Looking Beyond the Screen: A Framework for Re-Thinking Literacy in a Digital Age
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This paper presents an interdisciplinary and multidimensional framework for re-thinking literacy in a digital age. The goal of this work is to offer new ideas about how we can support the literacy development of young people growing up in an age when visual, digital and social media are taking up more of our everyday lives than ever before (Perrin & Duggan, 2015; Lenhart 2016). I will first outline some of the perspectives on learning, literacies, and technologies that inform this framework. I will then illustrate the three key dimensions of the framework drawing on what Gee (2009) has called “worked examples” from my own research. I will then suggest a few implications of the framework for literacy researchers and educators today.

This project is grounded in a perspective of literacy as a situated, sociocultural, and multimodal phenomenon (Gee, 2010; Gee & Hayes, 2011; Rowsell, Kress, Pahl, & Street, 2013; Serafini, 2013). Literacy is situated in that it involves cognitive capacities (e.g. decoding and processing written letters), social practices (e.g. reading a bedtime story), and material technologies (e.g. reading a physical or electronic book), but always within a specific context or situation; what counts as “being literate” has been demonstrated to vary across contexts, communities, and institutions (Gee, 2010; Gee & Hayes, 2011; Mahiri, 2004). Literacy is sociocultural in that beyond the immediate situation (e.g. a child reading a book in a third-grade classroom), it is shaped by broader social, historical, cultural, economic, and ideological contexts (Street, 2006; Warschauer, 1997). Finally, literacy is multimodal in that beyond its linguistic dimension, it involves artifacts that use a variety of modes of communication - image, sound, gesture and more - to represent and exchange social meanings (Serafini, 2012b). This view of literacy allows us to expand the idea of “texts” as encompassing more than just words written on a page, to more closely approximate a social-semiotic definition of a text as a material instantiation of these social exchanges of meaning (Zimmerman & Salen, 2003).

As studies in literacy education have moved through social, cultural, multimodal, and digital turns, a growing body of scholarship has begun to place an emphasis on developing more responsive ways to support literacy experiences in the contexts of students’ everyday lives (Gee 2004; Lankshear & Knobel, 2011; National Writing Project et al. 2010; Moje, 2002; Serafini & Gee, 2017). These everyday literacy experiences often involve multiple “modes” of exchanging meaning - visual, aural, gestural, etc. - across a variety of media (Lankshear & Knobel, 2011). This is perhaps more true now than ever, in an age when digital media and networked technologies like video games, mobile device applications, and internet websites are taking up a larger share of people’s everyday literacy experiences than ever before (Perrin and Duggan 2015; Lenhart 2016).

To support these efforts, I present a framework for re-thinking literacy practices as they are enacted across the virtual and face-to-face experiences of literacy learners in a digital age (Aguilera, 2017). The first dimension of this framework, drawing from research in literacy education, multimodality, and social semiotics, focuses on the content displayed on the screens through which we access much of our digital content today. This lens emphasizes the elements that we notice through perception (visual, aural, and otherwise multimodal), the ways these elements combine to create meaning through representation, and finally, the designs that inform our orientation to these processes of meaning-making (Serafini 2012; Kress & Van Leeuven, 1996; Holmes, 2013). To put these ideas to work in my own research, I developed a toolkit of questions around these three areas and applied them to studying the designed interfaces of
several interactive, multimedia websites designed to teach computer programming to novice students. What I realized through this work was that although many of these online platforms are advertised as informal, easy-to-use, student-directed experiences, some of the literacy demands they place on users can be considerably complex, and different students may need different kinds of support, rather than a one-size fits all approach, to make the most of them.

The second lens I propose for understanding digital-age literacies, drawing from work in games studies, computer science, and the digital humanities, places an emphasis on the technologies behind the screen that give rise to the content we experience. Using a behind-the-screen lens, we can shift our focus toward the interactive potentials designed into digital texts, the rules and limitations that guide or constrain what we can actually do with digital media, and the effective abilities or affordances, that these technologies extend to us as users that allow us to do more than we could on our own (Adami, 2015; Zimmerman & Salen, 2003; Gee, 2015). In my work with students learning computer programming in the library, what I found was that these behind-the-screen literacies, such as understanding or manipulating video game mechanics, are often caught up in both new media and “traditional” literacies, such as making reading instructions or writing a public review. If we focus exclusively on what is on the screen, we can miss out on opportunities to support students’ understandings across other areas. On the other hand, I found that students that struggled in one area, say, reading and applying instructions on a webpage, often got around it by experimenting with, and sometimes exploiting different features of designed tutorial. Given this tendency, we may need to rethink the ways we design lessons and tools meant to teach people - to avoid “gaming” the system, so to speak.

Finally, work in critical pedagogies, the New Literacy Studies, and media education underscores the importance of a third lens for understanding literacy practices in a digital age, one which I refer to as beyond-the-screen. This third lens rounds out the framework by shifting our focus onto the broader social contexts of the digital media we experience, the worldviews, or ideologies, that are embedded and promoted through this media, and finally the relationships of power that impact our experiences beyond the screen (Luke, 2012; Avila et al., 2013; Belshaw, 2014). The big idea here is not a new one in literacy and reading education - that broader social contexts can shape the ways we make meaning with texts (Heath 1983). What this perspective reminds us of, however, is that as technology becomes more and more an “invisible” part of our daily lives, “the way that things are” are not necessarily the ways that things could, or even should be, especially for people whose voices are often left of out of the conversation.

With regard to implications for literacy educators and researchers, the purpose of this framework is to expand our understanding of what “counts” as literacy in a digital age by examining contemporary literacy practices as they are enacted on, behind, and beyond the screen. What I believe this work helps to affirm is that people’s interactions with and around technology can be quite complex, and there is much more to be learned - not just about what approaches to technology use are “effective,” but also “for whom?” “in what contexts?” and “toward what ends?” Finally, it is my hope that this work reminds us, as Kranzberg stated, that “technology is neither good, nor bad, nor is it neutral” (1986). In a similar vein, Avila and Pandya (2013) have cautioned us against assuming digital technologies are always “naturally” empowering for users. However, the more we understand how these technologies and media work, and the ways that people use them, the more we can develop literacy research, theory, methods, and practices that can serve our students, and shape our society, for the better.

References available: http://bit.ly/CSUFvisit