

# DIGITAL LITERACIES



**Concepts, Policies and Practices**

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# **Introduction**

## **Digital Literacies—Concepts, Policies and Practices**

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This book supports an emerging trend toward emphasizing the plurality of digital literacy; recognizing the advantages of understanding digital literacy as digital *literacies*. In the book world this trend is still marginal. In December 2007, Allan Martin and Dan Madigan's collection *Digital Literacies for Learning* (2006) was the only English-language book with "digital literacies" in the title to show up in a search on Amazon.com.

The plural form fares better among English-language journal articles (e.g., Anderson & Henderson, 2004; Ba, Tally, & Tsikalas, 2002; Bawden, 2001; Doering et al., 2007; Myers, 2006; Snyder, 1999; Thomas, 2004) and conference presentations (e.g., Erstad, 2007; Lin & Lo, 2004; Steinkeuhler, 2005), however, and is now reasonably common in talk on blogs and wikis (e.g., Couros, 2007; Davies, 2007). Nonetheless, talk of digital literacy, in the singular, remains the default mode.

The authors invited to contribute to this book were chosen in light of three reasons we (the editors) identify as important grounds for promoting the idea of digital literacies in the plural. This, of course, does not mean the contributing authors would necessarily subscribe to some or all of these reasons. That was

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not a criterion for participating. At the same time, the positions argued by each of the contributing authors in this volume seem to us to support the case for taking the idea of digital literacies very seriously.

We believe it is important to emphasize the plurality of digital literacies because of:

- the sheer diversity of specific accounts of “digital literacy” that exist, and consequent implications of that for digital literacy policies;
- the strength and usefulness of a sociocultural perspective on literacy as practice, according to which literacy is best understood as literacies (Street, 1984; Lankshear, 1987; Gee, 1996). By extension, then, digital literacy can usefully be understood as digital *literacies*—in the plural;
- the benefits that may accrue from adopting an expansive view of digital literacies and their significance for educational learning.

### **A Plethora of Conceptions of Digital Literacy**

As the chapters that follow attest, the most immediately obvious facts about accounts of digital literacy are that there are many of them and that there are significantly different *kinds* of concepts on offer.

David Bawden (Chapter 1) refers to Paul Gilster’s (1997; Pool, 1997) claim that digital literacy involves “mastering ideas, not keystrokes.” One way of distinguishing the burgeoning array of concepts of digital literacy is, indeed, to delineate those that emphasize mastery of ideas and insist on careful evaluation of information and intelligent analysis and synthesis, from those that provide lists of specific skills and techniques that are seen as necessary for qualifying as digitally literate. A second broad line of demarcation indicated by Bawden (pp. 17–32 here) involves Eshet-Alkalai’s (2004) caution concerning the inconsistency between those who conceive digital literacy as “primarily concerned with technical skills, and those who see it as focused on cognitive and socio-emotional aspects of working in a digital environment.”

Similarly, we might distinguish *conceptual* definitions of “digital literacy” from “*standardized operational*” definitions (Lankshear & Knobel, 2006). Conceptual definitions present views of digital literacy couched as a general idea or ideal. In one of the earliest examples of a conceptual definition Richard Lanham (1995, p. 198) claims that “literacy” has extended its semantic reach from meaning “the ability to read and write” to now meaning “the ability to

understand information however presented.” He emphasizes the multimediatic nature of digital information and argues that to be digitally literate involves “being skilled at deciphering complex images and sounds as well as the syntactical subtleties of words.” (Lanham, 1995, p. 200) Digitally literate people are “quick on [their] feet in moving from one kind of medium to another . . . know what kinds of expression fit what kinds of knowledge and become skilled at presenting [their] information in the medium that [their] audience will find easiest to understand.” (ibid.) According to this ideal, digital literacy enables us to match the medium we use to the kind of information we are presenting and to the audience we are presenting it to.

Standardized operational definitions, by contrast, “operationalize” what is involved in being digitally literate in terms of certain tasks, performances, demonstrations of skills, etc., and advance these as a *standard* for general adoption. A well-known commercial variant is Certiport’s Internet and Computing Core Certification (IC<sup>3</sup>) ([www.certiport.com](http://www.certiport.com)). The website claims that “IC<sup>3</sup> certification helps you learn and demonstrate Internet and digital literacy through a worldwide industry standard,” through training and exam certification covering Computing Fundamentals, Key Applications, and Living Online. Computing Fundamentals test items involve tasks like asking learners to click on all the “output devices” from a list containing items like joystick, monitor, speakers, keyboard, etc.; to choose among four items (one thousand, one million, one billion, one trillion) for the number of bytes in a megabyte; to create a new folder on the C drive within a simulated file manager; and to match “operating system,” “application” and “utility program” to three provided definitions. The items testing Key Applications use a range of simulations and ask learners to insert content from the clipboard at the designated insertion point and exit Word without using the close box. Items assessing knowledge and skills related to Living Online use simulations to have respondents enter a subject in an email message and send the message, go to a specified address on a web page, and locate the history of sites visited in a web browser. Certiport asserts that IC<sup>3</sup> certification meets the technology requirements of “No Child Left Behind” legislation, with respect to ensuring that every student “regardless of . . . race, ethnicity, gender, family income, geographic location, or disability” is digitally literate by the time they finish 8<sup>th</sup> grade, and by providing “the professional development ‘through electronic means’ for teachers, administrators, and staff called for in No Child Left Behind’s “Enhancing Education Through Technology Act.”

Among the chapters that follow, those by David Bawden on origins and

concepts of digital literacy (Chapter 1), Leena Rantala and Juha Suoranta on digital literacy policies in the European Union (Chapter 5), Morten Sjøby on digital competence with particular reference to the Norwegian context (Chapter 6), and Allan Martin on digital literacy and the digital society (Chapter 7) especially foreground the sheer diversity and complexity of conceptions of digital literacy. They situate digital literacy in relation to a web of “literacies of the digital” (Martin, Chapter 7) including ICT/computer literacy, information literacy, technological literacy, media literacy, communication literacy, visual literacy, network literacy, e-literacy, digital competence, digital Bildung, and the like. David Buckingham (Chapter 4) addresses “web literacy,” “game literacy” and “writing digital media” in the context of developing an ideal of digital literacy in terms of what young people need to know about digital media. Such a larger map of concepts of digital literacy provides a lens for locating the kinds of focus represented in Genevieve Johnson’s chapter on “functional internet literacy” (Chapter 2), and the chapter on “digital literacy as information savvy” by Maggie Fieldhouse and David Nicholas (Chapter 3) as contributions to developing a robust discourse of digital literacy.

This sheer variety means that digital literacy can be seen as “a framework for integrating various other literacies and skill-sets” without “the need to encompass them all” or to serve as “one literacy to rule them all” (Martin cited in Bawden, Chapter 1 here; Martin, 2006). Equally, however, it reminds us that any attempt to constitute an umbrella definition or overarching frame of digital literacy will necessarily involve reconciling the claims of myriad concepts of digital literacy, a veritable legion of digital literacies.

## **The Sociocultural View of Literacy as a Set of Socially Organized Practices**

In the first extended English-language treatment of “digital literacy,” Paul Gilster (1997, p. 1) defines digital literacy as “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers.” This, says Bawden (Chapter 1), is quite simply “literacy in the digital age . . . [T]he current form of the traditional idea of literacy *per se*—the ability to read, write, and otherwise deal with information using the technologies and formats of the time.” This conception of digital literacy as what *literacy* is in the digital era opens up a second—sociocultural—line of argument for understanding “digital literacy” as a shorthand (Street 1984, p. 1)

for digital *literacies*.

From a sociocultural perspective literacy is a matter of social practices (Gee, Hull & Lankshear, 1996, p. 1). Brian Street (1984, p. 1) argues that literacy “is best understood as a shorthand for the social practices and conceptions of reading and writing.” Previously, Silvia Scribner and Michael Cole (1981, p. 236) had argued that literacy comprises “a set of socially organized practices which make use of a symbol system and a technology for producing and disseminating it” (see Chapter 11 here). Literacy does not simply involve knowing how to encode and decode a particular kind of script. According to Scribner and Cole it involves “applying this knowledge for specific purposes in specific contexts of use.” (1981, p. 236)

This approach has two important implications for how we think about literacy so far as the plurality of digital literacies is concerned. The first is that reading (and writing) always involve particular kinds of texts and particular ways of reading (and writing) that vary enormously. The case for reading can be stated as follows:

Whatever literacy is, it [has] something to do with *reading*. And *reading* is always *reading something*. Furthermore, if one has not *understood* [made meaning from] what one has read then one has not read it. So reading is always reading *something* with *understanding*. [T]his something that one reads with understanding is always a text of a *certain type* which is read in a *certain way*. The text might be a comic book, a novel, a poem, a legal brief, a technical manual, a textbook in physics, a newspaper article, an essay in the social sciences or philosophy, a “self-help” book, a recipe, and so forth through many different types of text. Each of these different types of text requires somewhat different background knowledge and somewhat different skills. (Gee, Hull, & Lankshear, 1996, pp. 1–2).

If we extend this argument from literacy to digital literacy it involves thinking of “digital literacy” as a shorthand for the myriad social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged, etc., via digital codification. Hence, to the list contained in the above quotation we may add blogs, video games, text messages, online social network pages, discussion forums, internet memes, FAQs, online search results, and so on.

Moreover, as is the case with the kinds of conventional text types previously mentioned, many types of digital texts will *themselves* take multiple forms. For example, the social practices of any two bloggers may seem as different from each other as writing an academic paper is from emailing a parent, spouse or sibling. Blogs are created and maintained for diverse purposes and

as elements or dimensions of diverse social practices. These include but are far from exhausted by (combinations of) the following: as personal diaries/journals; to provide alternative accounts of events and other phenomena to those of mainstream media as part of a citizen journalist practice; to critique mainstream broadcasting of news events as part of a “news watch” affinity space; to sell products or distribute corporate news as part of commercial practice; to express personal opinions as part of one’s alliance with particular points-of-view or perspectives; to archive memories (e.g., photo blogs, audio blogs, video blogs); to parody other blogs and other media; to augment fan fiction writing or drawing; to archive or index profession-related materials (e.g., hyperlinks to relevant policy documents and news reports, etc.); to augment hobbies and pastimes (e.g., collecting items, techno-gadgetry, genealogy studies, sport); to notify fans of popular culture events and information (like band tour dates, author readings and book events, art and design world developments), and so on. The sheer diversity of weblogs and weblogging practices cautions against conceiving blogging as a specific singular type.

The second implication builds further on what has just been said. It is well known that different people can read the same text in different ways and, furthermore, that some people simply cannot make sense of certain texts (despite being able to decide or encode them accurately) that other people handle with ease. Photoshopped images provide a good example here. An image of a snake pulling a cow up the side of a ravine is read by one viewer as an absolutely amazing testimony to the size and strength of a snake, and they express horror that such snakes are on the loose out there. It is read by a photshopper as a pretty cool remix of some images to produce an absurdity that is so technically proficient it looks real. The current “LOLcats” online phenomenon (e.g., [icanhascheezburger.com](http://icanhascheezburger.com); [www.dropline.net/cats](http://www.dropline.net/cats)) provides another instance. LOLcat texts typically show cats in weird poses, with captions containing strange, phonetically-spelled, syntactically odd, written language. Participating in the remixed LOLcats meme involves reading and writing distinctive language, using popular culture references, and employing certain motifs (e.g., “i can has X?”; “o hai” for “oh hello”, which invokes pop culture English translations of Japanese texts; “kthnxby” for “Okay, thanks. Bye”; repeated refrains like “I is in ur Y, Xing all ur Zs,” and various uses of game, computer and movie terms like “lasers on,” “morph ball acquired” and “n00b,” among others). Shared insider jokes about cute cats having secret lives as avid game players, as computer technicians, as having a range of magical powers, as being able to muster a range of smart weapons for different purposes, and suchlike, tap into a keen interest in

the absurd often found in gaming and computer discussion boards where these kinds of images were first generated. Many of these texts appear nonsensical to “outsiders” but nonetheless answer to certain (“insider”) conventions of use.

Sociocultural theorists respond to the question of how someone acquires the ability to read a particular kind of text in a particular way by emphasizing apprenticeship to social practices.

A way of reading a certain type of text is acquired *only* when it is acquired in a “fluent” or “native-like” way, by one’s being embedded in (apprenticed as a member of) a *social practice* wherein people not only *read* texts of this type in these ways but also *talk* about such texts in certain ways, *hold certain beliefs and values* about them, and *socially interact* over them in certain ways . . . Texts are parts of *lived, talked, enacted, value-and-belief-laden* practices carried out in specific places and at specific times (Gee, Hull, & Lankshear, 1996, p. 3).

From a sociocultural perspective, these different ways of reading and writing and the “enculturations” that lead to becoming proficient in them are *literacies*. Engaging in these situated practices where we make meanings by relating texts to larger ways of doing and being is engaging in literacy—or, more accurately, *literacies*, since we are all apprenticed to more than one. To grasp this point is to grasp the importance of understanding that “digital literacy” must also be seen as digital literacies. Hence, when we take an expansive conception of “digital literacy,” such as Gilster’s, we can see that “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers” will take diverse forms according to the many and varied social practices out of which different individuals are enabled to understand and use information and communications.

While all chapters in the book have something to say about social practices in relation to digital literacies, this is the primary role of chapters in the second half of the book (from Chapter 8 on). These chapters deal with selected aspects of digital remix, blogging, online shopping, social networking, and legal considerations that impact on digital literacies. Ola Erstad explores trajectories of remixing, looking at digital literacies from the standpoint of media production and schooling (Chapter 8). Lilia Efimova and Jonathan Grudin discuss digital literacies at work by reference to the case of employees’ blogging (Chapter 9), and Julia Davies explores digital literacies of online shoppers buying and selling on eBay.com (Chapter 10). Michele Knobel and Colin Lankshear conclude the second part of the book by discussing participation in online social networking spaces in terms of digital literacy practices (Chapter 11) and by assembling and remixing some of Lawrence Lessig’s work to provide a perspective on digital literacy and the law (Chapter 12).



## Toward an Expansive Politics of Digital Literacy

Educational learning serves multiple ends. These include academic and scholarly ends, civic ends, personal success and fulfillment ends, and what James Paul Gee (2005; 2007, Chapter 1) calls for the good “of the soul.” We would argue that during the past 50 years—and particularly during the past 25 years—the pursuit of literacy as a *sine qua non* for realizing these ends has often had counterproductive effects. A narrow focus on literacy as fluent encoding and decoding has done nothing to change familiar patterns of academic success and failure. At the same time, it has presided over escalating levels of disengagement from education that in many schools have reached crisis levels. Many souls have died or been severely damaged in the process.

If people are to nurture their souls, they need to feel a sense of control, meaningfulness, even expertise in the face of risk and complexity. They want and need to feel like heroes in their own life stories and to feel that their stories make sense. They need to feel that they matter and that they have mattered in other people’s stories. If the body feeds on food, the soul feeds on agency and meaningfulness. (Gee, 2007, p. 10)

Ironically, agency and meaningfulness are the very stuff of literacies as situated social practices. It has almost become a research cliché to cite instances of young people trapped in literacy remediation in schools whilst winning public esteem as fan fiction writers, AMV remixers, or successful gamers online. Experiences of agency and meaningfulness within learning contexts that engender it have powerful consequences for learning. Gee makes the case explicitly for video games, but it holds more widely.

Good video games give people pleasures. These pleasures are connected to control, agency, and meaningfulness. But good games are problem-solving spaces that create deep learning, learning that is better than what we often see today in our schools. Pleasure and learning: For most people these two don’t seem to go together. But that is a mistruth we have picked up at school, where we have been taught that pleasure is fun and learning is work, and, thus, that work is not fun (Gee, 2004). But, in fact, good video games are hard work and deep fun. So is good learning in other contexts. (Gee, 2007, p. 10)

What holds for video games holds in varying ways and degrees for legions of bloggers, social networkers, fanfic authors, machinima creators, photoshoppers, digital animators, music video and movie trailer exponents, who trouble-shoot, collaborate, share and develop expertise, and give and receive feedback

in all manner of online affinity spaces, in the process of co-learning and refining these arts in the company of others who share these affinities (Gee, 2004).

Approaching digital literacy from the standpoint of digital *literacies* can open us up to making potentially illuminating connections between literacy, learning, meaning (semantic as well as existential), and experiences of agency, efficacy, and pleasure that we might not otherwise make. The point here is not simply to import an array of digital literacies holus bolus into classrooms on the grounds that they are “engaging,” or because learners who do not experience success in conventional school subject literacies can nonetheless experience success and affirmation as bloggers, gamers and fan practice aficionados—although that would be no small thing. Rather, the educational grounds for acknowledging the nature and diversity of digital literacies, and for considering where and how they might enter into *educational* learning have partly to do with the extent to which we can build bridges between learners’ existing interests in these practices and more formal scholarly purposes.

In this vein Lawrence Lessig (2004, pp. 38–39; see Chapter 12 here) reports an example from a low-income area inner city Los Angeles school. In a project that involved mixing images, sound and text, led by Elizabeth Daley and Stephanie Barish, high school students with low school literacy achievement (and an open resistance to writing at school) expressed their perspectives on gun violence—with which they were very familiar. Inspired by their own video remixes, students “bumped up against the fact [that they had] to explain this . . . and really [needed] to write something”. Often “they would rewrite a paragraph 5, 6, 7, 8 times, till they got it right. Because they *needed* to” (in Lessig, 2004, p. 39, our emphasis). This need was born of emotional and cognitive investment in an achievement and the will to perfect it.

The educational grounds for acknowledging the nature and diversity of everyday digital literacies and where they enter into educational learning have to do also with the extent to which we can identify principles by which digital literacies successfully recruit participants to learning and mastering them, and then translate these principles into effective approaches for pursuing bona fide educational ends (cf. Carr et al., 2006; Black, 2005, 2007; diSessa, 2000; Gee 2003, 2004, 2007; Hull, 2004; Jenkins, 2006; Lam, 2000; Shaffer, 2005).

There is a further important point to be made here concerning the plurality of literacies and the politics of literacy within formal education. The conventional *singular* educational conception of literacy as proficiency with print has done much to mask the ways language and literacy play out in formal educational settings. It is well recognized among sociocultural researchers and

theorists of literacy that particular “ways with words” (Heath, 1982; 1983) are aligned consistently with experiences of academic success within scholastic settings, whereas others are aligned with educational under-achievement. This again, is practically a cliché for anyone versed in the politics and sociology of literacy. Most recently, Gee (2007) has addressed this issue in a way that has direct relevance to digital literacies.

Gee refers to an equity crisis in traditional print literacy: “poorer children do not learn to read and write as well as richer children” (Gee, 2007, p. 138). In part, this is a matter of poorer children having higher rates of functional illiteracy than richer children. More subtly, however, poorer children who become fluent encoders and decoders of alphabetic text systematically do less well in scholastic reading and writing than richer children. In the U.S. this difference is embodied in what is referred to widely as “the fourth grade slump,” and educators have been aware of it for decades. This 4<sup>th</sup> grade slump names the phenomenon

whereby many children, especially poorer children, pass early reading tests, but cannot later on in school read well enough to learn academic content. They learn early on to read, but don't know how to read to learn when they face more complex language and content as school progresses. (Gee, 2007, p. 138)

That is, literacy in the general sense of literal encoding and decoding is not the literacy that confers access to the learning that counts *scholastically* for school success. Moreover, the kinds of early language experiences that correlate with school success—with learning in content areas and not just with literacy in the sense of encoding and decoding and text-level comprehension—are not universal within societies like our own. Rather, they are more closely associated with membership of certain “primary discourses” (Gee, 1996) than others. Some children get much more early exposure than others to particular kinds of oral vocabulary and ways of talking involving complex language associated with books and school. This is language experience that prepares young people for managing language “that is ‘technical’ or ‘specialist’ or ‘academic’” and not just “everyday” (Gee, 2007, p. 139). Whereas early childhood experiences that promote “phoneme awareness and home-based practice with literacy” correlate well with “success in learning to decode print” and with other dimensions of success in the early grades, these are not the best predictors of school success in 4<sup>th</sup> grade and beyond. Instead, it is getting the kinds of experience that set learners up for managing technical and specialist language that counts most (ibid.).

This is increasingly well understood, although by no means as well or widely understood as it needs to be—especially among education policy makers, education administrators and teachers. On the other hand, as researchers like Gee and a growing corpus of other scholars and authors in the learning sciences, games studies and popular culture (e.g., Johnson, 2005; Shaffer & Gee, 2005; Squire, 2008; Steinkuehler, 2008) are finding, numerous contemporary popular cultural pursuits involve highly technical and specialist styles of language. Young people across the socioeconomic spectrum engage in these practices socially with one another in informal online and offline peer learning groups. These practices include playing card games, associated video games, and interacting socially around trading card collections that tap into young children's interests in certain anime television series, and the like. They also widely involve engaging with digital artifacts of one kind or another, which entails complex vocabulary and syntax in order to understand the rules for video games, master concepts for operating specific software or technologies, to knowing how to participate effectively within online social spaces, and how to meet criteria for success in a practice or quest.

Such pursuits bestow opportunities (that come more or less *free*, with participating in them as “value adds”) for achieving familiarity with particular forms of specialist and technical oral and written language. This language, however, is not necessarily *academic*—at least in the sense of academic literacy that pertains to schooling. In many contemporary popular cultural pursuits young people—as well as older people—are engaging in the kinds of language experiences that nonetheless *could* be leveraged for deep learning of an academic nature, as well as for educational learning conducive to developing competence in practical *professional* activities.

In other words, the digital literacy dimensions of these popular pursuits provide parallel forms of exposure to the kinds of language uses that some social groups have always drawn upon for scholastic success. They may not map as directly onto extant classroom practices as “middle class talk around books” does, but they *could* readily map onto a revitalized school curriculum that is developed and overseen by teachers who are experienced in leveraging learning principles and understandings from digital literacies for formal educational learning. This would involve a considerably redefined academic culture that was less about acquiring, remembering, and repeating subject content *per se*, and more about active participation in scholarly ways of doing and being (e.g., doing historical research like an historian, doing background research like a fiction writer, being a physicist or mathematician like professional physicists and

mathematicians) and/or participation in professional, technical, administrative, civic, and other ways of doing and being that are germane to post-school life trajectories (cf. Gee, 2004, 2007; Gee, Hull, & Lankshear, 1996).

A good example can be found in the case of Tanaka Nanako, a 16-year-old English language learner who migrated to Canada as a non-English speaking native speaker of Mandarin Chinese. Nanako is a successful fanfiction writer who became the key informant of a three-year study by Rebecca Black (2005, 2007). When Nanako began writing online fanfiction, she had been learning English for just two and a half years. By the time the study was written up, Nanako had received over “6000 reviews of her 50 plus publicly-posted fanfiction texts” (Black 2007, p. 120). While a somewhat atypical case, this kind of success makes Nanako a good example of how engaging in fanfiction writing among peers can, over time, contribute to young people becoming accomplished narrative writers.

Black describes how Nanako’s “author notes” to readers at the start, middle, or end of her fanfic chapters initially apologized for grammatical and spelling errors in the fictions, and how these evolved into seeking specific feedback from reviewers with respect to English grammar and spelling, and plot development. Black found that Nanako explicitly incorporated reviewer feedback into subsequent chapter revisions (cf., Black, 2005, p. 123). She argues that while Nanako’s English-language development was supported in school, reviewer feedback on grammar, spelling, and such in her fanfiction also contributed directly to enhancing Nanako’s English writing proficiency. Furthermore, Nanako explained in an interview with Black (2006) that she had come to realize that many of her schoolmates “were largely unaware of either Chinese or Japanese history” and that the same might hold for the readers of her fanfiction as well. Nanako had decided to focus more on the “rich histories of these two countries” (Black, 2006, p. 16) and had produced two fanfics; one that combined elements of the movie, *Memories of a Geisha*, and the anime character, Sakura (from the *Card Captor Sakura* series), and another “set in 1910 Kyoto, Japan, [which] centers on Sakura’s struggles with an arranged marriage” (ibid.). Black describes how Nanako also plans to “compose a historical fiction based on the second Sino-Japanese war, or the war fought between China and Japan from 1937–1945” (ibid.). Nanako explained that “her process of writing such texts is also an opportunity for her to ‘learn more about [her] own culture and history’ because she often must do research to effectively represent the social and historical details in her fictions” (Black, 2006, p. 16). Such authorial dispositions, processes, and commitments to polished writing are very much valued

in schools and beyond, and are practiced as a matter of course within fanfiction affinity spaces.

Furthermore, as Gee argues, participating in digital literacy practices like gaming, machinima, digital animating, fanfiction writing, blogging and the like, provides opportunities for gaining *situated* rather than merely verbal (or literal) meanings for concepts, processes and functions. Situated rather than literal meanings are, precisely, the kinds of meanings that underpin deep understanding and competence, whether in work practices or academic disciplines. They mark the difference between merely being able to parrot back content (which may be good enough for passing school tests, but not for performing with distinction in real world tasks) and attaining sound theoretical understandings and being able to apply these in concrete practical settings (displaying competence).

Along with valuable legacies of engagement with complex technical and specialized language, and immersion in situated meaning making, engaging in digital literacies like gaming, computer modeling, simulations, and popular culture-creating within activities like machinima making, Anime Music Video making, and the like, can lead to developing

a productive reflective stance on design (including content) and to the formation of tech-savvy identities, both of which “are particularly important for today’s high tech world.” [Crucially, however,] these things don’t just happen all by themselves. They require guidance, in one form or another, from adults and more masterful peers. (Gee, 2007, p. 138)

Gee raises two issues that go deep to the heart of the rationale for this book and that bespeak the wisdom of taking an expansive approach to digital literacies.

First, and as we might reasonably expect, early evidence (e.g., Neuman & Celano, 2006) indicates that we are already witnessing the emergence of a structural digital literacy inequity along the lines of richer children-poorer children alongside the traditional literacy gap. In this event, “richer children [will] attain productive stances toward design and tech-savvy identities to a greater degree than poorer ones” (Gee, 2007, p. 138), thereby creating a new equity gap involving skills and identities that may be crucially tied to success in the contemporary world.

[E]vidence is beginning to show that just giving young people access to technologies is not enough. They need—just as they do for books—adult mentoring and rich learning systems built around the technologies, otherwise the full potential of these technologies is not realized for these children (Gee, 2007, p. 138).

Second, the distinctive socio-technical accompaniments of digital literacies—the myriad “learning incidentals” that come free with the online and offline learning systems attaching to digital literacy practices within affinity spaces of any kind, but including popular cultural forms—suggest the possibility of addressing “the new gap (the tech-savvy gap) in such a way that we [simultaneously] address the old gap, the gap in regard to traditional print-based literacy” (ibid.).

Approaching digital literacy in terms of “digital literacies” allows for the kinds of analysis of social practices that identify key points at which effective learning is triggered within efficient socio-technical learning systems as well as key learning principles that can be adapted and leveraged for equitable educational learning. Taking an expansive view of digital literacies—one that includes popular cultural practices, everyday practices like workplace blogging, online shopping and participation in online network sites—extends the scope for identifying and understanding points at which these same conducive processes and principles operate within digital literacies that are increasingly part of the everyday lives of educators at large.

## Conclusion

We began by saying that the authors invited to contribute to this volume were chosen on the basis of the excellent contributions we thought they could in various ways make to (i) demonstrating the kind of diversity that exists among concepts of digital literacy; (ii) modeling the strengths and usefulness of a sociocultural approach to understanding digital literacy as a plural phenomenon comprising many digital literacies; and (iii) establishing the benefits of adopting an expansive view of digital literacies and their significance for educational learning. We believe they have done exactly that, and trust that readers will share this assessment as they explore the chapters that follow and the rich tapestry of perspectives on digital literacy that they provide.

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