internet and American Life Project (Pew Research Center, 2017) study suggested that "Americans today are increasingly connected to the world of digital information while 'on the go' via smartphones and other mobile devices" (para 1). The majority of adults access the Internet through smartphones (77%), computers (80%), tablets (50%), and e-readers (20%). Technology has changed the landscape of reading, and reader habits are mediated by the technologies they use. This context creates challenges for teachers of literacy, who must navigate the demands of both print and digital literacy in the classroom.

Though the field in print literacy is rich in its understanding of the development of critical readers, research in digital literacy is in its infancy. Studies to date in the fields of literacy education and psychology have documented numerous challenges associated with reading on the Internet:

- Verifying website credibility and usefulness through critical searching (Coiro, 2005);

- Managing distractions (Bauerlein, 2008); and

- Overcoming shallow practices and engaging deeply with texts (Carr, 2010; Thompson, 2013).

These kinds of studies have been devoted to the ways in which digital reading affects the comprehension of the reader, yet in most of the work to date, the agency is given to the technology, not the reader. As Rosenblatt (1978/1994) asserted, "The individual reader has seldom been acknowledged as carrying on his [or her] own special and peculiar activities" (p. 4). The present study refocused attention on readers who are able to control both their consumption and their contributions of information within a network of other readers.

The social aspect of reading, while not entirely new, is at least decidedly *different* in an era when opportunities to share and discuss reading have become more widely available with mobile technologies. As readers engage with texts on a daily basis, they are connecting with each other. The connected

learning principles proposed by Ito et al. (2013) helped to frame in this study the production and distribution of knowledge and ideas, especially those related to what we (and our students) read.

Rooted in a theory of connected learning, this research presents a framework for how readers engage in the practices of reading as mediated by the technologies to which they have access. Just as Ito et al. (2013) argued for the positive applications of digital media and communications, this research contends that such media can contribute to rich, multifaceted reading lives. Connected reading takes into account that "engaging formats" and "social supports" (Ito et al., 2013) are key elements for digital readers.

Methodology

This study explored the question "What, where, and how do teens read digitally?" Though not conceptualized as a grounded-theory study, the analysis used tools of grounded theory, which ultimately led to the articulation of the theory of connected reading.

Participants

Adolescents (ages 13–18) in Grades 7–12 from 12 classrooms in California, Michigan, New Jersey, and New York participated in the study. All students in the classes responded to a survey ($N = 804$), and 23 of these respondents were selected purposefully to participate in interviews. This interview pool included a variety of readers, including males and females, honor and struggling students, and those who preferred digital reading and those who did not.

Data Collection and Analysis

In order to explore the digital reading practices of adolescents, the research team collected several types of data and triangulated analysis across these data sources.

First, the team adapted Pew's "Teen Parent Survey on Writing" (Lenhart, Arafeh, Smith, & Macgill, 2008) to create a "Digital Reading Survey," which participants completed during their English Language Arts class. The 804 responses to the survey helped to inform the nature of teens' digital reading, their attitudes toward digital reading, and their access to technology. Data were disaggregated by gender, geography, and grade range (middle and high school), but there were no significant differences among those categories.

Second, a sample of the survey respondents participated in interviews. The interview protocol was inspired by Smith and Wilhelm's (2002) work and included five fictional profiles of readers to spark conversation about participants' reading habits and preferences. The profiles were read aloud to participants, who were asked to consider the following questions: (a) What, if anything, do you admire about the character in the profile? (b) What, if anything, do you not admire about the character in the profile? and (c) Where do you see yourself in the characters? Interviews were transcribed for analysis.

Analysis began with coding of the open-ended survey responses and interviews. Though the team intended to apply Smith and Wilhelm's coding scheme (2002, 2006) from their work on adolescent boys' out-of-school literacies, additional themes emerged from the data that prompted the development of codes specific to digital-reading practices. Using a grounded-theory approach (Charmaz, 2011), the researchers followed an iterative process of passing through the data multiple times to develop and refine

codes and categories. This process was aided by reflective journaling: Members of the research team documented their own reading practices in order to think more deeply about those practices that the teens shared in their interviews. After analyzing the survey and interview data, the team used the findings, as well as the current literature on digital reading and reading comprehension, to develop the connected reading model.

Findings

The research began by asking *what, where,* and *how* adolescents read. The survey of 804 teens provided quantifiable answers to the first two questions.

The results of the survey analysis revealed that teenagers read a variety of texts using a variety of devices. From the sample, 84% said that they read content from the Internet, such as news stories and blogs, 50% read digital books or magazines, and 82% said that they had at least one social network account where they read status updates and followed interesting links. These teens read short-, mid-, and long-form (Thompson, 2009) digital texts. In fact, 45% of the survey respondents said that they like to read "a great deal," and another 32% liked it "some." Finally, 49% of the sample said they read for themselves (mostly outside of school) every day. They read these texts on a variety of devices (see Table 1).

Device Owned	% of sample
Mobile phone	84
Laptop or Desktop at Home	77
Smartphone	71
Internet Enabled Handheld Device (e.g., iPod touch)	71
Ereader	21 (dedicated eReader) 45 (Internet enabled)

Table 1. Device ownership.

This snapshot into the teens' reading lives helped elucidate the variety of texts and devices with which they engaged. However, it was the process of reading that formed the basis for the model of connected reading.

A Model of Connected Reading

To understand *how* teens engaged with texts on their various devices, researchers looked carefully at

the interviews of the focal participants. These data revealed several practices in which the adolescents engaged. Through self-study and a process of peer feedback, researchers were able to hone the practices into a model of reading in a digital age. Given the theoretical frame for this study that relied heavily on principles of connected learning, the model of connected reading presented here (see Figure 1) speaks to the variety of texts types, both print and digital, that the teens in the study read.
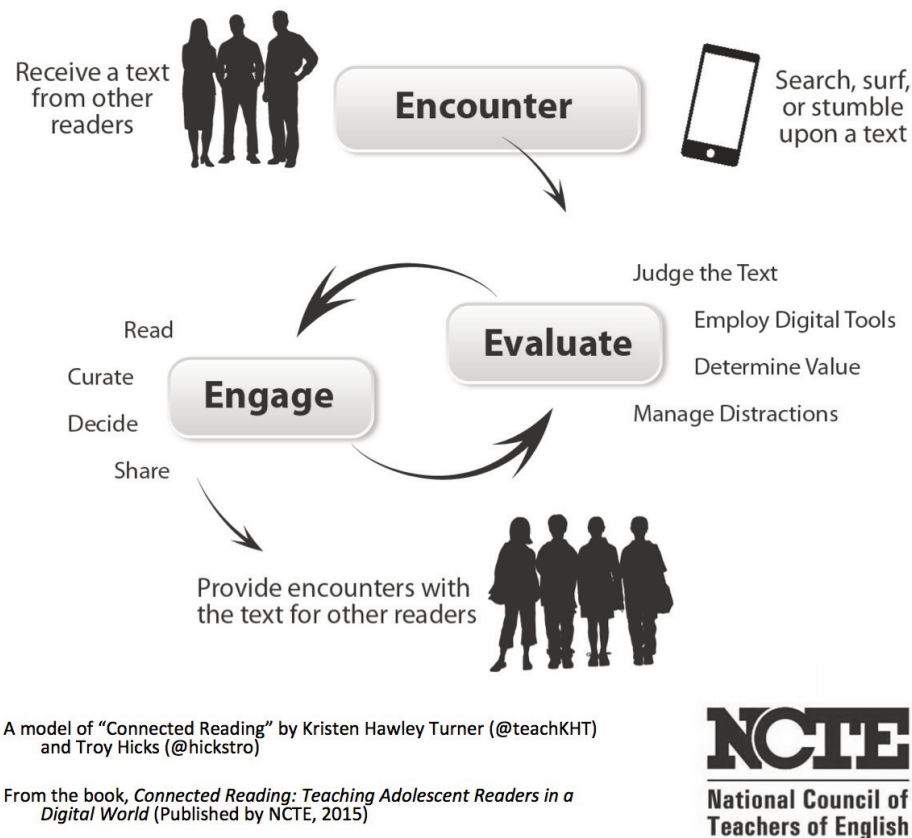

Figure 1. Model of connected reading (Turner & Hicks, 2015).

There are several key features to this model.

Recursiveness. This model is not linear. Instead, it suggests that readers engage in ongoing evaluation and engagement practices.

Social connection. Readers in this model exist within a network of other readers, highlighting the social nature of reading in a digital world.

Digital and print. Connected reading involves both print and digital texts. However, particular practices rely on digital tools; these tools and practices mediate the reading experience.

Within this frame, the research team identified key practices described by the participants in the study, each contributing to three main processes: encountering, engaging, and evaluating.

Practices of Connected Reading

The data revealed three primary processes in connected reading:

- Encountering—the manner in which a reader first makes contact with a text;
- Engaging—the activities that happen before, during, and after reading a text;
- Evaluating—the act of finding value in a text.

Each of the three process of connected reading can be broken into several subcategories, presented in Table 2.

Encountering a Text	
Surfing	Moving from text to text with little intent, most often for a purpose of leisure, amusement, distraction, or "killing time"
Receiving	Coming across a digital text passively, by means of seeing it upon opening a website, via a link from a friend or colleague, or via a preset RSS feed
Stumbling	Following a connected path (both in terms of algorithmic, networked connections provided by websites as well as through cognitive, schematic connections in the reader's mind) of related information from embedded hyperlinks
Searching	Actively seeking additional information to confirm (or disconfirm) an existing understanding about a topic, usually with the intent of learning something new
Engaging with a Text	
Deciding	Filtering texts to be read or discarded; deciding when and how to read
Curating	Organizing texts for reading and archiving; establishing additional feeds based on current feeds
Reading	Skimming, scanning, digging in; using multimedia; annotating; responding; interacting; monitoring; reading beyond a given text
Sharing	Offering public response to a text; posting or sending it to others
Evaluating a Text	
Determining value	Considering interest, overarching intentions, and immediate purpose to identify how useful the text might be in the moment and in the future; situating the text in a broader, on-going conversation
Judging	Critiquing the quality of a text (both content and form) as it compares to other similar texts (asking, "is it a good or bad example of [this particular genre]?")
Employing digital tools	Identifying and utilizing the most appropriate tools to read, annotate, respond to, and share a digital text
Managing distraction	Self-regulating one's attention related to the specific reading task and digital tool in use

Table 2. Practices of connected readers (first published in Turner & Hicks, 2015).

The connected reading model suggests that after encountering a text, a reader enters a recursive cycle of engagement and evaluation. Though the data revealed distinct practices within these categories, the

teens in the study demonstrated the complicated process of reading, which blurs the lines among these practices.

<div align="center">Connected Reading as Connected Learning</div>

The connected learning framework suggests that adolescents explore topics of interest in a network of peers and mentors and connect those topics to their personal goals. Not all of the teens in the study demonstrated full facility with the practices of connected reading. Those who did seemed to better achieve connected learning. Two cases, Andrew and Alan, best show the overlap between connected reading and connected learning. Both of these young men were seniors but their reading practices were distinct.

Andrew preferred reading print books at the time of his interview, but he recognized an "innate problem" with his reading life. Despite the fact he would rather read in print, he acknowledged that he searched online almost exclusively for information when he was interested in a topic.

One such topic was art, and Andrew participated in an online community where he could share his artwork, compose journals about it, and give and receive feedback to others. Andrew voraciously read journals of other artists, skimming and scanning until he found something interesting. Then, as he said, "I'll read the whole thing. If it's not [interesting], I'll just kind of like get the gist of it. If it's a little bit boring in some sections, I'll move on." He had honed his reading practices in this digital space, using traditional reading strategies (skimming, scanning, constructing the gist).

However, Andrew also described his use of the technological tools:

> You have the main page and there's a little thumbnail of every picture that's been recently posted. There's like 60 on a page. And you skim through and you're like, "Hey, I like this picture. I want to see it." You don't want to click on the picture, be redirected, look at the picture, like it or don't like it, then go back to the previous page. Hold down control, click on all the icons you like, and then go through all the pages that you have open. Like this, like this, like this, don't like this.

His use of scrolling, keyboard functions, and reading laterally helped him to navigate the text—and also to better connect with the other artists in the community. In fact, Andrew ended his interview by stating that "reading is supposed to be … connective." He had developed his reading practices in order to connect with others as he developed his artistic skills. In this community of artists, he was both a connected reader and a connected learner.

In contrast to Andrew, Alan loved reading digitally. Through his social networks, he felt connected:

> It's like I'm pretty much connected with everybody. I'm keeping in touch with people, I'm finding out what's going on. If we need help on a project or help with homework, I'll just shoot somebody a text or a message on Facebook like, "Yeah I need help with this math homework, this trigonometry. Can you help me out?" And I find that very innovative and very helpful.

In addition to the social connection, he described his practices of searching for information about environmental issues that impacted his neighborhood, reading his schoolbooks on his phone, and searching for articles on popular news sites. In short, he read a lot on his devices for a variety of purposes, and it was clear he had developed some critical searching practices:

If there's one thing I need to find, I type in that and I go through everything that's on the result list, and I analyze every one. Not click on every one and just go through the story. I like look at the title, look at the source, and if it's good enough to me, then I can use it.

Alan's savvy with digital texts demonstrated several practices of encountering, engaging, and evaluating. However, Alan had not learned how to connect his interests to his reading online. Like Andrew, Alan loved to draw, and in fact, he was interested in becoming an architect. Though he often drew in response to what he read in digital spaces, he did not indicate that he had found a community or that he curated digital texts that could help him achieve his career goals. Though he was a connected reader, he had not developed practices of curating, strategic use of tools, and sharing that could help him to realize the affordances of connected learning, especially as they related to his interest in art and a career in architecture.

The teens in this study demonstrated variable facility with the practices of connected reading. In particular, few of the participants actively curated and shared in a defined network of other readers who shared their interests. Students like Andrew, who had developed these practices, were much more likely to engage as connected learners.

Implications

Schools and districts are rolling out 1:1 device programs in large numbers. Additionally, an increasing number of students have access to their own smartphones and tablets through personal means. Therefore, the approach of literacy educators to reading instruction must expand to acknowledge the effects of these tools. The results of the present study demonstrated that students developed strategic approaches to reading digital texts, yet those approaches are uneven across students. It is imperative that literacy researchers and teacher educators consider new theoretical models, such as connected reading, to consider the types of literacy instruction offered to preservice and in-service teachers, and subsequently, the kinds of instruction offered to teens. Linking connected reading practices to connected learning may cultivate more critical readers who are college and career ready.

Connected reading, as a theoretical model for understanding who readers are and what they do in an era in which texts are both print and digital, provides researchers with new opportunities to frame both how to define reading as well as how to study reading practices. This study acknowledges and appreciates the work that has been started in digital reading (e.g., Coiro, 2005), yet looking at reading through a purely print/digital dichotomy fails to serve the field well. By simply studying reading practices as if they move from printed text to screen, researchers are not recognizing the complexity of social spaces in which readers participate, nor are they acknowledging the affordances and constraints that digital devices offer. On the flip side, if research simply studies digital texts and how readers move through hypertext, multimedia, and (almost incidentally) words, sentences, and paragraphs, then it will not recognize the actions that lead from decoding to comprehension.

How the field talks about reading in this increasingly hybridized world of print and media, then, matters a great deal. We must consider what readers do, how we study what readers do, and what we teach readers to do. The connected learning framework helps the field of literacy education to think more broadly about a long-standing question: "What do readers do?" By giving agency to the learner, rather than technology, in a connected world, connected learning influenced the interpretation of data in this study. As theory-building research, this work has started us on a path to investigating more fully the

processes of readers in a digital age—and ultimately, of creating critical readers who are also connected learners.

References

Bauerlein, M. (2008). *The dumbest generation: How the digital age stupefies young Americans and jeopardizes our future*. New York, NY: Tarcher/Penguin.

Carr, N. (2010). *The shallows: What the Internet is doing to our brains*. New York, NY: Norton.

Charmaz, K. (2011). *Constructing grounded theory: A practical guide through qualitative analysis*. London, England: Sage.

Coiro, J. (2005). Reading comprehension: Making sense of online text. *Educational Leadership, 63*(2), 30–35.

Ito, M., Gutierrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., … Watkins, S. (2013). *Connected learning: An agenda for research and design*. Irvine, CA: Digital Media and Learning Research Hub. Retrieved from http://dmlhub.net/publications/connected-learning-agenda-for-research-and-design

Lenhart, A., Arafeh, S., Smith, A., & Macgill, A. R. (2008). *Writing, technology and teens*. Washington, DC: Pew Internet and American Life Project/The College Board National Commission on Writing. Retrieved from http://www.pewinternet.org/2008/04/24/writing-technology-and-teens/

Pew Research Center. (2017, 17 January). *Mobile fact sheet.* Washington, DC: Pew Research Center. Retrieved from http://www.pewinternet.org/fact-sheet/mobile/

Rosenblatt, L. (1978/1994). *The reader, the text, the poem: The transactional theory of the literary work*. Carbondale: Southern Illinois University Press.

Smith, M. W., & Wilhelm, J. D. (2002). *Reading don't fix no Chevys: Literacy in the lives of young men*. Portsmouth, NH: Heinemann.

Smith, M., & Wilhelm, J. D. (2006). *Going with the flow: How to engage boys (and girls) in their literacy learning*. Portsmouth, NH: Heinemann.

Thompson, C. (2009, 22 May). *The future of reading in a digital world. WIRED*. Retrieved from http://www.wired.com/techbiz/people/magazine/17-06/st_thompson

Thompson, C. (2013). *Smarter than you think: How technology is changing our minds for the better*. New York, NY: Penguin Random House.

Turner, K. H., & Hicks, T. (2015). *Connected reading: Teaching adolescent readers in a digital age*. Urbana, IL: NCTE.

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